Tennessee Technological University

2024-2025 Graduate Catalog

Message from the President

Dear Student,

Congratulations and welcome to Tennessee Technological University. As a graduate student, we offer you a place to focus on relevant work, to fearlessly pursue answers to problems that have global implications, and to diligently dedicate yourself to creating knowledge.

Universities ultimately exist to create and transfer knowledge and to identify and develop human talent. During your personal experience here, you can expect that we will offer you the tools and environment you need to succeed.

We strive to incorporate the latest technology throughout all disciplines. As our university focuses on the national priorities of science, technology, engineering and mathematics, we strengthen all our programs by infusing technological innovation across campus.

TTU is also staying responsive to the needs of industry and to society. You will work with researchers, scholars and mentors here who maintain relationships with key industrial, government and community leaders.

You have joined the company of an esteemed group – those who have chosen TTU to prepare them for success in their careers and in their life experiences. Our alumni hold positions as Fortune 500 CEOs, NASA astronauts, government leaders, renowned professors, respected researchers and other prestigious leaders.

You will make a positive impact here. Congratulations for choosing to become an important part of Tennessee Tech University.

Sincerely,

Philip B. Oldham

President

Information Directory

All inquiries and correspondence concerning the following areas should be addressed to:

Graduate Studies	Financial Aid
College of Graduate Studies	Office of Financial Aid
Tennessee Tech University	Tennessee Tech University
Box 5012	Box 5076
Cookeville, TN 38505-0001	Cookeville, TN 38505-0001
Phone: (931) 372-3233	Phone: (931) 372-3073 or 1-800-268-0236
Fax: (931) 372-3497	Fax: (931) 372-6309
Email: Gradstudies@tntech.edu	Email: financialaid@tntech.edu

Records and Registration	International Admissions
Office of Records and Registration	Office of International Programs
Tennessee Tech University	Tennessee Tech University
Box 5026	Box 5093
Cookeville, TN 38505-0001	Cookeville, TN 38505-0001
Phone: (931)372-6111	Phone: (931) 372-3634
Email: records@tntech.edu	Email: Intl_adm@tntech.edu

Academic Offices	
College of Graduate Studies, Office of the Dean	(931) 372-3233
College of Agriculture & Human Ecology	(931) 372-3149
College of Arts & Sciences	(931) 372-3118
College of Business	(931) 372-3372
College of Education	(931) 372-3124
College of Engineering	(931) 372-3172
College of Interdisciplinary Studies	(931) 372-3394
Whitson-Hester School of Nursing	(931) 372-3203
International Education	(931) 372-3634
Provost and Vice-President for Academic Affairs	(931) 372-3224

Directory assistance for other offices is available through the main switchboard at (931) 372-3101. The University's web site address is www.tntech.edu.

Tennessee Tech University was founded in 1915 and is governed by our Board of Trustees. www.tntech.edu/board

TTU /An EEO/AA/Title IX/Section 504/ADA Employer

Accreditation and Memberships

Tennessee Technological University—A State University

Tennessee Tech University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, master's, specialist, and doctoral degrees. Tennessee Tech University also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Tennessee Tech University may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).

Accreditation

- AACSB--International - The Association to Advance Collegiate Schools of Business
- AAFCS - American Association of Family and Consumer Sciences
- ABET - Accreditation Board for Engineering and Technology
- ACS - The American Chemical Society
- ACEND - Accreditation Council for Education in Nutrition and Dietetics
- CACREP - Council for the Accreditation of Counseling and Related Educational Programs
- CAEP - Council for the Accreditation of Educator Preparation
- CCNE - Commission on Collegiate Nursing Education
- NASAD - National Association of Schools of Art and Design
- NASM - National Association of Schools of Music

Memberships

- American Association of Colleges of Teacher Education
- American Association of State Colleges and Universities
- Council of Graduate Schools
- Ohio Valley Conference
- Oak Ridge Associated Universities
- Putnam County Chamber of Commerce
- Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
- Teacher Education Council of State Colleges and Universities
- Tennessee College Association

Notice

The course offerings and requirements of the institution are continually under examination and revision. This catalog (bulletin) presents the offerings and requirements in effect at the time of publication, but is no guarantee that they will not be changed or revoked. However, adequate and reasonable notice will be given to students affected by any changes. This catalog (bulletin) is not intended to state contractual terms and does not constitute a contract between the student and the institution.

The institution reserves the right to make changes as required in course offerings, curricula, academic policies, and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions.

Current information may be obtained from the following sources:

- Admission Requirements – College of Graduate Studies
- Course Offerings – Department or Division Offering Course
- Degree Requirements – Departmental Chairperson of Major
- Fees and Tuition – Business Office

The University provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines and programs through faculty who, in the opinion of the University, are qualified for teaching at the college level. The acquisition and retention of knowledge by any student is, however, contingent upon the student's desire and ability to learn and his or her application of appropriate study techniques to any course or program. Thus, the University must necessarily limit representation of student preparedness in any field of study to that competency demonstrated at that specific point in time at which appropriate academic measurements were taken to certify course or program completion. Any or all students may be required to take one (1) or more tests designed to measure general education achievement and/or achievement in selected major areas as a prerequisite to graduation for the purpose of valuation of academic programs. Unless otherwise provided for any individual program, no minimum score or level of achievement is required for graduation. Participation in testing and other evaluation measures are required for all students and for students in selected programs. In order to comply fully with this provision, the student must authorize the release of his or her scores to the institution. Individual student scores will be treated as confidential.

Tennessee Tech University is an Equal Opportunity/Affirmative Action institution and is in compliance with Titles VI and VII of the Civil Rights Act of 1974, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1974, the Rehabilitation Act of 1973, the Vietnam Era Veterans Readjustment Act of 1974, and the Americans With Disabilities Act of 1990. The University is nondiscriminatory on the basis of age, race, color, religion, sex, national origin, disability status, or status as a disabled veteran or veteran of the Vietnam era. Inquiries or complaints concerning these policies should be directed to the Affirmative Action Officer, Derryberry Hall, Room 314D, (931) 372-3016.

Faculty members will endeavor to make necessary accommodations for disabled persons in their courses. The Office of Disability Services is available to assist the faculty to make necessary special arrangements for disabled students. This Office should be contacted as early as possible by a student regarding assistance that may be needed for attendance at the University.

2024-2025 Graduate Catalog

June 2024

The Graduate Catalog is only available online and covers the entire academic year. The next publication will take place in June 2024 for 2024-2025.

Search options are available on the left-hand side of the page.

Change of Catalog Content

The course offerings and requirements of the institution are continually under examination and revision. This catalog is not intended to state contractual terms and does not constitute a contract between the student and the institution.

The institution reserves the right to make changes as required in course offerings, curricula, academic policies, and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions.

If you have questions or comments, please contact Graduate Studies at gradstudies@tntech.edu.

University History

Tennessee Technological University was established by an act of the General Assembly in 1915 and opened its doors to students the following year. The University began operation on the campus that had belonged to Dixie College, a private institution founded in 1911. The purchase of the Dixie campus property and the erection of two dormitories, East and West Halls, were funded by Putnam County and the City of Cookeville. Since then, the growth of the institution has been closely interwoven with the development of the Upper Cumberland region.

From 1916-24 Tennessee Polytechnic Institute offered work only on a high school and junior college level. By 1929, however, the Tennessee Board of Education authorized a complete college program and the first class of four-year graduates received the B.S. degree in June.

In 1938 the instructional program was reorganized into two main divisions, the Arts and Sciences and the Professional and Technical Subjects. These divisions were renamed schools nine years later. In 1949 the administrative structure was expanded into five schools consisting of Agriculture and Human Ecology, Arts and Sciences, Business Administration, Education, and Engineering. The five undergraduate schools were designated as colleges in 1965 when Tennessee Polytechnic Institute gained university status and changed its name to Tennessee Technological University.*

The Master of Arts degree was authorized in 1958, and the Master of Science degree in 1964. The Specialist in Education degree was authorized in 1970, the Doctor of Philosophy in engineering in 1971, the Master of Business Administration in 1976, the Doctor of Philosophy in Environmental Sciences in 1997, and the Doctor of Philosophy in Exceptional Learning in 2000. The University granted its first 3 Master's degrees in August 1959.

Since its inception in 1958, the Graduate School has striven to provide the highest quality of graduate programs and to maintain its rich heritage.

Presidents of the University

Thomas Alva Early	1916 - 1920	
University of Georgia.		
Quentin Miller Smith	1920 - 1938	
B.S., George Peabody College for Teachers, 1917; M.A., 1927.		
James Millard Smith	1938 - 1940	
B.S., West Tennessee State Teachers College, 1929; M.A., George Peabody College for Teachers, 1930.		
William Everett Derryberry	1940 - 1974	
B.A., Summa Cum Laude, The University of Tennessee, 1928; B.A., (Honours) School of English Language and Literature; and M.A., Oxford University, Oxford, England, 1932; D.Litt., University of Chattanooga, 1965; LL.D., Pepperdine College, 1967.		
Arliss Lloyd Roaden	1974 - 1985	
A. A., Cumberland Junior College, 1949; B.A. Cum Laude, Carson-Newman College, 1951; M.S., The University of Tennessee, 1958; Ed.D., 1961.		
Wallace Samuel Prescott	1985 - 1987	
B.S., Tennessee Polytechnic Institute, 1946, M.S., The University of Tennessee, 1952; Ph.D., University of Illinois, 1961.		
Angelo Anthony Volpe	1987 - 2000	
B.S., Brooklyn College, 1959; M.S., University of Maryland, 1962; Ph.D., 1966.		
Robert R. Bell	2000 - 2012	
B.S., University of Florida, 1969; M.A., 1970; Ph.D., 1972.		
	2012 - present	
Philip Oldham		
B.S., Freed-Hardeman University, 1980; Ph.D., Texas A&M University, 1985.		

Statement of Mission

Tennessee's Technological University creates, advances, and applies knowledge to expand opportunity and economic competitiveness. As a STEM-infused, comprehensive institution, Tennessee Tech delivers enduring education, impactful research, and collaborative service.

Tennessee Tech Board of Trustees reviewed and approved the mission statement on September 28, 2023.

Tennessee Tech Board of Trustees

The Tennessee Tech Board of Trustees were appointed by the Governor of Tennessee and approved the Tennessee General Assembly.

Current Trustees Include:

Trudy Harper, Chair

Tom Jones

Fred Lowery

Dr. Jeannette Luna

Thomas Lynn

Rhedona Rose

Camron Rudd

Johnny Stites

Captain Barry Wilmore

Academic and Administrative Officers

Dr. Philip Oldham, President

<u>Senior Administration</u>

Dr. Lori Bruce, Provost and Vice President for Academic Affairs

Dr. Robert Owens, Chief Diversity Officer

Dr. Claire Stinson, Vice President for Planning and Finance

Dr. Cynthia Polk-Johnson, Vice President for Student Affairs

Dr. Zhanjiang (John) Liu, Vice President Research

Dr. Kevin Braswell, Vice President of University Advancement

Dr. Julie C. Baker, Associate Provost and Dean of the College of Graduate Studies

Dr. Sharon Huo, Associate Provost

Dr. Bedelia Russell, Associate Provost

Mrs. Karen Lykins, Vice President for Enrollment and Communication

Dr. Terry Saltsman, Chief Government Affairs Officer

Mark Wilson, Director of Athletics

Kevin Vedder, Associate Vice President of Human Resources

Troy Perdue, University Council

Lee Wray, Chief of Staff and Secretary to the Board of Trustees

<u>Academic Deans</u>

Dr. Darron Smith, Dean of the College of Agriculture and Human Ecology

Dr. Jeff Roberts, Interim Dean of the College of Arts and Sciences

Dr. Thomas Payne, Dean of the College of Business

Dr. Jennifer Shank, Dean of the College of Fine Arts

Dr. Lisa Zagumny, Dean of the College of Education

Dr. Joseph Slater, Dean of the College of Engineering

Dr. Mike Gotcher, Dean of the College of Interdisciplinary Studies

Dr. Kimberly Hanna, Dean of Whitson-Hestor School of Nursing

Dr. Kelly McCallister, Dean of University Library and Learning Assistance

Administration and Faculty

For the most current listing of Tennessee Tech administrative staff and faculty, visit the TTU home page and click on in the search bar click on <u>"People Finder".</u> You may search by name or department.

The University Campus

Cookeville, Tennessee, the site of Tennessee Tech University, is located within a day's drive of about 75% of the nation's population via Interstate 40, Highway 70 North, and Highway 111. Cookeville is just 70 miles East of Nashville and 110 miles West of Knoxville, with Chattanooga 100 miles to the South. Major airline services are available through Nashville, Knoxville, and Chattanooga.

The City of Cookeville has a population of more than 26,000 residents and is located on the eastern Highland Rim of Tennessee at an elevation of 1,140 feet. Cookeville is the 'hub' of the 14-county Upper Cumberland region of about 317,000 citizens. The local public schools, civic clubs, and churches have a friendly and cooperative relationship with students, faculty, and patrons. The surrounding area, enhanced by three major lakes, abounds in natural beauty and is served by several state park including Burgess Falls and Cummins Falls state parks. Cookeville is just minutes from top-rated golf courses, lakes, rivers, hiking, championship fishing, hunting, and an amazing variety of sports (including Tennessee Tech University's) and other activities.

The campus consists of a tract of 235 acres made attractive by building architecture, shrubbery, native trees, and a system of driveways and walkways; making travel to and from buildings to parking lots easy and convenient. A current map of the university may be found on the TTU website.

University Policies

Student Responsibility

All students are required to have knowledge of rights, responsibilities, and regulations pertaining to campus life which are published in the *Student Handbook*. Each student is responsible for maintaining communication with the University, by keeping officials informed at all times of current address (including zip code) and telephone number.

Students are responsible for the proper completion of their academic programs; for familiarity with requirements of the University Catalog; for maintaining the grade average required; and for meeting all other degree requirements. A student may receive counsel from an academic advisor; however, the final responsibility remains that of the student.

The course offerings and requirements of the institution are continually under examination and revision. This catalog (bulletin) presents the offerings and requirements in effect at the time of publication, but is no guarantee that they will not be changed or revoked. However, adequate and reasonable notice will be given to students affected by any changes. This catalog (bulletin) is not intended to state contractual terms and does not constitute a contract between the student and the institution. The University reserves the right to make changes in rules and regulations concerning admission, student conduct, degree requirements, and course descriptions subject to the concurrence and approval of its governing authorities.

The institution reserves the right to make changes as required in course offerings, curricula, academic policies, and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions.

The University provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines and programs through faculty who, in the opinion of the University, are qualified for teaching at the college level. The acquisition and retention of knowledge by any student is, however, contingent upon the student's desire and ability to learn and his or her application of appropriate study techniques to any course or program. Thus, the University must necessarily limit representation of student preparedness in any field of study to that competency demonstrated at that specific point in time at which appropriate academic measurements were taken to certify course or program completion.

The regulations and policies established by the Graduate Studies Executive Committee are intended to provide guidance to faculty and students. Should an individual believe that there is sufficient justification for an exception to any requirement, written requests (with any suitable statements or other supporting documents) may be submitted to the Associate Dean of Graduate Studies for consideration by the committee. The committee has regular meetings three times during each semester of the academic year and once during the summer.

The graduate catalog is a supplement to the undergraduate catalog (general catalog) and is published to provide information for graduate students, prospective graduate students, and members of the faculty. Students enrolling for graduate study at Tennessee Technological University are responsible not only to the provisions of the graduate catalog but also to the undergraduate catalog. Whenever a student's welfare or progress may be impeded or impaired by any conflict of information presented in the two (2) publications, resolution of such conflict will be determined by the appropriate standing committees of the University. When a person is admitted to graduate study, it is presumed that person accepts responsibility for learning and observing the regulations and policies of the University; therefore, ignorance of a regulation or policy does not constitute a basis for waiving that regulation or policy. Graduate students are subject to the usual procedures and regulations of the University as listed in the undergraduate catalog, except as they apply to undergraduate students only.

Tennessee Tech University is an Equal Opportunity/Affirmative Action institution and is in compliance with Titles VI and VII of the Civil Rights Act of 1974, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1974, the Rehabilitation Act of 1973, Vietnam Era Veterans Readjustment Act of 1974, and The Americans With Disabilities Act of 1990. The University is nondiscriminatory on the basis of age, race, color, religion, sex, national origin, disability status, or status as a disabled veteran or veteran of the Vietnam Era.

Disability Accommodation

Students with a disability requiring accommodations should contact the Office of Disability Services (ODS). An Accommodation Request (AR) should be completed as soon as possible, preferably by the end of the first week of the course. The ODS is located in the Roaden University Center, Room 112; phone 372-6119. For details, view the Tennessee Tech's Policy 340 – Services for Students with Disabilities at Policy Central.

Official Notice to Report

A notice to report to any administrative office of the University takes precedence over all noninstructional activities, and must be answered immediately or, if received during a class, as soon as the class is over. Failure to respond to such a notice will require satisfactory explanation to the Administrative Council before the student is allowed to continue in residence.

Student Academic Misconduct

Maintaining high standards of academic integrity in every class at Tennessee Tech is critical to the reputation of Tennessee Tech, its students, alumni, and the employers of Tennessee Tech graduates. The Student Academic Misconduct Policy describes the definitions of academic misconduct and policies and procedures for addressing Academic Misconduct at Tennessee Tech. For details, view the Tennessee Tech's Policy 217 – Student Academic Misconduct at Policy Central.

Grade Appeal Procedure

The university grade appeal procedure is outlined in Tennessee Tech Policy 218.

Judiciary Procedures

Judiciary procedures at the University do not constitute legal actions, and the decisions are not to be equated with verdicts reached by courts of law. These procedures simply involve the fact-finding and decision-making processes of an educational institution.

Detailed procedures for the disciplinary system are printed in the 'Disciplinary System Manual." Copies of the manual are located in the Office of Student Affairs.

Unofficial Withdrawal

Tennessee Tech University will, through forms of documentation deemed acceptable by federal guidelines, determine the date of unofficial withdrawal for any student who leaves the University without officially withdrawing. In compliance with federal guidelines this date will be used to calculate the University's financial liability to the federal government in the recovery of funds.

Official Withdrawal From The University

Students who desire to withdraw from the University before the end of an academic term must make formal application for withdrawal either in the Office of Student Affairs at the time of withdrawal. Those who complete withdrawal procedures will receive a grade of W in courses they are passing and a grade of WF in courses they are failing if official withdrawal is after the last date for dropping a course. Refunds which may be due will depend upon the date of formal withdrawal. Applications for withdrawal will not be considered if received after final examinations begin in any term.

Privacy Rights Of Students

On May 20, 1975, Tennessee Tech approved a statement of policy that includes provisions for the release of information about students and the rights of students and others to have access to Tech's education records. The complete policy statement of "Privacy Rights of Students" is available in the Records and Registration Office and in the Student Handbook.

A student may obtain a transcript of his or her academic records by making a written request to the Office of Records and Registration, Tennessee Tech University, P. O. Box 5097, Cookeville, TN 38505, fax (931) 372-6111.

Drug Free Policy

The Tennessee Tech University community (Faculty, Staff, and Students) complies with the policies and penalties relative to controlled substances (illicit drugs) and alcohol, as required by the Drug Free Workplace Act of 1988 and the Drug Free Schools and Communities Act Amendments of 1989. As an employee and/or student at Tennessee Technological University, you are required to be knowledgeable of and comply with the Drug Free Campus/Workplace Policy, the applicable provisions of which are summarized below:

It is the policy of this institution that the unlawful manufacture, distribution, possession, use, or abuse of alcohol and/or illicit drugs on the Tennessee Technological University campus or on property owned or controlled by the University is strictly prohibited. All categories of employees and students are subject to this policy and to applicable federal, state, and local laws related to this matter. Additionally, any violation of this policy will result in disciplinary actions as set forth in the applicable sections of this policy.

No Smoking & Tobacco-Free Campus Policy

Tennessee Tech University (TTU) agrees with the U.S. Surgeon General that tobacco use in any form, active and/or passive, is a significant health hazard. TTU further recognizes that environmental tobacco smoke has been classified as a Class-A carcinogen, and that the State of Tennessee is actively dissuading its employees from smoking. TTU supports the American College Health Association Position Statement on Tobacco on College and University Campuses (www.acha.org, Feb 2005). Due to these health risks, TTU has adopted a NO SMOKING & TOBACCO-FREE CAMPUS policy.

7.1 Policy - Effective January 1, 2010, TTU is a No Smoking & Tobacco-Free Campus, with all smoking ('herbal' and tobacco) and all other tobacco usage permitted only in private vehicles. This policy applies to all university buildings and grounds; TTU-affiliated off-campus locations and clinics; and any buildings or properties owned, leased or rented by TTU in all other areas. Smoking and tobacco use continues to be prohibited in all state vehicles. This No Smoking & Tobacco-free Campus Policy is in effect 24 hours a day year-round.

Background - The University promotes a healthy, sanitary environment free from all smoke ('herbal' and tobacco) and tobacco-related debris. The TTU community acknowledges that long-term health hazards may accrue to people who use tobacco products or who are subjected to second-hand smoke. The failure to address the use of tobacco products on campus would constitute a violation of the Americans with Disabilities Act, the Vocational Rehabilitation Act and Tennessee law.

Support - Understanding the addictive nature of tobacco products, TTU will make every effort to assist those who may wish to stop using tobacco. TTU Human Resources, Health Services and Counseling Center offer current information about available resources. The State offers toll-free assistance at 1-800-QuitNow (1-800-784-8669). The American Cancer Society offers free counsel to individuals wanting to quit.

7.2 Compliance and Enforcement - It is the responsibility of all members of the TTU community and visitors to comply with this no smoking and tobacco-free campus policy. Violations of the policy will be dealt with in a manner that is consistent with university procedures. There shall be no reprisals against anyone reporting violations of this policy.

Inclement Weather Policy

All Tennessee Tech University offices will remain in operation during inclement weather to ensure continuity of services and to meet the needs of our students. In extreme weather conditions, classes and exams on campus and at off-campus locations may be rescheduled or cancelled while the university is open.

In accordance with TTU policy, faculty, administrators and staff of TTU are expected to make every reasonable effort to be at their work assignment on time, taking into consideration the personal risk involved. Administrators or staff employees who anticipate arriving late, or not arriving at work at all, should notify their immediate supervisor of this fact as soon as possible and request annual leave for the period of absence. If faculty members must be absent from assigned classes due to inclement weather, it is their responsibility to notify the appropriate chairperson and/or dean.

Off-Campus Classes

28.1.2 The decision to cancel off-campus classes will be made by the Vice President for Academic Affairs in close consultation with the Vice President of Extended Programs and Regional Development and the coordinators of the off-campus centers. The information will then be disseminated by the coordinators as quickly as possible by whatever means are available in the vicinity of the affected center.

For Employees / Working Hours

At times it may be necessary for the President to declare specific hours as emergency closing as the result of inclement weather or other emergency situations. In such cases, regular full-time and part-time employees on the active payroll who are scheduled to work during the declared times of closing will be granted time off from work with pay. Employees who are not scheduled to work will not be paid for the emergency closing. Clerical and support personnel required to work to keep essential services functioning will receive extra compensation. Administrative personnel required to work will receive equal time off for hours worked.

Academic Work

If classes are canceled due to inclement weather, missed classes should be made up in a manner chosen by the individual faculty member involved. If classes are not cancelled despite inclement weather, students are responsible for any academic work they miss as a result of inclement weather. It is the individual student's responsibility to take the initiative in making up any missed work, including but not limited to examinations, presentations and projects, and it is the faculty member's responsibility to provide the student with a reasonable opportunity to make up missed work, including but not limited to examinations, presentations and projects.

Delays & Early Closings

The President of the University may choose a delayed opening or early closing.

In the event of the delayed opening, all faculty and staff are expected to report to their specific work location by the set opening time. Students are expected to report to regularly scheduled class only if there are 30 or more minutes remaining in the session. (Ex.: If the delayed opening is set for 10:00 a.m., students who have classes from 9:30 a.m. to 10:50 a.m. should report to that class at 10:00 a.m.). All classes scheduled prior to the delayed opening time and those that have less than 30 minutes remaining after the set opening time are cancelled for the day.

When time is announced for an early closing, it applies to all classes that begin on or after that hour. Ex. "Classes cancelled at 3 p.m." means all classes starting at 3 p.m. or later are cancelled. Classes that started before 3 p.m. will meet.

Procedures for Canceling Classes

In those instances when weather conditions require a decision by the President of the University to authorize canceling classes, delaying the start of classes or suspending selected activities, the following procedures will be in effect:

28.2.1 The Director of Facilities and Business Services and Director of Safety and Environmental Services will monitor official weather reports, contact appropriate state, county and local Public Safety Officials and check local roads for hazardous driving conditions. They will review campus roads, walkways and parking lot conditions. The Director of Facilities and Business Services will advise the Vice President for Business and Fiscal Affairs of the findings. After receiving this information, the Vice President for Business and Fiscal Affairs will inform the Vice President for Academic Affairs, who will consult with the other vice presidents and recommend to the President whether the University should cancel classes or declare an emergency closing. If the Vice President for Business and Fiscal Affairs is unavailable, the Director of Facilities and Business Services and Director of Safety and Environmental Services will contact the Vice President for Academic Affairs.

Once the decision is made to cancel classes or close offices and facilities or buildings on campus or at extended education sites, the President or Vice President for Academic Affairs will notify:

- Associate Vice President for Communications and Marketing (or representative of that office)
- TTU Police
- University Vice Presidents (Each University Vice President will be responsible for notifying the appropriate personnel in the division).

The Office of Communications and Marketing will prepare an official statement and notify the campus community and public through the following ways:

- University website homepage
- Broadcast e-mail to students, faculty and staff
- Text alert (written by OCM, distributed by University Police)
- Facebook and other social media
- Switchboard operator
- Local media (including Channel 7)
- Metro Nashville network TV stations and select radio stations
- Upper Cumberland Radio
- Campus media (Oracle/WTTU)
- Metro Knoxville network TV stations and select radio stations

Many media outlets require private passwords or codes for weather notifications. These codes will be kept confidential and maintained annually by the Office of Communications and Marketing. Access to a listing of codes will be limited to designated OCM staff members and the Vice President for University Advancement.

No notice will be sent to media if the University continues to operate on a normal schedule. (The University homepage and social media may be used to communicate to students, parents, faculty, staff and administrators that a normal schedule will be followed).

Inclement Weather Policy

Tennessee Tech Policy 240, Emergency Notifications, contains the most current emergency notification dissemination procedures including those regarding inclement weather.

When the university makes the decision to delay or cancel classes, announcements are shared on Tech's Facebook page, X (formerly Twitter) account, Instagram story, and the homepage of the Tech website. Media in Cookeville, Nashville, Knoxville and Chattanooga are alerted. In addition, the university also sends an email to campus and a text message alert to all TTUAlert subscribers.

Mission and Vision

Tennessee Tech will achieve national prominence and impact through its engaged students, dedicated faculty, and career-ready graduates known for their creativity, tenacity, and analytical approach to problem solving.

Mission of the College of Graduate Studies

The mission of the College of Graduate Studies is to promote, coordinate, enhance the quality of, and serve as an advocate for graduate education programs at Tennessee Tech University, which supports both the mission and flight plan of the university.

Vision of the College of Graduate Studies

The vision of the College of Graduate Studies is to improve human knowledge through teaching, learning, research and outreach.

The College of Graduate Studies reports to the Provost's Office and is responsible for promoting, coordinating, enhancing the quality of, and serving as the advocate for graduate education programs at Tennessee Techn University. Our goals are to enhance the intellectual community of scholars among graduate students and faculty; provide quality control of all graduate education programs; promote academic excellence of all graduate programs; and support and facilitate research and scholarly activities. The policies that govern the college are developed by the Graduate Studies Executive Committee which includes faculty members, administrators and student members.

Graduate Studies Executive Committee

Policies that govern the organization and administration of the College of Graduate Studies are developed by the Graduate Studies Executive Committee. As authorized by the Administrative Council of the University, the membership of this committee includes a minimum of nine (9) faculty members, representing the six (6) colleges in which graduate programs are offered; a minimum of eight (8) administrators, to include representation from each of the six (6) colleges; a minimum of four (4) student members, also representing the six (6) colleges; and such nonvoting advisory members as may be determined by the President of the University. The Dean of the College of Graduate Studies serves as executive officer. All appointments are made by the President. The chairperson of the committee is elected annually.

The Dean of the College of Graduate Studies, in collaboration with the Executive Committee, exercises overall review and supervision of graduate programs and provides leadership in developing new programs and in improving standards for existing programs.

Graduate Faculty

Appointment and Qualifications of Graduate Faculty

Status	Minimum Eligibility Criteria	Responsibilities	Term *
FULL -full-time faculty member, emeriti, senior affiliate faculty or academic administrator holding faculty rank; -rank of assistant professor or higher -tenured or tenure-track	-Meets criteria for Associate Membership -criteria for reappointment are based on evidence of continued pattern of scholarly or creative activity of the quality expected for initial membership.	-may serve as a student's academic advisor for the Doctor of Philosophy degree; -may teach graduate courses for Master's, Specialist, and Doctoral degrees	6 Years
ASSOCIATE -full-time faculty member who is not eligible for full membership	-holds an earned doctorate or equivalent terminal degree in an appropriate discipline from an appropriately accredited institution; -demonstrated competence to carry out the departmental needs for graduate teaching, advisement, or research	-may serve as a student's academic advisor for Master's and Specialist degrees -may teach graduate courses for Master's, Specialist, and doctoral degrees	3 Years
ADJUNCT -part-time faculty who are employed for graduate teaching, advisement, or research	-holds an earned doctorate or equivalent terminal degree in an appropriate discipline from an appropriately accredited institution; -demonstrated competence to carry out the departmental needs for graduate teaching, advisement, or research	-may serve as a committee member for Master's and Specialist degrees; -may teach graduate courses for Master's, Specialist, and doctoral degrees	3 Years
CLINICAL -full or part-time faculty who participate in directing educational experiences in a clinical/professional setting where the faculty member practices	-holds at least a master's degree and professional certification in an appropriate discipline from an appropriately accredited institution/ agency/association and relevant experience in the field of study	-may only teach clinical or practicum designated courses	3 Years

* Eligibility for renewal is based on a review of credentials during the years of their appointment period listed.

All appointments to memberships on the graduate faculty are made by the President based upon recommendations submitted by departmental chairpersons with suitable endorsement from the dean of the college, the Dean of the College of Graduate Studies, and the Vice President of Academic Affairs. The appropriate forms may be obtained from the College of Graduate Studies website.

It is also possible for a member of the Graduate Faculty to have their Graduate Faculty status revoked by the dean of their college or school, or the Dean of the College of Graduate Studies, outside the periodic review process. Revocation may occur for egregious acts or when a Graduate Faculty member fails to fulfill the responsibilities of a member of the Graduate Faculty to teach graduate student(s) effectively, in a civil, professionally appropriate manner; to do scholarly research and creative work of high quality or remain active in the practice of the profession; to adhere to university policies related to graduate programs; and to direct the research/professional development of graduate student(s) so that they progress toward graduation in a timely manner appropriate to the field. If Graduate Faculty status is revoked, the faculty member has the right to make an appeal against the decision to the Provost. This appeal must be made in writing within 14 days of the Dean of the College Studies providing notification of the removal of Graduate Faculty status. The Provost is the final arbiter of the decision to revoke Graduate Faculty status.

Responsibilities of the Graduate Faculty

An instructor of any course for which students receive graduate credit must be a member of the graduate faculty. When students are enrolled in undergraduate classes (4000/5000) for graduate credit, the faculty member has the responsibility of making appropriate additional assignments to ensure students receive proper value from the courses. A general description of the extra work required of students taking a 4000/5000 level course for graduate credit must be included in the description of the course approved by the Graduate ~~School~~ Studies Executive Committee. Instructors of undergraduate courses are provided class rolls that show the names of those students seeking graduate credit for work in their classes.

A faculty member may not direct independent study/research courses taken by a student who is a relative of the faculty member and may not be a member of a relative's graduate advisory committee. For the purposes of this policy, "relative" means a parent, foster parent, parent-in-law, child, spouse, brother, foster brother, sister, foster sister, grandparent, grandchild, son-in-law, brother-in-law, daughter-in-law, sister-in-law, or other family member who resides in the same household.

Responsibilities of Departmental Chairperson

Primary responsibility for determining that a faculty member meets the above requirements rests with the departmental chairperson and those faculty members in the department who are members of the graduate faculty; with oversight being provided by the dean of the college, the Dean of the College of Graduate Studies, and the Vice President for Academic Affairs. Service as a graduate student's academic and/or research advisor must be reviewed and approved by the student's departmental chairperson, the dean of the college, and the Dean of the College of Graduate Studies. At the discretion of the departmental chairperson, responsibilities of an associate member may be any of those normally given to a full member of the graduate faculty, except service on the Graduate Studies Executive Committee, or serving as a doctoral-level academic or research advisor.

The chairperson of any department offering a graduate degree may act in any capacity open to a graduate faculty member and has certain administrative responsibilities pertaining to the graduate program. The chairperson will oversee the process of reviewing applications of prospective graduate students including working with faculty in the department to develop admission criteria and an application review process; and nominating qualified faculty members for appointment to the graduate faculty. The departmental chairperson also provides direction and coordination in supporting departmental faculty members in the development of research projects and in the appropriate utilization of facilities.

Organization and Appointment of Advisory Committee

The advisory committee may be appointed during the student's first term but no later than the term in which 15 credits of course work are to be completed. The student, in consultation with the departmental chairperson or academic advisor, will determine a minimum of three (3) in the Master's and Specialist in Education, four (4) in the doctoral program in Education; five (5) in the doctoral programs in Engineering and Environmental Sciences, suitable graduate faculty members who are willing to serve as voting members of the committee. Degree programs with a capstone course will have oversight of a pre-assigned Program Coordinator/Director/Chairperson. Members shall represent each of the areas in which the student expects to study, with two (2) members having background in the major area. Each area in which the student presents as many as six (6) credits should be represented by one (1) member. At least one (1) member of the advisory committee should have adequate background and research interests in the area in which the student has proposed a research objective.

Role	Eligibility Criteria	Responsibilities
ACADEMIC	-experienced faculty member; -demonstrated ability to effectively mentor students	-may serve as a student's academic advisor; -shall chair or co-chair the student's advisory committee
RESEARCH	-demonstrated significant research capability; -experienced in directing independent study; -may hold rank in a department other than that in which the student is majoring -research capability in a discipline closely related to a discipline associated with the student's department	-may serve as a student' academic advisor for Master's and Specialist degrees

Changes to the advisory committee must be requested by the student and approved by the departmental chairperson, the dean of the college, and the Dean of the College of Graduate Studies. Except in unusual circumstances such as extended campus leave, change of teaching fields, or inappropriate advisement loads, a faculty member enjoys the prerogative of accepting or relinquishing an appointment on a student's advisory committee.

Non-university professionals may become voting members of graduate committees as consultants. These consultants must have earned a doctorate or equivalent terminal degree in an appropriate discipline and completed all procedures necessary to be appointed as an Adjunct Member of the graduate faculty. Only one (1) such member may serve on an individual student's committee, and this member may not serve as academic or research advisor. Consultants not meeting the above requirements may serve on the committee but do not have voting privileges.

Each member of a graduate student's advisory committee is expected (1) to review the student's proposed plan of study and to approve it or make recommendations to improve it; (2) to consider the student's application for candidacy including both the proposed plan of study and the research proposal and, with other members of the committee, to approve, approve with change, or disapprove the program; (3) to review the student's thesis (if one is required) prior to the comprehensive examination; and (4) to assist in the conduct of an examination to insure that the student has at least a satisfactory knowledge of the subject matter covered in the program of study and that the thesis (when required) is of suitable caliber and presents a valid investigation properly completed. The minimum required majority for all actions of the advisory committee at the master's and specialist levels is three (3) positive votes, or three-fourths of the committee members eligible to vote. At the doctoral level, four-fifths is required as the minimum for programs in Engineering and Environmental Sciences; a unanimous vote is required for the program in Exceptional Learning.

Responsibilities of Thesis Advisor

The chairperson of an advisory committee assists the student in the selection of a course of study and works with the student in choosing a suitable thesis topic. The chairperson is expected to furnish appropriate assistance and encouragement when excessive difficulties arise in the investigation of the problem. At the request of the student, the chairperson schedules the comprehensive examination and is responsible for its administration and conduct, as well as the reporting of the examination results to the Dean of the College of Graduate Studies. The chairperson is responsible for assisting the student in ensuring the thesis is error-free in regards to format, grammar, spelling, punctuation, and content thereby meeting the standards of excellence expected by the advisory committee, department, and the College of Graduate Studies. Only grades of SP and NP shall be used to indicate a student's progress in thesis or dissertation credit.

Turnitin Use Guidelines & Self-Study Materials

Turnitin is software that Tennessee Tech University provides to faculty to evaluate student work for originality, online grading, and peer review. This resource has been made available to the graduate school faculty and offers an excellent mechanism for educating students about the nature of academic integrity, as well as the mechanics of proper citation of sources.

Before you begin using Turnitin we strongly recommend that you go through a brief set of self-study training materials available through iLearn. Also, please familiarize yourself with the current TTU Student Academic Misconduct Policy 217.

Graduate Assistants

Preamble

Programs of graduate study are designed to transform the individual from student to (knowledgeable practitioner or) professional scholar. When a graduate assistantship is well conceived and executed, it should serve as an ideal instrument to help facilitate the desired transformation. The primary goal of an assistantship, then, is to facilitate progress toward the graduate degree. Rather than interfere or conflict with the student's educational objective, the assistantship is to aid in the prompt and successful completion of the degree program. While the student assistant makes progress toward an advanced degree, he or she also receives work experience in a profession under the supervision of a faculty mentor.

The graduate assistant is both student and employee. As a student, the graduate assistant is expected to perform well academically to retain the assistantship. He or she is to be counseled and evaluated regularly by a faculty mentor so as to develop professional skills. As an employee, the graduate assistant is expected to meet teaching, research, and/or administrative obligations. He or she is to work under the supervision of experienced faculty and receive in-service training. In sum, the graduate assistant receives financial support for graduate study by contributing to the teaching and/or research mission of the university. The totality of responsibility may be greater than that required of other students or staff members, but the opportunities for professional development also are greater for the graduate assistant.

- Tennessee Conference of Graduate Schools

Appointment of Graduate Assistants

There are four (4) classifications of graduate assistantships:

1. Graduate Teaching Assistant (GTA)
2. Graduate Teaching Associate (GTS)
3. Graduate Support Assistant (GSA)
4. Graduate Research Assistant (GRA)

Appointments are made upon unit recommendation of the department in which the assistantship is available, provided the recommendation is appropriately endorsed by the Dean of the College and the Dean of the College of Graduate Studies. Unless other arrangements are specified, it is assumed the graduate assistant will pursue a degree objective in the department where the assistantship assignment is made. Applications for assistantships are found on the Graduate College website.

Graduate Assistantship awards are available for qualifying graduate students. Consideration is given on the basis of academic preparation, major area of study, and the availability of funds. Additional information may be found on the Graduate College website.

A graduate student must be admitted to full standing in a Tennessee Tech graduate program to be eligible to apply for a graduate assistantship. The period of appointment is normally for one (1) academic year at a stipend determined by the department in which the assistantship is available.

The graduate assistant must maintain a cumulative 3.0 GPA. If the Graduate Assistant's cumulative GPA falls below the required 3.0 GPA, but not less than 2.0 GPA, the Appointing Authority may authorize continuation under probationary status for one semester.

Overview of Duties of Graduate Assistants

Graduate Assistantships are an option for graduate student funding for higher education and are a form of graduate student employment, providing a compensation package that includes both a monthly stipend and a waiver for tuition and fees. The assistantship allows students to perform research, teaching or other support services for the University as part of their academic professional training and development. Assistantship students will be appointed as a Research Assistant (GRA), Teaching Assistant (GTA), Graduate Teaching Associate (GTS), or Graduate Support Assistant (GSA) with a maximum of 20 hours per week of assigned duties. The majority faculty advisor (or other assigned departmental faculty) determines the duties of the appointment. No vacation or sick benefits are applicable, but there will be no change in monthly stipend amounts and no Graduate Assistantship services required for any University holidays that the University is closed. Arrangements for any variation in work hours, including time off for vacation, holidays, or illness, should be made individually with the major advisor (or other assigned faculty). Graduate assistants receiving teaching, research, or support assignments are expected to devote sufficient hours per week as may be required to perform all duties necessary to satisfactorily complete all degree requirements. Students holding full assistantships are assigned duties which require approximately one-half the workload of a full-time faculty member.

An international graduate student, who is on an F-1 or J-1 visa, can work no more than 20 hours per week while school is in session. On-campus employment may exceed 20 hours per week during the summer for eligible international students who plan to register for the following semester if approval is granted by their major advisor, department chair, college dean, International Education, and the Dean of the College of Graduate Studies. Under federal regulations, volunteering by an international graduate student for teaching, research, or other support activity is regarded as employment that must be compensated at a fair wage.

Each academic college and/or department may have requirements in addition to the University. Graduate students are required to become knowledgeable of college and/or departmental policies concerning Graduate Assistantships.

TYPES OF ASSISTANTSHIPS

A graduate student may hold an assistantship in one of the following categories:

1. Graduate Teaching Assistant (GTA)

Graduate Teaching Assistants work under the the direct supervision of a Tennessee Tech faculty member performing one or more of the following responsibilities:

- Assist in teaching a classroom section of a course,
- Assist in teaching a laboratory or discussion section of a course,
- Tutor or provide other special assistance to Tennessee Tech students,
- Assist a faculty member in preparing lectures, grading, advising, and other duties necessary to conduct a course, or

- Assist directly or indirectly in instruction or supervision of Tennessee Tech students in community programs, internships, or seminars for practicing professionals.

2. Graduate Teaching Associate (GTS)

A GTS may have the same type of responsibilities as a GTA, but will have the responsibility of teaching an undergraduate course and be listed as a primary instructor of record for undergraduate courses only.

The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) specifies that a GTS who has primary responsibility for teaching a course for credit and/or assigning final grades for such a course must:

- Have earned at least 18 graduate credit hours in his/her teaching discipline,
- Be under the direct supervision of a Tennessee Tech faculty member experienced in the teaching discipline,
- Receive regular in-service training, and
- Be regularly evaluated by the GTS's direct supervisor.

3. Graduate Support Assistant (GSA)

Graduate Support Assistants are appointed to perform various types of duties other than those related directly to teaching or research, such as supervisory or administrative functions, by the Appointing Authority.

4. Graduate Research Assistant (GRA)

A Graduate Research Assistant has varying duties according to the specific research project to which the graduate student is assigned by the Appointing Authority. The duties of a GRA are limited to research activities.

Requirements for Eligibility and Maintaining an Appointment

1. A graduate student must be admitted to full standing in a Tennessee Tech graduate program to be eligible to apply for a graduate assistantship.
2. A graduate student seeking a graduate assistantship must complete the Graduate Assistantship application and file a copy with each department in which the graduate student is seeking a graduate assistantship.
3. No Tennessee Tech employee can make a graduate assistantship offer in writing or verbally unless s/he has explicit authority to make such offers.
4. The Appointing Authority should send a copy of all international student graduate assistantship offer letters to the TTU International Education office.
5. Graduate students who are in a co-op program are not eligible for a Graduate Assistantship.
6. A Graduate Assistant will perform all graduate assistantship duties at the Tennessee Tech campus or at a Tennessee Tech approved off-campus facility under the direct guidance of his/her assigned supervisor or Appointing Authority.

Graduate Assistant GPA Requirements

A Graduate Assistant must maintain a cumulative 3.0 GPA. If a Graduate Assistant's cumulative GPA falls below the required 3.0 GPA, but not less than 2.0 GPA, the Appointing Authority may authorize continuation under probationary status for one semester.

Permissible Loads of Graduate Assistants

Registration requirements for Graduate Assistants to receive and maintain full-time graduate student status, is as follows:

1. For the summer semester, a Graduate Assistant must register for a minimum of one (1) graduate credit hour but not more than 12 graduate credit hours.
2. For the fall and spring semesters, a Graduate Assistant must register for a minimum of six (6) graduate credit hours but not more than 12 graduate credit hours.

Qualifications of Graduate Teaching Associates (GTS)

The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) specifies that Graduate Teaching Associates who have primary responsibility for teaching a course for credit and/or assigning final grades for such a course must have earned at least 18 graduate semester hours in their teaching fields, be under the direct supervision of a faculty member experiences in the teaching discipline, receive regular in-service training, and be regularly evaluated.

The 18-hour requirement does not apply to Graduate Teaching Assistants who are engaged in assignments such as laboratory assistance, teaching physical education activities, attending or helping prepare lectures, grading papers, keeping class records, and conducting discussion groups.

The appropriate departmental chairperson has responsibility for certifying that the 18-hour requirement is met either through coursework or by documentation that the graduate assistant meets the requirement as an exception. The appropriate form will be submitted and approved by the Office of the Provost prior to the beginning of the semester.

Competency in English

Tennessee Technological University requires all who teach to be proficient, as determined by Tennessee Tech, in oral and written English.

Stipends, Tuition and Fees

Each Appointing Authority establishes the minimum stipend amount for it's Graduate Assistants. The Appointing Authority will pay, on a pro rata basis, tuition, maintenance fees, debt service fees, TN eCampus on-line fees, MBA distance course fees, and some special academic course fees based upon the Graduate Assistant's assistantship classification as full-time (100%) or one-half time (50%) assistantship. The Graduate Assistant is responsible for all other costs including books, international fees, and any other fees assessed.

Only courses listed on the graduate student's program of study will be covered by the graduate assistantship.

Unless a Graduate Assistant receives prior approval from the Appointing Authority, course repetitions and course withdrawals will not be covered by the graduate assistantship.

Graduate Assistants must notify the Appointing Authority of all course withdrawals.

Termination/Resignation/Cancellation of Graduate Assistantships

Absent good cause, if a Graduate Assistant fails to meet the requirements in the offer letter, the Appointing Authority will terminate the assistantship.

All graduate assistantships terminate immediately if the Graduate Assistant is dismissed for academic reasons.

If a Graduate Assistant decides to resign from his/her assistantship before expiration of the assistantship, the Graduate Assistant should notify the Appointing Authority in writing two (2) weeks before the date of resignation and should complete an exit interview with the Appointing Authority.

If the Appointing Authority determines that the Graduate Assistant has completed his/her degree program and all research requirements mid-semester, the Appointing Authority may cancel the stipend for the Graduate Assistantship or continue it until the end of the semester.

If Tennessee Tech terminates the graduate assistantship or the Graduate Assistant resigns, forfeits, or withdraws from Tennessee Tech during a semester:

- The Graduate Assistant will be responsible for paying his/her academic tuition fees on a pro rata basis for the remainder of the term.
- The Graduate Assistant's financial responsibility will be based on the number of days left in the semester at the time the assistantship ends and reclassification of residency in accordance with TTU Policy 253 (Residency Classification).
- Should a Graduate Assistant believe there is sufficient justification for an exception to the tuition fee balance owed by the Graduate Assistant, s/he must submit the Request for Exception to University Requirement form to the Tennessee Tech Bursar's office for review and final disposition.

Resolution Regarding Graduate Scholars, Fellows, Trainees, and Assistants

Acceptance of an offer of financial support (such as a graduate scholarship, fellowship, traineeship, or assistantship) for the next academic year by a prospective or enrolled graduate student completes an agreement that both student and graduate school expect to honor. In that context, the conditions affecting such offers and their acceptance must be defined carefully and understood by all parties.

Students are under no obligation to respond to offers of financial support prior to April 15; earlier deadlines for acceptance of such offers violate the intent of this Resolution. In those instances in which a student accepts an offer before April 15, and subsequently desires to withdraw that acceptance, the student may submit in writing a resignation of the appointment at any time through April 15. However, an acceptance given or left in force after April 15 commits the student not to accept another offer without first obtaining a written release from the institution to which a commitment has been made. Similarly, an offer by an institution after April 15 is conditional on presentation by the student of the written release from any previously accepted offer. It is further agreed by the institution and organizations subscribing to the above Resolution that a copy of this Resolution should accompany every scholarship, fellowship, traineeship, and assistantship offer.

-National Council of Graduate Schools

General Graduate Admission Requirements

Admission to the College of Graduate Studies is open to anyone holding a bachelor's or master's degree from an accredited college or university. A foreign degree must be equivalent to a U.S. Bachelor's degree and must be accredited by its regional or national accreditation agency or Ministry of Higher Education. Applicants should have completed undergraduate or graduate work of sufficient quality and scope to enable them to successfully pursue graduate study. Tennessee Tech University offers equal educational opportunity to all persons, without regard to race, religion, sex, age, creed, color, national origin, or disability.

Students are admitted to Tennessee Tech University through a cooperative effort of the Graduate College and the departments, colleges, and schools of the University. When the Graduate College receives the student's application material, an official file is established. The department then reviews the application file and makes a recommendation to the Graduate College. The Graduate College notifies applicants as soon as a decision has been reached.

Applicants must submit the following for admissions consideration:

- An application for admission.
- Official transcripts of undergraduate and graduate credit from all institutions attended.
- Letters of recommendation from persons acquainted with the applicant's scholastic and professional accomplishments. The individual department will determine the requirements for letters of recommendation.
- Graduate admissions test scores. The individual major department or division will determine the minimum test score requirement for admission and readmission, subject to approval by the respective college-level committees, college dean, and the Graduate Studies Executive Committee.
- All graduate applications must be accompanied by a one-time non-refundable graduate application fee ($35.00 for domestic applicants; $40.00 for international applicants). Applications received without the application fee will not be processed.
- Any other applicable requirement required by the major department or division to which the applicant is applying.

An applicant who was previously enrolled in a graduate degree program but had a break in enrollment, excluding the summer term, must reapply.

All application materials become the property of Tennessee Tech and will not be returned to the applicant regardless of whether admission is approved or denied.

In order to be admitted to a degree program in any academic unit, applicants are also required to meet any additional standards set by the department, school, or college. Applicants are selected on a competitive basis and, therefore, admission is not granted to all applicants who meet only the minimum requirements. In addition, academic programs may have additional requirements such as portfolios, proficiency examinations, professional licensing, etc.

Individual program requirements are described in the Tennessee Tech University Graduate Catalog and on department websites. Requirements are subject to change. The Graduate College no longer accepts hard-copy (paper) applications. Please visit the Graduate College web site for detailed program admission requirements, deadlines, and to begin the on-line application process.

Procedures

Applications for admission to the Graduate School must be submitted by the due dates defined on the college website (International students must submit applications at least six (6) months in advance.) Applications for readmission should be filed not later than 2 weeks before the first day of registration. All applicants for admission into the following programs must submit satisfactory official scores on the required admission test.

College Test	
College of Arts and Sciences	GRE® General Test (GRE)
College of Business	no test required
College of Education, Mater's & Ed.S.	no test required
College of Education, Ph.D., Exceptional Learning only	GRE® General Test (GRE)
College of Engineering	GRE® General Test (GRE)
School of Nursing	Successful completion of the NCLEX-RN licensing examination (to be verified by the School of Nursing)
All International Students	Test of English as a Foreign Language (TOEFL) *or* International English Language Testing System (IELTS) *or* Pearson Test of English (PTE-A) *or* Duolingo English Test and the appropriate test as required by colleges

Each application must be supported by official transcripts of undergraduate and graduate credit from an accredited institution (for a list of accrediting agencies recognized, refer to the U.S. Department of Education website) and letters of recommendations if required by the major department from persons acquainted with the applicant's scholastic and professional accomplishments. If admission is granted pending receipt of application credentials, the student must submit the required items before the end of the first semester during which the student is enrolled. Within the limits of academic reason, either the departmental chairperson or the Associate Dean of Graduate Studies may require additional information and verification of credentials submitted in support of an application for admission.

The requirement of minimum test scores either for admission, readmission, or candidacy is determined by individual departments or divisions, subject to approval by the respective college-level committees, college dean, and the Graduate School Executive Committee.

All application materials become the property of the University and will not be returned to the applicant regardless of whether admission is approved or denied.

It is a Class A misdemeanor to misrepresent academic credentials. A person commits the offense of misrepresentation of academic credentials who, knowing that the statement is false and with the intent to secure employment at or admission to an institution of higher education in Tennessee, represents, orally or in writing that such person:

1. Has successfully completed the required course work for and has been awarded one (1) or more degrees or diplomas from an accredited institution of higher education;
2. Has successfully completed the required course work for and has been awarded one (1) or more degrees for diplomas from a particular institution of higher education; or
3. Has successfully completed the required course work for and has been awarded one (1) or more degrees or diplomas in a particular field or specialty from an accredited institution of higher education.

International Students

International students having adequate preparation for graduate study may apply for admission, but applications should be filed at least six months prior to the anticipated date of enrollment. Midyear enrollment is strongly discouraged. In addition to the requirements mentioned in the paragraphs above, all students from non-English-speaking countries must submit proof of adequate training and ability in the use of English as evidenced by a satisfactory score on recognized and acceptable tests administered in the student's home country. Normally, it is expected that an applicant will submit a score of at least 525 (71 internet-based) on the Test of English as a Foreign Language (TOEFL) or base score of 6.0 on the International English Language Testing System (IELTS) or 48 on the Pearson Test of English-Academic (PTE-A). Please review the admissions criteria for your desired degree program. A TOEFL score of at least 550--79 internet-based or 213 computer-based or a PTE-A score of 53 is required for Agriculture & Human Ecology, Business, Engineering, Interdisciplinary Studies, and Nursing.

	TOEFL - Test of English as a Foreign Language		DUO	IELTS	PTE-A
COLLEGE/SCHOOL	Paper-based Test	Internet-based Test	Duolingo English Test	International English Language Testing System	Pearson Test of English-Academic
Arts & Sciences, Education	525	71	100	6.0	48
Agriculture & Human Ecology, Business, Engineering, Interdisciplinary Studies, Nursing	550	79	100	6.0	53

Check requirements of the specific college or department to determine level needed for admissions.

Applicants must also give satisfactory proof of sufficient funds to cover all of their expenses including travel.

The Graduate School will not knowingly consider for admission any person who has entered the United States via an immigration visa issued for another university until that person has transferred their SEVIS record to Tennessee Tech; thereafter, the usual transfer procedures would be implemented. International students who wish to transfer from another university to Tennessee Tech must submit the usual materials required for initial admission; additionally, each applicant must furnish:

1. official transcripts from the current institution;
2. a verification statement from that institution's international student advisor;
3. photocopies of Form I-20 ID (front and back), the passport, the visa, and Form I-94.

Only transfer credit from an accredited university is permitted; each student is expected to complete a full program of study at Tennessee Tech.

In cases where the undergraduate record may furnish insufficient evidence of any applicant's potential for success in graduate study, additional qualifying examinations may be administered by the department in which the applicant proposes to study. The cost of the tests will be borne by the applicant.

If admission is approved, Form I-20 will be issued as follows: not later than June 1 for the fall term, November 1 for the spring term, and April 1 for the summer term. These dates are consistent with immigration regulations and apply to all F-1 non-immigrant students including those transferring from other U.S. institutions and those who are already enrolled at Tennessee Tech who wish to change from one degree program to another.

Enrollment in a program is contingent on the student receiving an appropriate visa.

Resident Classification

The residence of a dependent student is presumed to be that of his/her parents. Residence (for fee-paying purposes) is interpreted to mean where the parents are domiciled. Unless the contrary appears from clear and convincing evidence, it is presumed that an emancipated person does not acquire domicile in Tennessee while enrolled as a full-time student at any public or private institution of higher education in the state. A student once classified as an out-of-state student will continue to be so classified unless a review of classification is requested. An emancipated individual who is working full time (30 hours per week or more) in Tennessee may register for up to 7 hours per term at in-state rates while establishing permanent residency.

A graduate assistant is classified as an in-state resident for fee-paying purposes only while he/she is an assistant. Residency will be reviewed when assistantship ends.

Change of residence status for tuition purposes is never automatic. A request for review must be made to the Dean of the College of Graduate Studies and adequate information must be provided by the student to warrant a review of resident status. Many factors, such as full-time employment for an extended period, are taken into consideration when a student's resident status is reviewed. If the review is negative, a request for exception may be filed with the Dean of the College of Graduate Studies and, then, the Graduate School Executive Committee.

If Tennessee residency is approved, the classification change shall be effective at the next registration after the approval has been granted.

Resident Alien

A lawful permanent resident of the United States (holder of a "green card") may be required to take the English Placement Test or other tests to determine proficiency in English and the necessity for taking courses in English.

Admission Classifications

The major department or division and College of Graduate Studies will classify applicants as Full, Provisional, or Special Standing.

Full Standing

This category indicates that the student has an adequate background for pursuing graduate work and that all minimum requirements for admission to graduate standing have been met.

Provisional Standing

This category indicates that the student does not qualify for full standing due to deficiencies in meeting specific program requirements. "Provisional Standing" is not equivalent to "conditional" admission for the purpose of international student enrollment.

The College of Graduate Studies will change a student's Provisional Standing to Full Standing when the deficiencies identified at the time of admission are removed, provided, at the sole discretion of the department and college: the deficiencies are cured prior to the completion of 15 graduate hours; or after acceptable completion of 9 graduate hours if the sole deficiency is caused by an unacceptable admission exam. A student's failure to remove the deficiencies by the deadline established by Tennessee Tech will result in a registration hold being placed on future registrations until such time as the deficiencies have been removed.

Special Standing

This category denotes that the student has declared a non-degree graduate objective. Students who declare a non-degree graduate objective or transient students who have been admitted to graduate schools of other institutions are assigned to Special Standing.

Admission to the Graduate School in any of the categories described above does not imply acceptance to candidacy for a graduate degree. The requirements for candidacy are explained elsewhere in this publication.

Individuals who wish to enroll in graduate level courses and who do not wish to seek graduate degrees (non-degree graduate students under the category of Special Standing), must submit an application, application fee, and proof of having earned the baccalaureate degree. Students admitted under this category of Special Standing must submit official transcripts of degree conferral's no later than the end of the first semester of enrollment or will be denied registration in subsequent semesters.

Change of Classification

Students who have been admitted to graduate study with Provisional Standing may, upon the approval of the departmental chairperson (or Program Director for students in the Ph.D. programs) and the Associate Dean of Graduate Studies, request and be granted Full Standing after removing any entrance deficiencies noted at the time their applications for admission were approved. Deficiencies may be removed by:

- establishing credit in the courses recommended by the departmental chairperson as necessary to remove a deficiency, or any group of courses which the departmental chairperson may approve as a suitable substitute for the listed courses; the courses used for removal of deficiencies must be passed with a grade of "C" or better and these courses will not be counted in the graduate program nor in the computation of the graduate quality point average;
- the completion of at least nine (9) semester credits of graduate work, including six (6) semester credits in the major field, with a minimum quality point average of 3.0 for students who entered with a questionable undergraduate background; and obtaining satisfactory scores on admission tests.

In any instance, a student must apply for reclassification to Full Standing prior to the completion of 15 graduate hours. Students who have been admitted to graduate study with Special Standing are not eligible for reclassification until their graduate and undergraduate records have been evaluated by the department in which they wish to major. Credit earned while in Special Standing may not be counted toward a degree until approved by the major departments but in no case will more than nine (9) semester credits be counted.

General Graduate Admission Requirements

Admission to the College of Graduate Studies is open to anyone holding a bachelor's or master's degree from an accredited college or university. A foreign degree must be equivalent to a U.S. Bachelor's degree and must be accredited by its regional or national accreditation agency or Ministry of Higher Education. Applicants should have completed undergraduate or graduate work of sufficient quality and scope to enable them to successfully pursue graduate study. Tennessee Tech University offers equal educational opportunity to all persons, without regard to race, religion, sex, age, creed, color, national origin, or disability.

Students are admitted to Tennessee Tech University through a cooperative effort of the Graduate College and the departments, colleges, and schools of the University. When the Graduate College receives the student's application material, an official file is established. The department then reviews the application file and makes a recommendation to the Graduate College. The Graduate College notifies applicants as soon as a decision has been reached.

Applicants must submit the following for admissions consideration:

- An application for admission.
- Official transcripts of undergraduate and graduate credit from all institutions attended.
- Letters of recommendation from persons acquainted with the applicant's scholastic and professional accomplishments. The individual department will determine the requirements for letters of recommendation.
- Graduate admissions test scores. The individual major department or division will determine the minimum test score requirement for admission and readmission, subject to approval by the respective college-level committees, college dean, and the Graduate Studies Executive Committee.
- All graduate applications must be accompanied by a one-time non-refundable graduate application fee ($35.00 for domestic applicants; $40.00 for international applicants). Applications received without the application fee will not be processed.
- Any other applicable requirement required by the major department or division to which the applicant is applying.

An applicant who was previously enrolled in a graduate degree program but had a break in enrollment, excluding the summer term, must reapply.

All application materials become the property of Tennessee Tech and will not be returned to the applicant regardless of whether admission is approved or denied.

In order to be admitted to a degree program in any academic unit, applicants are also required to meet any additional standards set by the department, school, or college. Applicants are selected on a competitive basis and, therefore, admission is not granted to all applicants who meet only the minimum requirements. In addition, academic programs may have additional requirements such as portfolios, proficiency examinations, professional licensing, etc.

Individual program requirements are described in the Tennessee Tech University Graduate Catalog and on department websites. Requirements are subject to change. The Graduate College no longer accepts hard-copy (paper) applications. Please visit the Graduate College web site for detailed program admission requirements, deadlines, and to begin the on-line application process.

Special Admissions

Admission of Faculty Members to Graduate Studies

Any faculty member may register for credit courses offered by the University. Faculty members with full-time responsibilities to the University may not register for more than six (6) credit hours per semester. No member of the faculty who holds tenure or professorial rank is eligible to become a candidate for a graduate degree; however, an instructor on temporary appointment may qualify for candidacy. Exceptions to this policy must be approved by the Graduate School Executive Committee; such approval will be granted only in unusual circumstances.

Admission of Seniors to Graduate Courses

A senior who needs less than a normal semester's work to complete the requirements for the bachelor's degree, and who gives indication of being able to achieve Full Standing in the Graduate School at the conclusion of the undergraduate program, may take sufficient graduate credit (6000 level or below) to fill out a normal schedule, subject to the approval of the departmental advisor, course instructor(s), chairperson of the department(s), and the Associate Dean of Graduate Studies. If the student would not qualify for Full Standing but would qualify for Provisional Standing, he/she may take such 5000-level courses for graduate credit as may be approved by his/her departmental advisor, chairperson of the department(s), and the Associate Dean of Graduate Studies. A Tentative Graduate Advisory Committee and a program of study must be developed prior to the completion of nine (9) credit hours of graduate work to be counted toward degree requirements.

A senior who gives indication of being able to achieve Full Standing in the Graduate School may elect up to nine (9) hours of graduate courses (6000 level or below) for undergraduate credit upon approval of his/her departmental advisor, course instructor(s), chairperson of the department(s), and the Associate Dean of Graduate Studies. Credit earned in this manner may not later be counted as graduate credit. If the senior would not qualify for Full Standing but would qualify for Provisional Standing, he/she may elect up to nine (9) hours of 5000 level courses upon approval of his/her departmental advisor, course instructor(s), chairperson of the department(s), and the Associate Dean of Graduate Studies.

When a senior earns graduate credit, that credit falls under the Special Standing regulation that is described in a previous section of this catalog regarding "Admission Classification." Specifically, the student is cautioned to remember that not more than nine (9) semester credits earned in Special Standing can be counted for graduate degree purposes.

Admission of Transfer Students

An applicant for admission who has begun a graduate program at another college or university may be considered for admission to the Graduate School of Tennessee Technological University on a transfer basis. Coursework transferred or accepted for credit toward a graduate degree must represent graduate coursework relevant to the degree, with course content and level of instruction resulting in student competencies at least equivalent to those of students enrolled in the institution's own graduate degree programs. It is anticipated that such an applicant will have maintained a "B" average in prior graduate study and will be in good standing at the institutions previously attended. If transfer admission is approved, the student's grades that are accepted for transfer will **not** be included in this institution's GPA calculations. The number of transfer credits utilized for degree purposes is determined by the program department, at their sole discretion, and in accordance with SACSCOC Accreditation Standard 9.2. In certain instances, a competency examination may be administered to validate credit.

International students who wish to transfer to Tennessee Tech from another Graduate School must submit the usual materials required for initial admission. Additionally, each applicant must furnish official transcripts from the current institution as well as a statement from that institution's international student advisor. The applicant must also submit a bank statement verifying that sufficient funds are available for the applicant's living and collegiate expenses, as well as photocopies of the passport, visa, I20-ID and I-94.

Admission of Non-degree Graduate Students

Admission to some graduate courses is available to persons who do not seek a graduate degree. Each applicant must submit to the Graduate School an application and proof of having earned the baccalaureate degree. Students admitted under this category of Special Standing must submit official transcripts of degree conferral's no later than the end of the first semester of enrollment or will be denied registration in subsequent semesters. When the student declares a degree major, the student will then pay the admissions application fee.

International students on an F1 Visa are not eligible for admission as non-degree students.

Non-degree graduate students are placed in Special Standing (see Special Standing section) and are permitted to take such undergraduate and graduate courses as are approved by individual advisors. Not all courses offered at the University are available for non-degree students. Information concerning the availability of specific courses can be obtained from individual departments. A non-degree graduate student subsequently admitted into a graduate program may submit previously earned graduate credit hours to the program to review. The department will determine at their sole discretion, and in accordance with SACSCOC Accreditation Standard 9.2, the number of credit hours it will accept towards such a degree.

Admission as a non-degree graduate student is not the same as admission as an "additional bachelor's" student. The admission status of an additional bachelor's student is explained in the following section of this catalog.

Admission as an Additional Bachelor's Student

An additional bachelor's student is a post-baccalaureate student but is not a graduate student and should not be confused with a non-degree graduate student.

Admission to Class as an Auditor

An auditor is one who enrolls in classes on a noncredit basis, is expected to attend class, but is not required to hand in assignments or to take examinations. If the instructor is not satisfied with the attendance, the instructor may assign a grade of "W." A student who audits must be admitted to the University as a regular or special student.

Admission to class as an auditor requires the consent of the instructor and the approval of the Director of Records and Registration. The applicant should secure the Audit Registration form from the Office of Records and Registration. Fees for audit courses are the same as those for credit courses.

Readmission of Former Students

A former graduate student at Tennessee Technological University who is not currently enrolled at the University must file an application for readmission. The application must be submitted through the online application system and should be filed no later than two (2) weeks before the first day of registration of the semester of anticipated enrollment.

Veterans' Benefits

Many students enroll for graduate study with financial benefits provided by the Veterans Administration. A student who anticipates receiving VA benefits should keep in mind that enrollment cannot be verified until the student files with the Graduate School an approved program of study or teacher licensure plan. Certificate of satisfactory process can be verified for no more than two (2) semesters of academic probation.

Any covered individual will be able to attend or participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under chapter 31 or 33 (a "certificate of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website – eBenefits, or a VAF 28-1905 form for chapter 31 authorization purposes) and ending on the earlier of the following dates:

1. The date on which payment from VA is made to the institution.

2. 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

Tennessee Tech will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

College of Engineering - Master of Science Admission Requirements

Master of Science Admission Requirements

Applicants for admission to any of the MS programs offered by the departments of the College of Engineering are expected to have earned a BS degree from an approved program, or its equivalent. The admission decision is based on multiple criteria drawn from the following items:

- Undergraduate GPA of at least 3.0 on a 4.0 scale,
- GRE® General Test (GRE) scores with Quantitative greater than or equal to 50%; Verbal greater than or equal to 33%; Analytical Writing greater than or equal to 33%. A GRE is not required for applicants to the Computer Science MS program if their undergraduate degree is from a U.S.-based institution. Students with BS degrees in related fields from TTU are not required to take the GRE.
- Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.
- Availability of appropriate faculty to serve as research advisor(s).
- Participation in undergraduate research.
- Post-BS degree professional experience relevant to planned degree of study.
- Publications in peer reviewed journals and/or award-winning presentations in technical conferences.
- A score of at least 79 on the TOEFL or a minimum base score of 6.5 on the IELTS must be achieved by international students.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission. Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Note: all MS degree programs, except Engineering Management, offer the Fast Track program to qualified applicants from the TTU BS program. See department details to find out more about Fast Track.

College of Engineering - Doctor of Philosophy Admission Requirements

A graduate program leading to a Doctor of Philosophy (Ph.D.) degree in Engineering is offered by the College of Engineering. When applying for admission, a student must state on the application the specialization area of study for which admission is requested.

The basic admission standards for the Ph.D. program are the same as for the MS programs, except that, additionally, an applicant is expected to have completed an MS degree in an academic area appropriate to the proposed area of study and to have earned an MS GPA of at least 3.5 on a 4.0 scale. In addition, a GRE score is not required for applicants to the PhD in Engineering with a Computer Science concentration, if an applicant's undergraduate degree or Master's degree is from a U.S.-based institution.

Though the general requirement for admission to the Ph.D. program is a master's degree in an appropriate discipline, students with a bachelor's degree may be admitted to the Ph.D. program directly on exceptional basis, provided the applicant has a record of excellent academic performance in an appropriate engineering program undergraduate program. The applicant's test scores, personal recommendations, and relevant work experience must indicate a high potential for success in doctoral studies and research. In addition, factors such as appropriateness of the applicant's research objectives to the research interests of the program faculty, availability of faculty to supervise the applicant's research, and prior research accomplishments of the applicant will also influence the admission decision.

Fulfilling the minimum requirement does not guarantee admission; an applicant who does not meet the above minimum, but appears to have reasonable potential for success as a Ph.D. student, may be admitted to provisional standing. His/her status may be changed to full standing after satisfying requirements specified by the Associate Dean of Engineering for Graduate Studies and Research, in consultation with the appropriate departmental chairperson, at the time of admission.

If admitted in provisional standing at either the MS or Ph.D. level, the student must remove all deficiencies and apply for reclassification to full standing prior to the completion of 15 graduate hours.

Sometimes a master's-level student takes more graduate-level courses than are required for the degree because the student is expecting to continue on to the Ph.D. program and hopes to use the extra courses to satisfy the Ph.D. coursework requirement. When this is the case, the student can request when registering for the course(s) that the course(s) be "banked" for the Ph.D. program. If the student lacks no more than 12 semester hours on the master's degree, he/she may accumulate a maximum of nine (9) semester hours which may be applied toward the Ph.D. When this is the case, the student's advisory committee must initiate approval via memo with consensus of the departmental chairperson, dean of the college, and the Director of Graduate Studies. Banked courses then show up on the student's transcript as courses taken for the Ph.D. rather than being shown as a part of his/her M.S. program. Banking course does not guarantee admission to the Ph.D. program, or, if admitted, that the student's Ph.D. advisory committee will approve the course as part of the student's Ph.D. program of study.

General Degree Requirements

Time Limits on Completion of Requirements

A graduate student in a master's or specialist program must complete all degree requirements within six (6) consecutive years. A graduate student in a doctoral program must complete all requirements within eight (8) consecutive years. Time limits shall be computed from and including the first semester the student is admitted and enrolled in a degree program.

All Graduate Courses (both TTU and transfer credit) earned toward a graduate program must be taken within the applicable time limit. Courses that exceed the time limit must be validated for currency.

Course Validation

Tennessee Tech courses will be reviewed for current content at the home department where the course is offered. Courses taken outside of TTU will be reviewed for current content at the discretion of the department. The department will notify the College of Graduate Studies (via the Course Validation form) regarding the results of course content review and validation. Validated courses will not have to be reviewed again during the remaining time limit associated with the degree program.

Advisory Committee

A graduate student is required to have an advisory committee and is responsible for its formation and maintenance. Several programs have a designated "standing advisory committee." TTU Policy 271 provides details on the composition of the student's advisory committee. All requirements related to advisory committee responsibility as defined in Tennessee Tech Policy 282 (Graduate Faculty Appointment and Responsibilities Policy) must be met, except as provided in this section;

- Unless a specific graduate program has direct oversight by a standing advisory committee, all graduate degree programs must follow the committee formation requirements.
- In consultation with their advisor, a graduate student is required to establish their advisory committee and should submit the Advisory Committee Form to the College of Graduate Studies by the completion of 15 semester hours.
- The graduate student, in consultation with the departmental chairperson or graduate student's academic advisor, will determine the formation of the graduate student's advisory committee as part of the Program of Study.
- A minimum of three (3) advisory committee members is required for a master's or specialist degree program.
- A minimum of four (4) advisory committee members is required for a doctoral program in Education.
- A minimum of five (5) advisory committee member is required for a doctoral program in Engineering and Environmental Sciences.
- A graduate student's advisory committee members shall represent each of the areas in which the graduate student expects to study, with two (2) members having background in the major area. The graduate student must have at least one (1) committee member with adequate background and research interests in the area in which the student has proposed a research objective.
- A faculty member has the prerogative of accepting or relinquishing an appointment on a graduate student's advisory committee.
- Professionals who are not employed by Tennessee Tech may serve as a consultant on a graduate student's committee if appointed pursuant to Policy 282 (Graduate Faculty Appointment and Responsibilities).
- Approval requirements are as follows:
    ◦ Three (3) positive votes, or seventy-five percent positive votes, whichever is greater, is required from the advisory committee members of a graduate student pursuing a master's or specialist degree.

- ◦ A minimum of eighty percent positive votes is required from the advisory committee members of a graduate student pursuing a doctoral degree in Engineering or Environmental Sciences.
  - ◦ The advisory committee must vote unanimously positive for a graduate student pursuing a doctoral degree in Education.
  - ◦ In the event a student does not meet the required number of votes for approval, the student may appeal to the dean of the college in which they are enrolled. The college dean may assign a subcommittee to review the appeal. However, the decision from the dean of the college is final.
- The graduate student is responsible for submitting to the College of Graduate Studies any change in advisory committee.

Program of Study

Following admission into a graduate degree program, a graduate student will work with their academic advisor and committee members to determine the specific courses needed to fulfill their degree requirements.

Comprehensive Examination

At or near the completion of the course requirements for the graduate degree, each candidate must pass a comprehensive examination conducted by the candidate's graduate advisory committee. The examination may be oral or written or both. In the examination the student should demonstrate the breadth of knowledge in the discipline, depth in specific areas, and the ability to integrate what has been learned. The following degree programs have a capstone course in which the final course completion is used in place of the comprehensive examination.

- Curriculum and Instruction, and Instructional Leadership (M.A. and Ed.S.) completion of CUED 6305 or CUED 6315 or CUED 7910
- Exercise Science and Wellness (M.A.) completion of EXPW 6550
- Electrical Engineering non-thesis completion of final project course, ECE 6970
- Masters of Business Administration completion of BMGT 6950
- Masters of Nursing completion of NURS 6990
- Masters of Professional Studies completion of PRST 6998
- Mechanical Engineering non-thesis completion of final project course ME 6900
- Professional Science Masters completion of ESS 6910

Thesis/Dissertation Defense

Serving as a comprehensive examination for students pursuing a thesis track master's or doctorate, a formal defense of the thesis or dissertation is required. Scheduling of the defense is the candidate's responsibility. The defense will be attended by the candidate's advisory committee and other designees as the individual degree defines.

Application for Graduation

In addition to satisfying all degree requirements, a candidate for a degree must file an Application for Graduation one semester prior to the semester in which the degree is expected to be conferred. The deadline for the filing of the application is posted on the College of Graduate Studies website each semester.

A graduate student shall be enrolled for a course approved by the graduate advisor during the term in which the degree is awarded <u>unless</u> all requirements have been completed by the last day to register for the term. Any prior courses with a grade of "I" do not count toward enrollment hours.

If a student applies for graduation but fails to satisfy graduation requirements, the student must reapply; this must be done by the date appearing in the online calendar.

All final degree requirements for graduation must be filed in the Graduate Studies Office no later than one (1) week prior to commencement, with the exception of the defense form and comprehensive exam form which are due three (3) weeks prior to commencement. Transcripts from other universities used as transfer credit on a program of study must be received no later than two (2) weeks after the commencement date.

The advisory committee approved copy of the thesis/dissertation must be submitted through the ETD Administrator (ProQuest) for format review no later than two (2) weeks prior to commencement. The final copy for publication through ProQuest must be submitted via the ETD Administrator one (1) week prior to commencement.

Commencement

There will not be a commencement ceremony for those graduating in August. Students who wish to participate will be allowed to return to the University for the December commencement ceremony. Exceptions may be made to this policy for extenuating circumstances. Students requesting to walk in a commencement other than the semester that the degree is conferred, are required to request prior-approval. An "Exception to Walk in Commencement" should be filed by the student (the form may be found ONLINE at College of Graduate Studies - Online Forms (tntech.edu)) at least four weeks before the end of the semester. The completed form is to be electronically signed by the student's advisor, department chair, and the Dean of the College of Graduate Studies. Students may participate in only one (1) commencement ceremony for each degree earned at Tennessee Tech University.

Master's Degree General Requirements

Programs of Study

Programs of study toward advanced degrees are less formal than for undergraduate degrees. Individual programs are planned for each student on the basis of educational background and career objective. Graduate degrees are not only awarded on the basis of completion of specific courses, but also on the basis of evidence of proficiency, scholarship, reasoning and investigation, and high attainments in the field of the student's specialization.

Although the maximum number of credits required in any degree program is determined in accordance with the formalized program approved for each student, a candidate for the master's degree must complete at least 30 semester hours of credit in a program requiring a thesis or at least 33 semester hours in a nonthesis program. The MBA program, while nonthesis, requires only 30 hours. The MA program in Exercise Science, Physical Education, and Wellness requires only 30 semester hours of credit for both the thesis and nonthesis options. Nonthesis options may be permitted by departments when authorized by the Graduate School Executive Committee (see "credit

requirements" below). At least seventy percent of the credit to be counted toward a master's degree must be at the 6000 level or above. In addition to the minimum course credits required for the advanced degree, other courses may be required as prerequisites depending upon the student's educational background, preparation, and objectives; however, credit earned below the 5000 level will not be counted toward a graduate degree. Courses listed as 4000 (5000) may be taken only at the 5000 level for graduate credit, and graduate credit is earned on the basis of additional work required by the instructor. Courses taken at the 4000 level may not later be taken at the 5000 level without special permission from the departmental chairperson, dean of the college, and the Associate Dean of Graduate Studies. Credit earned for one (1) degree program cannot be used in another degree program.

Any nonthesis program which is considered for approval by the Graduate Studies Executive Committee must demonstrate that it fosters independent learning.

A student desiring to pursue study for the master's degree in a field which may be different from the field of his undergraduate degree, and in which the necessary prerequisites are lacking, may do so by including in the program of study (as background courses) all the necessary undergraduate prerequisites for the area of specialization in addition to the required number of hours for the degree.

Each proposed program of study must be approved by the student's advisory committee, the departmental chairperson, and the Associate Dean of Graduate Studies.

There will be a hold placed on each student's registration if the program of study has not been filed in the Graduate Studies Office by the time 15 semester hours have been earned.

Admission to Candidacy

Graduate students in a program leading to the master's degree, except those in Special Standing, should make application for admission to candidacy immediately following the completion of nine (9) semester hours of graduate credit. If application is not made by the time 15 hours are completed, the student may not be permitted to register for subsequent work until the application is approved. The requirements which must be met before approval of admission to candidacy are:

1. the achievement of Full Standing.
2. the completion of at least nine (9) semester hours of graduate credit with a minimum quality point average of 3.0.
3. the written approval by the student's advisory committee.
4. the written approval of the chairperson of the major department.
5. successful completion of any examination which may be required by the student's department.

If the student's application for admission to candidacy is not approved due to academic deficiencies, the student cannot continue graduate study with a major in any of the departments of the college in which he/she is studying.

Credit Requirements

A candidate for the master's degree must normally complete at least 30 semester hours of credit in a program requiring a thesis and at least 33 semester hours in a nonthesis program. Nonthesis options are available in all departments of the College of Education; in the Departments of English in the College of Arts & Sciences, and in all but Engineering Management in the College of Engineering. The M.B.A. in the College of Business and the Master of Professional Studies in the College of Interdisciplinary Studies are nonthesis programs but requires only 30 hours. The master's program in Exercise Science, Physical Education, and Wellness requires only 30 hours. The master's program in Educational Psychology within the Department of Counseling and Psychology requires 30 hours for the non-thesis option and 33 hours for the thesis option.

At least 21 semester credits including the thesis shall be required at the 6000 level or above in a 30-hour program for the master's degree; at least 23 semester credits at the 6000 level or above shall be required in a 33-hour master's program. The remainder of the courses in the program of study may be at the 5000 level; however, not more than 30% of the courses in a student's program of study may be in dually numbered 4000 (5000) courses. Courses below the 5000 level will not be counted toward a graduate degree; and, although they may appear on the written program as background requirements, these courses are not figured into degree requirements.

Requirements for a Major

A student's program of study must reflect a reasonable concentration in related or interrelated courses. A department may require that all of the courses in a student's program be taken in that department; or it may require that a major portion be taken in that department and allow for one or more minor areas of collateral study in other departments.

Transfer and Other Credit

Students who request to transfer graduate course credits from an accredited institution to Tennessee Tech must request that the institution send official transcripts directly to TTU. Official transcripts must include all grades.

The program department will determine, at its sole discretion, what transfer coursework is eligible for transfer to the student's program of study.

The coursework transferred or accepted for credit toward a graduate degree must have a minimum grade of "B" in each course.

For all graduate degree programs, the department will determine, in its sole discretion, the number of transfer credits it will accept, provided the department's decision is in compliance with SACSCOC Accreditation Standard 3.6.3.

Tennessee Tech will exclude grades earned in transferred courses in the calculation of grade point averages.

Tennessee Tech Policy #283 (General Graduate Transfer Credit Requirements) provides additional information on Transfer Credit.

Thesis

When a thesis is required in a student's program of study, no fewer than six (6) credit hours for Graduate Course 6990 (Master's thesis) will be counted towards the degree. Thesis (and dissertation) credit is made available in increments of 3, 6, or 9 semester hours during any given semester (and in some departments as one [1] hour credit). A graduate student shall be required to be registered for at least one (1) course appropriate to the student's degree objective in order to have access to computer equipment, laboratories, library, and other university facilities and resources even if the student is working in absentia on research and thesis. A graduate student shall be enrolled during the term in which the degree is awarded. When a student makes satisfactory progress in research and thesis, a grade of SP (Satisfactory Progress) will be assigned

for credit earned. When satisfactory progress is not achieved, a grade of NP (No Progress) will be assigned; however, a grade of NP shall not be counted as having satisfied either program or degree requirements, and the student must register again for additional thesis (or dissertation) credit. Only grades of SP and NP shall be used to indicate a student's progress in thesis or dissertation credit.

Thesis Preparation:

The College of Graduate Studies requires all graduate students to follow the "Guide to the Preparation of Theses and Dissertations" that is published on the College website. The College of Graduate Studies will review the graduate student's thesis for formatting to ensure the thesis adheres to the Guide. The College will not review the paper's content, spelling, or accuracy of the citation.

Once the graduate student's advisory committee certificate approval page has been submitted to the College of Graduate Studies, the graduate student must submit the thesis electronically (through eTD ProQuest) to the Graduate School at least two (2) weeks prior to the close of the semester in which the degree is to be conferred (or at an earlier date if such is specified in the University calendar). Refer to the College of Graduate Studies website regarding requirements for electronic submission. Any thesis/ dissertation that does meet the required standards will be returned to the student who will have one (1) week maximum to make corrections and resubmit. Failure to do so will result in ineligibility for graduation. All theses/dissertations that meet the required standards will be forwarded on for publication and the student will be eligible for graduation.

The graduate student's failure to complete the thesis review and formatting process with the College by the posted deadline on the College calendar, will result in the graduate student's ineligibility to graduate.

Thesis Defense:

A graduate student pursuing a thesis track master's will be required to participate in a formal defense of his/her thesis.

Prior to scheduling the thesis defense, the graduate student must submit the thesis certificate of approval page to the College of Graduate Studies for format review and approval.

The graduate student is responsible for scheduling his/her thesis defense with his/her advisory committee to allow enough time to submit the defense results to the College of Graduate Studies by the deadline established by the College. Failure to defend the thesis by the deadline will prevent graduation.

A graduate student's thesis defense is open to the public.

All the graduate student's advisory committee members are required to attend the thesis or dissertation defense.

Failure to submit the graduate student's thesis defense results to the College of Graduate Studies by the posted deadline on the College of Graduate Studies calendar will result in the graduate student's ineligibility to graduate.

Nonthesis

Most non-thesis graduate programs and some thesis graduate programs require that the graduate student successfully pass a Comprehensive Exam conducted by his/her advisory committee at or near the completion of his/her graduate program. Failure to submit the Comprehensive Exam results by the posted deadline on the College of Graduate Studies calendar will result in the graduate student's ineligibility to graduate.

Several non-thesis graduate programs have a capstone course or project course in which the final course completion is used in place of the Comprehensive Examination.

Any nonthesis program that comes before the Graduate School Executive Committee for consideration for approval must foster independent learning.

Second Master's Degree

A student holding an earned master's degree from Tennessee Tech or an accredited institution may qualify for a second master's degree by completion of graduate work approved by the graduate student's advisory committee, provided:

1. If the graduate student has previously earned a master's degree at Tennessee Tech then a minimum of 21 semester hours taken at Tennessee Tech must be completed for a thesis second master's degree or 24 semester hours if non-thesis.

2. If the graduate student has not previously earned a master's degree at Tennessee Tech, a minimum of 24 semester hours taken at Tennessee Tech must be completed for a thesis second master's degree or 27 semester hours if non-thesis.

3. The graduate student successfully completes all requirements prescribed in the specified graduate program.

College of Graduate Studies - How to Apply (tntech.edu)

Doctor of Philosophy Degree General Requirements

Advisory Committee Formation

Each Ph.D. student's advisory committee is determined by the department in which the degree is offered. The committee will have a minimum number of voting members from predetermined departments or fields. The student is responsible for identifying, in consultation with the departmental chairperson, or director and dean or associate dean of the respective college, a faculty member who is willing to chair his/her advisory committee. The chairperson of the committee and the student are responsible for identifying the other faculty members required/desired and determining if they are willing to serve. Advisory committees are permitted to have more than the minimum number of members required. If necessary, the advisory committee may be co-chaired. Changes in a Ph.D. advisory committee must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the College of Graduate Studies.

If a student is not able to identify a sufficient number and type of faculty who are suitable and willing to serve on his/her advisory committee, the student will be advised by the Dean that he/she should either change his/her area of research interest to more closely match those of the available faculty or consider selecting another major. Failure to be able to form a committee is a cause for transfer to non-degree status. Further regulations concerning the membership, appointment, and responsibilities of the advisory committee are given in other sections of the catalog, and in College of Graduate Studies Policy 282.

Program of Study

Programs of study toward advanced degrees are less formal than for undergraduate degrees. Individual programs are created for each student on the basis of educational background and career objective. Graduate degrees are not only awarded on the basis of completion of specific courses, but also on the basis of evidence of proficiency, scholarship, reasoning and investigation, and high attainments in the field of the student's specialization.

Each proposed program of study must be approved by the student's advisory committee, the departmental chairperson or program director, the dean or associate dean of the respective college, and the associate dean of the College of Graduate Studies.

There will be a hold placed on a student's registration if his/her Program of Study form has not been filed in the College of Graduate Studies office by the semester in which 15 credit hours will be earned.

Comprehensive Examination

Before requesting that his or her major professor schedule a Comprehensive Examination for Candidacy, a student must:

- have achieved Full Standing in the program; and
- have completed approximately 80% of the course work in his/her Program of Study.

The method of testing may consist of written, oral, and/or presentation components.

Details of this examination, including format, content, method of evaluation, timing, and deadlines will be determined by the college/departmental regulations. Successful completion of the Comprehensive Exam for Candidacy advances the student to official doctoral candidate status.

Admission to Candidacy

Admission to candidacy is granted when a student successfully completes the exam mentioned above. The advisory committee chairperson will complete an Admission to Candidacy Comprehensive Exam form, which will be signed by the student's advisory committee, the departmental chairperson or program director, the dean or associate dean of the respective college, and then sent to the associate dean of the College of Graduate Studies.

The candidate will then continue his/her research and prepare the doctoral dissertation and defense to fulfill all degree requirements.

Dissertation & Defense

Dissertation credit is offered in increments of 3, 6, or 9 credit hours during any given semester (and in some departments as one (1) credit hour). A graduate student shall be required to be registered for at least one (1) course appropriate to the student's degree objective in order to have access to computer equipment, laboratories, library, and other university facilities and resources even if the student is working in absentia on research and dissertation. A graduate student shall be enrolled during the term in which the degree is awarded. When a student makes satisfactory progress in research and dissertation, a grade of SP (Satisfactory Progress) will be assigned for credit earned. When satisfactory progress is not achieved, a grade of NP (No Progress) will be assigned; however, a grade of NP shall not be counted as having satisfied either program or degree requirements, and the student must register again for additional dissertation credit. Only grades of SP and NP shall be used to indicate a student's progress in dissertation credit.

The graduate student is expected to consult frequently with the major advisor during dissertation preparation. At the time the final rough draft has been completed, the dissertation should be in electronic form. The only content revisions the student should make are those suggested by the advisory committee. The student should allow ample time for the committee to review the dissertation, usually no less than two (2) weeks.

The College of Graduate Studies has published the Guide to the Preparation of Theses and Dissertations which serves as the official manual for all theses or dissertations. Also provided is a "Thesis/Dissertation Checklist" which outlines basic formatting requirements.

Although examples in this guide are recommended for making footnotes, endnotes, and giving bibliographical references, each department is encouraged to use those systems of citations that are most commonly used in its own discipline. Any other departure from this manual must have the prior approval of the associate dean of the College of Graduate Studies. The guide is on the College of Graduate Studies website.

A student must submit the final, error-free copy of his/her dissertation electronically (through eTD ProQuest) to the College of Graduate Studies by the date specified on their website's calendar of deadlines. Please see Graduate Studies' personnel regarding requirements for electronic submission or deadline date questions. Any dissertation that does not meet the required standards will be returned to the student, who will then be required to complete requested revisions and resubmit new versions until all required corrections are made. Failure to do so will result in ineligibility for graduation. All dissertations that meet the required standards will be forwarded on for publication, and the students will be eligible for graduation.

Transfer and Other Credit

For all graduate degree programs, the department will determine, at its sole discretion, the number of transfer credits it will accept, provided the department's decision is in compliance with SACSCOC Accreditation Standard 3.6.3 and any other applicable accreditation requirements. Accreditation Standard 3.6.3 states, "At least one-third of credits toward a graduate or a post-baccalaureate professional degree are earned through instruction offered by the institution awarding the degree." For a list of accrediting agencies recognized, refer to the U.S. Department of Education website.

Credit by special examination is not permitted at the graduate level; however, special examinations to determine competency or proficiency in courses where credit has already been earned but is currently out-of-date may be permitted during a period of up to three (3) consecutive semesters immediately following the eight-year time limitation. Special examinations may also be permitted to validate transfer credit, but the credit must be originally earned as graduate credit and not undergraduate credit.

Graduate credit will not be given for correspondence courses.

Graduation / Hooding

No doctoral degree candidate is permitted to participate in commencement until all requirements for the degree are successfully completed.

Specialist in Education Degree General Requirements

Specialist in Education Degree

The program of study leading to the Specialist in Education degree (Ed. S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional educator working with other educators. The program will therefore be tailored to serve the needs and objectives of the individual student.

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level and no course below the 6000 level shall be counted for credit unless written approval is obtained from the student's advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Admission To Candidacy

Graduate students in a program leading to the Specialist in Education degree should make application for admission to candidacy immediately following the completion of fifteen (15) semester hours of graduate credit. If application is not made by the time 15 hours are completed, the student may not be permitted to register for subsequent work until the application is approved. The requirements which must be met before approval of admission to candidacy are:

The achievement of Full Standing

- The completion of at least fifteen (15) semester hours of graduate credit with a minimum quality point average of 3.0.
- The written approval by the student's advisory committee.
- The written approval of the chairperson of the major department.
- Successful completion of any examination which may be required by the student's department for admission to candidacy.

If the student's application for admission to candidacy is not approved due to academic deficiencies, the student cannot continue graduate study with a major in any of the departments of the college in which he/she is studying.

Students in the counseling program within the Department of Counseling and Psychology will take the national Counselor Preparation Comprehensive Examination (CPCE) during their first semester of study. This examination will be diagnostic in nature and must be passed to graduate from a counseling Ed.S. program.

Final clearance for candidacy will be achieved only upon recommendation by the department in which the student is majoring, subject to approval of the Associate Dean of the College of Graduate Studies.

Prior to admission to candidacy the student may be required to remove certain deficiencies resulting from insufficient background preparation for the specific field or from the absence of certain prerequisite courses essential in preparation for pursuing the proposed specialist program. The candidacy step should not be confused with the final comprehensive examination which is required of all degree candidates and which has been explained previously in the general regulations section of this catalog.

Transfer And Other Credit

Students who request to transfer graduate course credits from an accredited institution to Tennessee Tech must request that the institution send official transcripts directly to TTU. Official transcripts must include all grades.

The program department will determine, at its sole discretion, what transfer coursework is eligible for transfer to the student's program of study.

The coursework transferred or accepted for credit toward a graduate degree must have a minimum grade of "B" in each course.

For all graduate degree programs, the department will determine, in its sole discretion, the number of transfer credits it will accept, provided the department's decision is in compliance with SACSCOC Accreditation Standard 3.6.3.

Tennessee Tech will exclude grades earned in transferred courses in the calculation of grade point averages.

Tennessee Tech Policy #283 (General Graduate Transfer Credit Requirements) provides additional information on Transfer Credit.

Other Regulations

In addition to these specific requirements for the Specialist in Education Degree, all candidates will be expected to comply with general regulations of the Graduate School. (See Regulations and Degree Requirements in previous sections of this catalog.)

College of Engineering - Master of Science Degree Requirements

Master of Science Degree Requirements

A master's degree is a certification that the recipient is able to read with understanding and apply with profit the literature of his/her field. The general requirements for an MS degree are the same for all departments: development and completion of a program of study which includes a minimum of 24 semester hours of course credits and at least six (6) semester hours of thesis. All pertinent regulations of the Graduate School apply.

Listed below are College of Engineering regulations that are clarifications of, or additions to, those promulgated by the Graduate School. Additional information can be found in the listings of the individual departments.

Advisory Committee

Every master's student is required to have an advisory committee having a minimum of three (3) members. The student is responsible for identifying, in consultation with the departmental chairperson, a faculty member who is willing to chair his/her advisory committee. In consultation with the chairperson of the committee, the student is responsible for identifying at least two (2) other faculty members who are willing to serve on his/her committee. Advisory committees may include more than three (3) members. If desired or required, two (2) members of the committee may serve as co-chairs of the committee rather than the committee having one (1) chair. If a student is not able to identify a sufficient number of faculty who are suitable and willing to serve on his/her advisory committee, the student will be advised by the departmental chairperson that he/she should either change his/her area of research interests to more closely match those of the available faculty or consider selecting another major. Failure to be able to form a committee is cause for transfer to non-degree status. Further regulations concerning the membership, appointment and responsibilities of a student's advisory committee are given in other sections of the catalog, including the sections on "Organization of the Graduate School" and "Degree Requirements."

Thesis/Comprehensive Examination

A thesis is required for all MS degrees in the college of engineering, except the MS in Engineering Management. All five MS degrees in the college also offer a non-thesis option.

A candidate for a master's degree must submit a thesis in writing and orally present and defend the thesis to his/her advisory committee. The meeting at which the thesis presentation and defense occurs also serves as the time for the student's final oral comprehensive examination over any or all aspects of the student's master's program. On the form on which the chairperson of the student's advisory committee reports the results of the thesis defense, the chairperson also reports the results of the comprehensive examination, including a brief synopsis of the examination.

Limitations on Graduate Assistantships

A master's student may receive support during the first two (2) calendar years after initial enrollment. This time limitation does not imply a student will receive support during his/her first two (2) years. Whether or not a student receives support depends on the availability of funds and the suitability of the student to carry out the responsibilities associated with the support. Support beyond the stated limits, regardless of source of funding in the College of Engineering, requires justification, which must be reviewed and approved by the Associate Dean of Engineering Research an Innovation prior to the implementation. (See College of Engineering website for the exception request form.)

College of Engineering - Doctor of Philosophy Degree Requirements

The Ph.D. is a research degree. The minimum requirements for a Ph.D. degree in the College of Engineering stated below are the same for all departments. Each department may include additional degree requirements for students pursuing specialization in that department.

Students Admitted with a Master's Degree

1. A minimum of 48 credits of course work and doctoral research and dissertation as follows:
    1. A minimum of eighteen (18) credit hours of course work beyond the master's degree, acceptable to the student's advisory committee. Additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department. No 5000-level courses are to be used to meet the minimum requirements of course work.
    2. A minimum of twenty four (24) credit hours of doctoral research and dissertation built upon the student's course of study and making a significant contribution to the state of knowledge or to the art of the engineering profession, is required; not more than nine (9) credit hours may be earned in a particular semester.
2. Residence of four (4) semesters beyond the master's degree, with at least two (2) semesters in continuous residence, is required. All requirements, including the dissertation, must be completed within a period of eight (8) consecutive years.
3. Maintenance of a minimum quality point average of 3.0 and adherence to the general regulations of the College of Graduate Studies are expected.

All students in the program must follow a plan of study and research developed in conjunction with an advisory committee, satisfactorily complete a comprehensive examination, achieve candidacy, and satisfactorily defend their dissertation.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Degree Program

A student admitted with a bachelor's degree on exceptional basis must successfully complete a qualifying examination based mostly on undergraduate materials before the end of the second semester of enrollment. Students with a Bachelor of Science (B.S.) degree from ABET-accredited programs are exempted from this examination. Other students without such a degree, or M.S. students without an ABET-accredited B.S. degree, switching to direct Ph.D. will have to take a qualifying exam through a formal process established by the department. The process should include at a minimum an examination of the student's fundamental knowledge managed by the Graduate Committee of the department.

Based on the student's performance on the qualifying examination, the student may be (i) permitted to continue in the doctoral program, or (ii) advised to transfer to an M.S. degree program in an appropriate discipline in the college, or (iii) recommended for termination from the graduate program of the college.

If permitted to continue in the doctoral program, the student, as described elsewhere in the catalog, will select a research advisor, form an advisory committee, and submit a program of study satisfying the following requirements.

The program of study should have a minimum total of seventy two (72) credit hours of academic work, consisting of course work and dissertation work, beyond baccalaureate work, subject to the following:

- The program of study should include a minimum of forty two (42) credit hours of appropriate graduate level course work consisting of a maximum of nine (9) credit hours at the 5000-level, acceptable to the student's advisory committee.
- It should also include an additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department.
- A minimum of 24 credit hours of doctoral research and dissertation, built upon the student's course of study and making significant contribution to the state of knowledge and the art of the engineering profession, is required; no more than nine (9) credit hours may be earned in a particular semester.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Program Earning a Non-thesis M.S. en route

All conditions stated above for the students admitted directly into the Ph.D. program apply. In addition:

Nine (9) credit hours will count toward the non-thesis M.S. degree and toward the Ph.D. degree. If the departmental non-thesis M.S. requires a three (3) credit hour non-thesis project course, those three (3) credit hours can be counted as three (3) credit hours of dissertation research toward the Ph.D. degree. Six (6) credit hours of M.S. coursework can be counted toward the Ph.D. coursework. If no project course is required for the non-thesis M.S., then nine (9) credit hours of M.S. coursework can be counted toward the Ph.D.

Limitation on Graduate Assistantships

It is expected that a full-time, post master's Ph.D. Engineering student should be able to achieve candidacy within the first three (3) calendar years after enrollment, and a direct admit Ph.D. Engineering student after four (4) calendar years. If candidacy is not achieved within the aforementioned periods, a student must request and receive approval for an extension of assistantship following the College of Engineering's established procedure. An extension may be granted by the Associate Dean of Engineering for Research and Innovation. This limitation is regardless of student funding or the source of support for the student.

The School Year

Tennessee Tech University is organized on the semester basis. When the term *hour* or *credit* is used, it refers to a semester-hour credit. One semester hour of credit requires one hour (55 minutes) of classroom or direct faculty instruction and a minimum of two hours out-of-class student work each week for approximately fifteen weeks.

Two or more hours of laboratory or studio work are required per hour of credit. An equivalent amount of work is required for practica and other academic activities that award credit. Summer, intersession or other alternate course formats require the equivalent amount of work per credit hour. Laboratory hours per credit are determined by the department or college. Semester credit hours earned in courses such as internships, research, theses, dissertations, study abroad, etc. are based on outcome expectations established by the academic program.

Fees and Expenses

For the most complete and up-to-date fee and refund policy information, go to https://www.tntech.edu/bursar/tuition

Note: a student may not enroll or receive a diploma, transcript of records, or grade report until all matured debts or obligations to the University, or any phase of its program, have been cleared.

Graduate Courses

- 5000-5990 Graduate Level
- 6000-6990 Graduate
- 7000-7990 Advanced Graduate
  (Restricted to Graduate Students)

Graduate courses are numbered at the 5000, 6000, and 7000 levels and are offered in the College of Agriculture and Human Ecology, College of Arts and Sciences, College of Business, College of Education, College of Engineering, and College of Interdisciplinary Studies. These courses are described on the following pages and are listed by departments. Numerous senior level courses are permitted for graduate credit when offered dually as 4000 (5000) and taken at the 5000 level.

A graduate student may be permitted to register for any course which appears in the Schedule of Classes; however, only those courses taken at the 5000, 6000, and 7000 levels may be counted for graduate credit.

Courses which are dually numbered, i.e., 4000 (5000), are essentially undergraduate courses in which graduate students may earn graduate credit on the basis of required additional work defined by the instructor in the course syllabus. Graduate credit will not be given for a course numbered at the 4000 level or below. A course taken at the 4000 level may not be taken later at the 5000 level without special permission from the departmental chairperson, college dean, and the Dean of Graduate Studies.

At least 70% of the Graduate Course credit to be counted toward a master's degree must be at the 6000 level or above (with the exception of those programs that fall under state-wide numbering schemes, specifically TNeCampus, MPS, MSN, and DNP 5000 level courses.)

At least 15 Graduate Credit Hours must be taken at the 7000 level for a specialist degree, unless written approval is granted by the graduate student's advisory committee, department chair, and Dean of the College of Graduate Studies.

No Graduate Course below 6000 level will be counted toward a specialist degree unless written approval is granted by the graduate student's advisory committee, department chair, and the Dean of the College of Graduate Studies.

A non-degree graduate student subsequently admitted into a graduate program may use up to nine (9) previously earned graduate Credit Hours toward the graduate program, upon approval from the graduate student's advisory committee.

All graduate coursework is part of the graduate transcript and all grades earned are part of the cumulative GPA. This applies to all Graduate Courses completed, even if the Graduate Courses are not part of the degree requirements.

A graduate student must achieve a Grade of at least "C" on all Graduate Courses taken, including those taken for non-degree purposes, Background Courses, Mandatory or Pre-requisite courses, licensure, certification, endorsement or personal enrichment.

A graduate student must achieve a Grade of at least "C" on all undergraduate courses listed on the Program of Study. All courses will appear at each respective Academic Course Level on the graduate student's transcript.

The University reserves the right to change course numbers and course descriptions after the date of publication of the catalog, or to decline to offer the course as described when circumstances warrant such action.

Tennessee Tech will grant credit toward a graduate program for any Graduate Course in which a graduate student earns a Grade of A, B, C, S, or SP toward the final approved Program of Study, unless otherwise required by a specific program. Tennessee Tech, however, will not accept more than six (6) Credit Hours of "C" earned toward any graduate program.

A graduate student may appeal an assigned Grade through Tennessee Tech Policy 218 (Grade Appeals Policy).

Definition of Credit Hour

Tennessee Technological University is organized on the semester basis. When the term *hour* or *credit* is used, it refers to a semester-hour credit. One semester hour of credit requires one hour (55 minutes) of classroom or direct faculty instruction and a minimum of two hours out-of-class student work each week for approximately fifteen weeks.

Two or more hours of laboratory or studio work are required per hour of credit. An equivalent amount of work is required for practica and other academic activities that award credit. Summer, intersession or other alternate course formats require the equivalent amount of work per credit hour. Laboratory hours per credit are determined by the department or college. Semester credit hours earned in courses such as internships, research, theses, dissertations, study abroad, etc. are based on outcome expectations established by the academic program.

Grading

On September 1, 1951, the University adopted a 4.0 quality point scale, changing from the 3.0 scale.

Grading System

Grades are indicated by letters.

- A--Excellent
- B--Good
- C--Satisfactory
- D--Passing*
- F--Failure
- I--Incomplete
- NF--Fail, Never Attended
- X--Absent from Examination
- W--Withdrew Passing
- WF--Withdrew Failing
- S--Satisfactory
- P--Passing**
- U--Unsatisfactory
- SP--Thesis (Satisfactory Progress)
- NP--Thesis (No Progress)

*D is a Passing grade for undergraduate students only. For graduate students, only grades of A, B, C, S, P, and SP are considered satisfactory, with not more than two (2) grades of C allowed for graduate degree purposes.

**At the graduate level, P/F (Passing/Fail) grades are only approved for COUN 6800, COUN 6820, COUN 6821, COUN 6830, and COUN 7830. A student must meet the minimum requirements for a grade of B to earn a P grade in these courses.

Grade Appeal Procedure

The university grade appeal procedure is outlined in Tennessee Tech Grade Appeals Policy #218.

Quality Points

Quality points are assigned to each semester-hour credit as follows:

- For a grade of A, 4 quality points
- For a grade of B, 3 quality points
- For a grade of C, 2 quality points
- For a grade of D, 1 quality point
- For grades of F, I, X, NF, W, S, SP, NP, U, and WF, no quality points.

The quality point average for the semester is determined by dividing the total quality points earned by the total semester hours attempted (excluding courses in which grades of I, W, S, SP, NP, and U were earned). The cumulative quality point average is determined by dividing the total quality points for all semesters by the cumulative hours (excluding courses in which grades of I, W, S, SP, NP, and U were earned). Noncredit courses are disregarded in computing the quality point average.

When a course is repeated, the grade on repeated work as well as the original grade will be included in calculation of the quality point average. Credits attempted with a grade of I, W, S, NP, and SP are disregarded, but credits attempted with grades of X, WF, NF, and U are counted as F's.

Grade of I (Incomplete)

An instructor may assign an "I" Grade when a student's performance has been satisfactory, but for reasons beyond the student's control, they have not been able to complete the Graduate course requirements within the allotted time.

When a Grade of "I" is assigned, the graduate student will not be required to register for the Graduate course again but must complete the original course requirements with the original instructor, if applicable.

Upon approval of the instructor, the graduate student has up to one (1) calendar year or until the time of graduation, whichever comes first, to remove the "I".

Completion of a Graduate course with a Grade of "I" does not count toward enrollment hours.

The "I" is excluded from the calculation of the graduate student's Current GPA and Cumulative GPA until a Grade is earned.

If the "I" is not removed within the established time limits, it is automatically changed to a Grade of "IF". The Grade of "IF" will remain on the student's academic record permanently and will be included in the Cumulative GPA. A Graduate student cannot graduate with an "I" on their record.

Quality of Work

Required QPA

A graduate student is required to maintain a cumulative grade average of at least B (3.0) on all courses taken for degree purposes. Credit toward a degree objective will be granted for any graduate course in which a grade of A, B, C, S, or SP (for thesis or dissertation) is assigned; however, not more than six (6) hours of C credit will be accepted. If a grade of D, U, F, WF, or NF is assigned in a degree-related course, the course must be repeated; and both the original grade and the grade for the repetition will be counted in the cumulative average.

M.B.A. Requirements

An MBA student is required to maintain a cumulative grade average of at least B (3.0) on all courses taken for degree purposes, and must achieve a grade of B or better in BMGT 6950. Students must repeat BMGT 6950 until a grade of B or better is obtained. Other courses may be repeated at the discretion of the student, and both the original grade and the grade for the repeat will be counted in the cumulative average. Any student receiving a D or an F in an MBA degree course shall be dismissed from the program.

Nursing Requirements

1.   Students in graduate nursing programs must meet the requirements of the College of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;
2.   In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the College of Graduate Studies for progression will apply.
3.   MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GP A.
4.   If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.
5.   Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.
6.   An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

Progression:

Students must report the following to the Dean of the Whitson-Hester School of Nursing (WHSON) within 72 hours of change of status or requirement:

1.   Any adverse action taken against their RN licensure (i.e. probation, termination, suspension, limiting scope of practice, any change in activity);
2.   Placement in the Tennessee Peer Assistance Program (TNPAP) or any other peer assistance program;
3.   Admission to a substance abuse rehabilitation program;
4.   Any legal issues that may result in a change in their ability to pass a criminal background check, including but not limited to arrests or convictions (see University's Arrest and Conviction Self-Disclosure form (link)) or change of status legal status with regards to probation or parole.

Failure to disclose to the WHSON could result in automatic dismissal from the MSN program. In addition, student must disclose the same information to preceptors and clinical agencies and provide appropriate documentation of this disclosure to WHSON.

Graduate Assistant GPA Requirements

A graduate assistant is required to maintain a minimum quality point average of 3.0 each semester. Upon the recommendation of the appropriate departmental chairperson and academic dean, the student may be permitted to retain the assistantship on probation for one (1) semester should the average fall below the minimum requirement.

Background Courses

Additionally, a graduate student must achieve a grade of at least C on each course taken for nondegree purposes, that is, courses taken for background preparation, certification, or personal enrichment. A student will be required to repeat each nondegree course in which a grade of D, U, F, WF, or NF is assigned except that, with approval of the student's advisory committee, repetition of a course will not be required if a student's cumulative grade average on all courses (degree and nondegree) is at least B (3.0).

Probation for Unsatisfactory Performance

A graduate student is required to maintain a cumulative grade point average of at least "B" on all graduate courses taken as a graduate student. When a student's cumulative average on courses falls below 3.0, but not less than 2.00, the student will be placed in probationary Academic Standing. If the cumulative average falls below 2.00, the student will be dismissed.

Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester.

If the term average, on all courses presented as part of the hours required for graduation, during any semester is less than 2.00, the student's record will be reviewed and may be placed on probation.

Dismissal for Unsatisfactory Performance:

A graduate student will be dismissed from the graduate program if any one of the following conditions occurs:

1.	The graduate student's current GPA or cumulative GPA falls below 2.0.
2.	The student earns two Grades of "F",
3.	Two consecutive semesters of "No Progress" grades assigned in thesis or dissertation courses.
4.	Two "C" grades in the Ph.D. in Exceptional Learning Program.
5.	One "D" or "F" grade in a course in the Ph.D. in Exceptional Learning Program.
6.	Some graduate programs may have more stringent dismissal criteria. Students should confer with the department about such criteria.
7.	The graduate student fails to achieve Good Academic Standing by the end of the next enrolled semester following a semester that the graduate student was placed in probationary Academic Standing
8.	The graduate student fails to meet program-specific requirements.
9.	The graduate student does not successfully pass all examinations for admission to candidacy as required by their graduate program.

A graduate student who has been dismissed for unsatisfactory performance may request reinstatement through the appeal procedures in Tennessee Tech Policy #281 (Graduate Student Dismissal, Reinstatement, and Appeal Procedures).

https://tntech.policytech.com/

Course Repetition Policy

A course repetition is required for all Graduate Courses in which a Grade of D, U, X, IF, F, FA, WF, or NF is earned. Both the original Grade and the Grade for the repetition will be counted in the Cumulative GPA.

Each graduate program in which Graduate Course repetition is permitted is limited to one (1) repetition per Graduate Course.

Unless defined otherwise by the program, a student must repeat any "C" grade earned beyond 6 credit hours of "C" on graduate level courses.

The cumulative Graduate Course repetition cannot exceed nine (9) Credit Hours in any graduate program.

Some Graduate Courses that share the same prefix and number are permitted to be taken more than once for credit and are not considered repetition due to the change in Graduate Course material. These types of Graduate Courses are noted in Course Descriptions.

Permissible Loads

Nine (9) credit hours in the fall or spring semester constitutes a full load for a graduate student. During the Summer Semester, a full load is six (6) hours taken in the 1st term, 2nd term, or a combination of both terms. The maximum permissible load is 16 credit hours per semester, inclusive totals of all credits earned at all institutions. Tennessee Tech Policy 274 (Graduate Assistantship), describes Graduate Course load limits for graduate assistants.

Permissible Loads of International Students

Each semester, except summer, an international graduate student must earn a minimum of nine (9) credit hours if a Master's student and six (6) credit hours if a PhD student. In the event that an international graduate student attending TTU on an F-1 Visa has not attended another F-1 certified school continuously for one academic year (30 weeks) the student will be required to enroll in the summer term as a full-time student (3 hours non-online coursework). However, if the student's department chair determines that appropriate courses are not available during the summer term, the student is not required to enroll as described above. Documentation stating the lack of appropriate course availability should be maintained in the student's immigration file. Tennessee Tech Policy 240 (Full Course of Study Requirements for International Students), describes Graduate Course load minimums for international graduate students. Tennessee Tech Policy 274 (Graduate Assistantship), describes Graduate Course limits for graduate assistants.

Permissible Loads of Graduate Assistants

To receive and maintain full-time graduate student status, a graduate assistant must meet the following registration requirements:

- For the summer semester, a Graduate Assistant must register for a minimum of one (1) credit hour but not more than twelve (12) graduate credit hours.
- For the fall and spring semesters, a Graduate Assistant must register for a minimum of six (6) credit hours but not more than twelve (12) graduate credit hours.

A graduate assistant is classified as an in-state resident ONLY while working as a graduate assistant. Classification status will be reverted back to out-of state when the assistantship ends.

Change of Major

A student is admitted to a degree program only upon a declaration of a major area of study. The student may change their major area of study only if the department of the new major admits the student. The student must complete the Change of Major/Concentration Request which may be found on the College of Graduate Studies website. College of Graduate Studies - Online Forms (tntech.edu)

Graduate Academic Fresh Start

Graduate Academic Fresh Start is a plan of academic forgiveness provided for graduate students who have gained maturity in learning through extended experience outside higher education institutions. The Academic Fresh Start allows the calculation of the quality point average and credit hours toward graduation to be based only on work done after returning to college under the Academic Fresh Start program.

Individuals interested in requesting a Graduate Academic Fresh Start must submit a completed application College of Graduate Studies - Online Forms (tntech.edu) to the College of Graduate Studies, including a written justification for the request.

A Graduate Academic Fresh Start request is limited to situations where the individual wishes to apply to a graduate degree program other than the previously attempted coursework.

An individual seeking a Graduate Academic Fresh Start must:

1. Submit a completed change of major form to the College of Graduate Studies;
2. Submit all admission documents as required by Tennessee Tech Policy 270; and
3. Meet all the requirements for admission as determined by the program and the College of Graduate Studies.

The approval of a request for a Graduate Academic Fresh Start is at the discretion of the department and academic dean for the program to which the individual is applying and the Dean of the College of Graduate Studies.

An individual may receive only one Graduate Academic Fresh Start.

Previous coursework will not be used to satisfy the requirements of the new degree program.

Research Opportunities

Research is an integral part of the University and is broadly defined to include studies, investigations, and other scholarly and creative pursuits. Faculty involvement may be on an individual basis or as members of interdisciplinary teams. Many faculty include students in their research activities and are encouraged to do so.

The University's membership in research-oriented organizations compliment and enhance both faculty and student research opportunities. Among the organizations is Oak Ridge Associated Universities (ORAU).

Since 1981, students and faculty of Tennessee Tech University have benefited from its membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of 96 colleges and universities and a contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE), the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one (1) month to four (4) years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the *ORISE Catalog of Education and Training Programs*, which is available at www.orau.gov/orise/educ.htm or by calling either of the contacts below.

ORAU's Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU's members, private industry, and major federal facilities. Activities include faculty development programs, such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, consortium research funding initiatives, faculty research and support programs as well as services to chief research officers.

For more information about ORAU and its programs, contact the Office of Research at (931) 372-3374 or the web site at www.tntech.edu/research. You may also contact the ORAU Corporate Secretary, at (865) 576- 3306 or visit the ORAU Home Page at www.orau.org.

There are identified units within the university that have a research component, and in some instances these units provide opportunities for student research focused in a particular area. One example is the Upper Cumberland Humanities and Social Sciences Institute. This interdisciplinary institute is designed to promote humanities and social sciences in the University and in the institution's service area through the Upper Cumberland Studies Program, funded research projects, and public service activities. Of particular interest are activities that deal with the Upper Cumberland region, promote interaction between various disciplines, and encourage cooperation between the community and the University.

Research is conducted in each division of the University, including the Centers of Excellence, and there are numerous opportunities for student involvement either directly on contracts and grants or on research assistantships. The University maintains an Office of Research which assists in the procurement of funds to support research.

Centers of Excellence

By authority of the General Assembly of the State of Tennessee, the Tennessee Higher Education Commission, and the Tennessee Board of Regents, three Centers of Excellence have been established at Tennessee Technological University. These accomplished Centers of Excellence focus on advanced interdisciplinary scholarship, including basic and applied research. Each center strives to utilize more efficiently the resources of the University in order to improve the general economic development of the State of Tennessee; improve the state's research base; and enhance the intellectual, cultural, and social activities of its citizens.

Among its priorities, each center attempts to attract internationally recognized faculty, as well as both undergraduate and graduate students who have strong scholarly backgrounds and a commitment to academic excellence.

Graduate students who become affiliated with a Center of Excellence must first qualify for admission into one of the University's graduate programs. Thereafter, in cooperation with the chairperson of the student's major department and the director of the center, the student may gain an assignment in research or similar scholarly activity; in most cases, the student will be appointed to a graduate assistantship or be given some remuneration for successful participation.

Center for Energy Systems Research

The Center for Energy Systems Research was established to advance and apply scientific and engineering knowledge associated with the generation, transmission, distribution, and use of electric power while supporting the instructional program of the University in academic areas related to electric power. In pursuing its goals, the Center works with electric utilities, state and federal agencies, private industries, nonprofit organizations, and other universities on a wide spectrum of projects. Research efforts, both theoretical and experimental, are focused on solving problems currently faced by the electric power industry. Specific research projects involve:

1. developing integrated software packages for the simulation and analysis of electric power systems to improve performance and reduce costs,
2. implementing innovative techniques to improve the utilization of fossil fuels in power plants, and
3. participating in basic research on emerging technologies to ensure that future electric power needs are met in an environmentally acceptable manner.

The Center, which is administered through the College of Engineering, provides opportunities for interdisciplinary research by involving faculty, staff, and students throughout the University. The Center has a positive impact on many facets of the electric power industry in the State of Tennessee and the nation.

Center for the Management, Utilization, and Protection of Water Resources

The Center for the Management, Utilization, and Protection of Water Resources focuses interdisciplinary scientific research on water resources issues in Tennessee, the surrounding region, and the nation. Its team approach to environmental research strengthens the University's educational program by combining faculty, professional staff, and students from agriculture, biology, chemistry, the Cooperative Fisheries Research Unit, earth sciences, engineering, and the social sciences into problem-solving groups. Center-supported graduate students pursuing degrees in one of these academic areas become important members of professional research teams. The Center is administered through the Office of Research & Economic Development. It maintains a staff with expertise in geographic information systems (GIS), modeling, and database management, and a professionally staffed laboratory, capable of general wet chemistry/physic parameter analyses, organic analyses, metal analyses, and biological/mutagenicity/toxicity testing. Basic techniques on solid-liquid phase interactions, chemistry, and the biological sciences provide support for fundamental and applied research. Current faculty research emphasizes:

1. biodiversity;
2. surface and ground water protection, use, and availability;
3. domestic, industrial, and recreational water use;
4. conservation and reuse of finite water supplies;
5. public education and the examination of socioeconomic problems of water treatment and distribution;
6. wastewater treatment and disposal; and
7. water pollution and the protection of aquatic organisms and other wildlife from point and nonpoint sources.

Center for Manufacturing Research

The Center of Excellence for Manufacturing Research was created to draw together resources of the State of Tennessee, the University, industries from Tennessee and abroad, and government funding agencies into a cooperative effort to be on the leading edge of the latest technological advances in manufacturing. The Center has a twofold mission:

1. to advance and support scientific and engineering knowledge in areas related to manufacturing, and
2. to enhance the University's instructional program in manufacturing-related areas.

The Center draws upon expertise from throughout the College of Engineering and various other colleges, departments, and the University, as appropriate, as well as resources outside the University. In addition, the Center employs dedicated faculty and staff that are responsible for enhancing and supporting our strategic research program. The Center for Manufacturing Research has concentrated on four (4) strategic research areas:

1. Intelligent Control of Processes and Equipment,
2. Integrated Product and Process Realization,
3. Next Generation Materials and Manufacturing Processes, and
4. Pervasive Modeling and Simulation.

The Center for Manufacturing Research also has a significant extension component with a focus on quality services provided to industry. Service activities can include externally funded research projects, small laboratory testing projects, an industry work-study program that matches industry needs for engineering assistance with engineering student capabilities, and small business support through a TSBDC that is partially supported by the Center.

Student Support Services

Alumni Association

The purpose of the Alumni Association is to promote the educational, social, and economic interests of Tennessee Technological University, its alumni, faculty, friends, and current students. All former students of Tennessee Technological University who earned a degree are recognized as alumni.

The Director of Alumni Relations coordinates the activities of the Alumni Association. The work of the Association is administered through the Office of Alumni Relations in consultation with the Association's Advisory Board. The advisory board consists of alumni representatives appointed by the Director of Alumni Relations and the current Advisory Board; it also includes a delegate from the Student Alumni Ambassadors.

Career Services

The Office of Career Services, located on the third floor of the University Center, provides a variety of career resources for graduate students. Advice and suggestions to maximize interviewing strategies and resume preparation are also provided. As the University's centralized recruiting facility, candidates for a graduate degree should register with the office two (2) semesters prior to their anticipated graduation date for assistance with their job search. Registration is required for students and alumni in advance of their participation in campus interview activities.

Recognizing the benefits to be gained through the use of cutting-edge technology, Career Services maintains a full service web site at http://www.tntech.edu/career/. Students, alumni, and employers can access information about campus recruiting activities including the ability to post and obtain resumes online. Electronic links have been set up as a quick resource tool to use when searching the Internet for career resources and opportunities. Interactive videoconferencing software enables students and alumni to interview with employers worldwide.

Computer Facilities

The D. W. Mattson Computer Center is equipped with a large-scale, modern digital computer, together with peripheral equipment for the rapid input, output, and storage of information. Although the Center satisfies the general administrative, instructional, and research needs of the University, there are numerous student computer labs located throughout the campus for instructional and research purposes. Many graduate students utilize computer facilities in their research pursuits. Lab locations and hours are posted on the ITS website.

Counseling Center

The Tennessee Tech Counseling Center, located in the Roaden University Center, provides a wide range of services. Counseling offers an opportunity for students to develop more effective means of resolving problems and acquiring strategies for achieving personal and professional goals. The Center also administers a number of standardized tests including the GRE (subject only) and MAT for students interested in or planning to attend graduate school. Outreach and consultation services on a variety of topics of interest to students are available.

Students experience varying degrees of difficulty related to the challenges of graduate school. Transition issues, stress management, interpersonal relationships, family issues, depression, and anxiety are among the concerns that students discuss in counseling. Strict confidentiality is maintained in the counseling process.

There is no fee for this service. Registered, enrolled students are eligible and may make appointments by calling the Counseling Center (931) 372-3331.

Financial Aid

Graduate assistantships constitute the primary source of financial aid for students enrolled in the Graduate School. Information concerning appointment of graduate assistants is found in the section entitled Organization of the College of Graduate Studies.

Students who have been admitted as regular students in a degree-seeking program may wish to complete the Free Application for Federal Student Financial Aid (FAFSA). Recipients of federal direct loans or work-study must be U.S. citizens or eligible noncitizens enrolled for at least five (5) semester hours (for federal aid purposes, halftime status is defined as enrollment for five (5) hours, three-quarter time status is defined as enrollment of six to eight (6-8) hours, and full-time is defined as enrollment of nine [9] hours). The interest on these loans is a variable amount (set by the federal government each year); interest and principal repayment may be deferred while the student is enrolled. The FAFSA is available online at www.fafsa.ed.gov.

You may also wish to review our website at www.tntech.edu/financialaid/ for further information about aid programs and procedures. In addition, you can use this site to link to the online version of the Free Application for Federal Student Aid (FAFSA).

In some instances graduate students may qualify for positions as head residents in the University's housing program. Information on available positions

Angelo and Jennette Volpe Library

The Angelo and Jennette Volpe Library contributes to the university's mission by providing the collections, services, and environments that lead to intellectual discovery and student success.

The library has **physical and digital collections**, including University Archives and Special Collections and a selective US Federal Depository. Students can learn how to search the collections from **online videos** or **get help from a librarian**. Additional library services include a **citation management tool** and a **notary service**. The **library hours** are very user-friendly, and the building houses a **wide range of technology**.

Multicultural Affairs

Our mission is to provide personal, cultural, social, and academic growth and development for students of color. We provide and encourage opportunities for all students of color to learn about their history, take pride in their heritage, and explore their potential. We promote cultural awareness by providing an environment that embraces diversity.

Our office provides programs designed to encourage cultural awareness, as well as, educational opportunities outside the classroom. In addition, we provide tutoring, academic counseling, scholarships and internships to improve academic performance.

The Office of Multicultural Affairs is located in the Leona Lusk Officer Black Cultural Center, which houses a computer lab, conference room, and a library of African-American authors. We hope you will come visit and relax. It is a great place to meet new friends and become involved with student organizations

Residential Life

Tennessee Tech has 15 residence halls and a 304-unit apartment complex--called Tech Village Apartments--which provides housing accommodations for enrolled students--both undergraduate and graduate.

Residence hall rooms are designed for double occupancy; however, a few single rooms are available. Rooms are furnished to include standard twin beds and mattresses, desks, chairs, dressers, telephone, smoke detector, mini blinds, closets and a wastebasket. Additionally, all rooms receive expanded basic cable service at no additional charge. All residence halls have laundry facilities located in each building. Students may provide their own personal items to make their room more unique and comfortable.

Tech Village apartments are newly renovated and assigned to students in the following priority: married students, single students with child(ren), graduate students, students with disabilities, senior undergraduate students, and faculty/staff. Each apartment has a telephone, stove, refrigerator, garbage disposal, dishwasher, smoke detector, fire extinguisher, expanded basic cable service and mini blinds. Tech Village has a laundry facility, a community center with ice machine. Your monthly rent includes expanded basic cable service, local telephone service, water service, and garbage removal. Occupants pay for electric utilities and long-distance phone calls.

All residence halls are connected to ResNet. ResNet is short for Residence Hall Computer Network. Each of these residence hall rooms has a ResNet connection for each occupant, provided the student has a personal computer. Residents also have access to computer labs in designated residence hall lobbies and the Tech Village community center. Additionally, all residence halls and Tech Village students will have a voice mailbox assigned to them to be used in conjunction with their telephone service.

To secure an assignment on campus, simply complete either a residence hall or Tech Village application or by contacting the Office of Residential Life by calling (931) 372-3414 or toll free 1-800-255-8881 or online at www.tntech.edu/reslife/. On-line deposits may be made to secure your apartment/room. Applicants for residence hall assignments will be notified by the third week of July for a fall semester assignment, the second week of December for a spring assignment and the first week of May for a summer assignment. Applicants for Tech Village assignments will be notified as apartment space is available. Tech Village applicants are not guaranteed an apartment assignment; therefore, consider researching other housing options in the event an apartment does not become available.

Services for Students with Disabilities

The Office of Disability Services program is designed to improve the educational opportunities of students with disabilities and to create an accessible physical environment so that students may obtain their educational objectives. The Office also provides the University community with information pertinent to the successful integration of students with disabilities into the environment, as well as within the community at large.

All students with disabilities are urged to come by the Office of Disability Services to discuss their educational plans and any special needs they might have. Official documentation of a disability is necessary to determine the level of services that may be needed. The Office is located in Room 112, University Center. Students may also call for an appointment at (931) 372-6119.

Campus Health Services

Tennessee Tech University has a state-of-the-art campus health center which provides medical services for minor illnesses or injuries to any student enrolled at the University on a walk-in basis during hours of operation. The health service staff includes nurses, a nurse practitioner, physician, and pharmacist who plan and implement care for students during daytime hours Monday through Friday. The only charge made to a student is for medications, treatments, supplies, or laboratory work.

The student is responsible for expenses incurred for ambulance service, calls at a local physician's office, emergency services, and other services provided at Cookeville Regional Medical Center. Health and accident insurance is available to each student upon his/her registration at Tennessee Tech. This insurance coverage is authorized and approved by the Tennessee Board of Regents. Coverage provides hospital, surgical, and in-hospital medical protection on a year-round basis beginning with the first day of fall registration and continuing until the first day of fall registration the following year. Students may enroll in the plan during registration or at any time during the year by picking up an application at the Health Services Office (Infirmary).

Two (2) plans of coverage are available at reasonable rates. Optional maternity coverage is offered under both plans. Details concerning this insurance are available at the Student Health Service and during registration. Students are encouraged to participate in one (1) of the insurance plans, as it supplements the above services offered by Campus Health Services.

Student Complaint Procedures

Students or prospective students who wish to file a complaint related to accreditation or regarding violations of state law not resolved at the institution may do so by following the Student Complaint Policy and Procedure at Student Affairs - Students Complaints (tntech.edu)

Complaints regarding accreditation can also be made by contacting the Southern Association of Colleges and Schools Commission on Colleges, 1866 Southern Lane, Decatur, GA 30033-4097, telephone: 404-679-4500 (www.sacscoc.org).

Complaints of fraud, waste or abuse may be made by email at reportfraud@tbr.edu or by calling the Tennessee Comptroller's Hotline for Fraud, Waste and Abuse at 1-800-232-5454.

Accounting Department

The Accounting Department holds separate AACSB Accounting Accreditation. Accordingly, our mission is "to graduate students characterized by a commitment to professional competence, ethical conduct, excellent communication skills, and critical thinking." Toward that end, we strive to provide students access to advanced knowledge in the field of accounting and we emphasize the importance of life-long learning and continuing professional development.

We strive to adhere to a set of values that embraces our commitment to a standard of excellence. Those values include:

• Integrity

• Professionalism

• Diversity of Thought

• Excellence

• Team Collaboration

The purposes of the MAcc Program at TTU include delivery of: (1) strong, masters-level education that provides accounting students with advanced academic knowledge, requisite professional skills, and a relevant, high-quality pathway to the profession and associated certifications", (2) high-quality programming that facilitates students' development and growth as successful, ethical business leaders, (3) appropriate graduate-level degree programming to meet the needs of aspiring professional accountants and their prospective employers that is not currently available to TTU accounting graduates, and (4) using online and associated technologies to increase Tennesseans' access to graduate accounting education.

Departmental Admission Requirements

Master of Accountancy Website

Tennessee Tech's AACSB-accredited Master of Accountancy (MAcc) program maintains an admission process that considers applicants' total academic and work-life achievements. The Master of Accountancy does not require the GMAT or GRE for admission to the program.

Pre-Requisites: Applicants must have an undergraduate degree in business with a major in Accounting (or the equivalent) from an accredited school or university, or be in their final semester of undergraduate coursework. Accounting major equivalency can be achieved by presenting evidence of successful completion of two courses in Intermediate Financial Accounting and one course each in Cost Accounting, Taxation, and Auditing.

While it is not required, it is helpful if students have successfully completed at least one undergraduate course in business or accounting analytics.

To Apply: Visit the online application portal, create an account, complete the application, and upload the following required documents:

• Official transcripts from all institutions where you took classes or received a degree. You may provide copies of transcripts to speed the application process, but official transcripts will be needed to finalize admission.

• A current resume. Make sure your resume contains dates for all work experience and degrees received.

Factors that may be considered in the admission decision are:

• Undergraduate GPA*,

• Professional or Accounting Work Experience or Internships,

• Other Graduate Degrees and Relevant Achievements, and

• Significant leadership roles.

*Although not required, a strong score on the GMAT can be a positive factor in an admission decision for students with a GPA that is below our average GPA. We recommend that you consider preparing for and taking the GMAT if your undergraduate GPA is below 3.0. GMAT information is available at GMAC - GMAT Assessment.

Note: Annually, the MAcc seeks to fill a cohort of 25-30 students each Fall term. Admission can be competitive. We advise you to submit your completed application and all required documentation as early as possible. We begin reviewing applications on January 31 each year.

Visit the Graduate Admissions Calendar for a complete list of application deadlines. MAcc admission is open to qualified students with a bachelor's degree and a major in accounting or coursework in accounting that gives students an academic foundation to be admitted into the MAcc program. The degree and coursework must be from an accredited institution. Consideration is given to the applicant's work experience and other activities that demonstrate potential for successful completion of the program.

Applications for admission are accepted for all semesters. Candidate screening and admission decisions will be made as applications are completed by the applicants.

Fast Track Program

Generally, the Fast Track program allows selected undergraduates to enroll for up to six (6) hours of graduate courses that will count at both the undergraduate and graduate level prior to formal admission to the MAcc program. Participation does not change the requirements for the student's undergraduate or MAcc program. Currently, the MAcc only allows students to Fast Track the six hours of electives in the MAcc program. Accounting courses (designated with the ACCT prefix) are not allowed to be Fast Tracked.

Admission to Fast-Track

Minimum requirements for admission are:

- 90 hours of undergraduate work in an AACSB accredited College of Business and successful completion of the required prerequisites
- Recommendation of a faculty member in the student's major
- Overall GPA of 3.2 and GPA of 3.2 in the student's major
- Program participants should consult with their future MAcc advisor regarding appropriate graduate courses to take during their junior/senior year.
- All requirements for full admission to Graduate School must be met upon graduation.
- Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee acceptance into the MAcc Fast Track program or the MAcc program. Students who meet the above minimum requirements must consult with the College of Business for eligibility and acceptance.

Minimum Retention Requirements

A MAcc student is required to maintain a cumulative grade average of at least B (3.0) in all courses taken for degree purposes. Not more than six (6) hours of credit below a B grade will be allowed. If a grade of C is assigned in a MAcc-related course, the course may be repeated. However, both the original grade and the grade for repeat will be counted in the cumulative average. A MAcc degree course may be repeated only one (1) time and no more than two (2) MAcc degree courses may be repeated. In addition, any student receiving a D or an F in a MAcc degree course shall be dismissed from the program.

Probation for Unsatisfactory Performance

A graduate student is required to maintain a cumulative grade point average of at least "B" on all graduate courses taken as a graduate student. When a student's cumulative average on courses falls below 3.0, but not less than 2.00, the student will be placed on probation. If the cumulative average falls below 2.00, the student will be dismissed.

If the term average, on all courses presented as part of the hours required for graduation, during any semester is less than 2.00, the student's record will be reviewed and the student may be placed on probation.

Degree Requirements

The 30-credit hour MAcc program was designed with two options, a 1-year track and a 2-year track. Due to the importance of completing the degree in a timely fashion and time limits established by the Tennessee Society of CPA's for completing the CPA Exam, it is important that the discipline of either a 1-year or 2-year timeline be imposed on applicants. The disciplined time-line will also contribute to lowering the attrition rate and increasing the likelihood of graduation.

The MAcc is a 100% online program with limited face-to-face interaction. While the coursework will be online, there is a provision in the program for two residency experiences. These residency experiences will be required components of the program and, combined with the online pre-work, will count for 1 credit hour each. Students will attend two live weekend sessions that will include group project work, group presentations, seminars and networking opportunities. The residency experiences will also provide vital "touch points" in the program that will allow students and faculty to communicate in a one-on-one exchange of thoughts and ideas related to the program and course materials.

The following are the MAcc degree requirements:

- **Core Required Courses:** 24 hours
- **Advisor Approved Electives:** 6 hours
- **Total Degree Requirement:** 30 hours

Core Course Requirements (24 hours)

The following courses are required as part of the MAcc degree program:

- ACCT 6210 - Corporate Tax Management and Research Cr. 3.
- ACCT 6220 - Auditing and Attestation Cr. 3.
- ACCT 6231 - Professional Certification: Business Environment and Concepts Cr. 1.
- ACCT 6232 - Professional Certification: Audit Cr. 1.
- ACCT 6233 - Professional Certification: Regulation Cr. 1.
- ACCT 6234 - Professional Certification: Financial Accounting and Reporting Cr. 1.
- ACCT 6240 - Ethics and the Professional Code of Conduct Cr. 1.
- ACCT 6250 - Governmental and Not-for-Profit/Healthcare Accounting Cr. 3.
- ACCT 6260 - Tax Management of Flow-Through Entities and Strategy Cr. 3.
- ACCT 6270 - Advanced Financial Accounting Cr. 3.
- ACCT 6281 - Professional Development I Cr. 1.
- ACCT 6282 - Professional Development II Cr. 1.
- ACCT 6290 - Essential Tech for Accountants Cr. 2.

Advisor Approved Electives (6 hours)

The advisor will approve six hours of elective credit. Students may use any 5000-level or 6000-level course offered by the College of Business, except ACCT6010, which cannot be used as a MAcc elective.

One and Two Year Completion Pathways

As stated earlier, the MAcc program is designed to provide two pathways for students to take in order to meet the student's academic goals and to fulfill the requirements of the CPA examination timelines. The following is the academic plan for each pathway:

1-Year Completion Pathway

Fall Term

- ACCT 6210 - Corporate Tax Management and Research Cr. 3.
- ACCT 6220 - Auditing and Attestation Cr. 3.
- ACCT 6231 - Professional Certification: Business Environment and Concepts Cr. 1.
- ACCT 6240 - Ethics and the Professional Code of Conduct Cr. 1.
- ACCT 6281 - Professional Development I Cr. 1.
- **Graduate Elective Cr. 3.** *

Spring Term

- ACCT 6260 - Tax Management of Flow-Through Entities and Strategy Cr. 3.
- ACCT 6270 - Advanced Financial Accounting Cr. 3.
- ACCT 6232 - Professional Certification: Audit Cr. 1.
- ACCT 6233 - Professional Certification: Regulation Cr. 1.
- ACCT 6282 - Professional Development II Cr. 1.
- **Graduate Elective Cr. 3.** *

Summer Term

- ACCT 6250 - Governmental and Not-for-Profit/Healthcare Accounting Cr. 3.
- ACCT 6290 - Essential Tech for Accountants Cr. 2.
- ACCT 6234 - Professional Certification: Financial Accounting and Reporting Cr. 1.

2-Year Completion Pathway

1st Fall Term

- ACCT 6210 - Corporate Tax Management and Research Cr. 3.
- **Graduate Elective Cr. 3.** *

1st Spring Term

- ACCT 6260 - Tax Management of Flow-Through Entities and Strategy Cr. 3.
- **Graduate Elective Cr. 3.** *

1st Summer Term

- ACCT 6290 - Essential Tech for Accountants Cr. 2.
- ACCT 6233 - Professional Certification: Regulation Cr. 1.

2nd Fall Term

- ACCT 6220 - Auditing and Attestation Cr. 3.
- ACCT 6231 - Professional Certification: Business Environment and Concepts Cr. 1.
- ACCT 6240 - Ethics and the Professional Code of Conduct Cr. 1.
- ACCT 6281 - Professional Development I Cr. 1.

2nd Spring Term

- ACCT 6270 - Advanced Financial Accounting Cr. 3.
- ACCT 6232 - Professional Certification: Audit Cr. 1.
- ACCT 6282 - Professional Development II Cr. 1.

2nd Summer Term

- ACCT 6250 - Governmental and Not-for-Profit/Healthcare Accounting Cr. 3.
- ACCT 6234 - Professional Certification: Financial Accounting and Reporting Cr. 1.

Programs

MACC-MAC - Accountancy, M.Acc.

Program Overview

Program Long Title
Accountancy, M.Acc.

College/School
Business

Department(s)
Accounting

Catalog Full Description

The 30-credit hour MAcc program was designed with two options, a 1-year track and a 2-year track. Due to the importance of completing the degree in a timely fashion and time limits established by the Tennessee Society of CPA's for completing the CPA Exam, it is important that the discipline of either a 1-year or 2-year timeline be imposed on applicants. The disciplined time-line will also contribute to lowering the attrition rate and increasing the likelihood of graduation.

The MAcc is a 100% online program with limited face-to-face interaction. While the coursework will be online, there is a provision in the program for two residency experiences. These residency experiences will be required components of the program and, combined with the online pre-work, will count for 1 credit hour each. Students will attend two live weekend sessions that will include group project work, group presentations, seminars and networking opportunities. The residency experiences will also provide vital "touch points" in the program that will allow students and faculty to communicate in a one-on-one exchange of thoughts and ideas related to the program and course materials.

The following are the MAcc degree requirements:

- **Core Required Courses:** 24 hours
- **Advisor Approved Electives:** 6 hours
- **Total Degree Requirement:** 30 hours

Departmental Mission

The Department holds separate AACSB Accounting Accreditation. Accordingly, our mission is "to graduate students characterized by a commitment to professional competence, ethical conduct, excellent communication skills, and critical thinking." Toward that end, we strive to provide students access to advanced knowledge in the field of accounting and we emphasize the importance of life-long learning and continuing professional development.

We strive to adhere to a set of values that embraces our commitment to a standard of excellence. Those values include:
• Integrity
• Professionalism
• Diversity of Thought
• Excellence
• Team Collaboration

The purposes of the MAcc Program at TTU include delivery of: (1) strong, masters-level education that provides accounting students with advanced academic knowledge, requisite professional skills, and a relevant, high-quality pathway to the profession and associated certifications", (2) high-quality programming that facilitates students' development and growth as successful, ethical business leaders, (3) appropriate graduate-level degree programming to meet the needs of aspiring professional accountants and their prospective employers that is not currently available to TTU accounting graduates, and (4) using online and associated technologies to increase Tennesseans' access to graduate accounting education.

Admission Requirements

Admission Requirements

Tennessee Tech's AACSB-accredited Master of Accountancy (MAcc) program maintains an admission process that considers applicants' total academic and work-life achievements. The Master of Accountancy does not require the GMAT or GRE for admission to the program.

Pre-Requisites: Applicants must have an undergraduate degree in business with a major in Accounting (or the equivalent) from an accredited school or university, or be in their final semester of undergraduate coursework. Accounting major equivalency can be achieved by presenting evidence of successful completion of two courses in Intermediate Financial Accounting and one course each in Cost Accounting, Taxation, and Auditing.

While it is not required, it is helpful if students have successfully completed at least one undergraduate course in business or accounting analytics.

To Apply:
Complete the application, and upload the following required documents:
• Official transcripts from all institutions where you took classes or received a degree. You may provide copies of transcripts to speed the application process, but official transcripts will be needed to finalize admission.
• A current resume. Make sure your resume contains dates for all work experience and degrees received.

Factors that may be considered in the admission decision are:
• Undergraduate GPA*,
• Professional or Accounting Work Experience or Internships,
• Other Graduate Degrees and Relevant Achievements, and
• Significant leadership roles.

*Although not required, a strong score on the GMAT can be a positive factor in an admission decision for students with a GPA that is below our average GPA. We recommend that you consider preparing for and taking the GMAT if your undergraduate GPA is below 3.0.

Note: Annually, the MAcc seeks to fill a cohort of 25-30 students each Fall term. Admission can be competitive. We advise you to submit your completed application and all required documentation as early as possible. We begin reviewing applications on January 31 each year.

Visit the Graduate Admissions Calendar for a complete list of application deadlines. MAcc admission is open to qualified students with a bachelor's degree and a major in accounting or coursework in accounting that gives students an academic foundation to be admitted into the MAcc program. The degree and coursework must be from an accredited institution. Consideration is given to the applicant's work experience and other activities that demonstrate potential for successful completion of the program.

Applications for admission are accepted for all semesters. Candidate screening and admission decisions will be made as applications are completed by the applicants.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> The following are the MAcc degree requirements:
>
> - Core Required Courses: 24 hours
> - Advisor Approved Electives: 6 hours

- Total Degree Requirements: 30 hours
- The MAcc program is designed to provide two pathways for students to take in order to meet the student's academic goals and to fulfill the requirements of the CPA examination timelines.

Core Course Requirement (24 hours)
Type
Completion Requirement

Core Course Requirements

Complete ALL of the following Courses:
- ACCT6210 - Tax Management for Entities
- ACCT6220 - Auditing and Attestation
- ACCT6231 - Prof Cert:Busn Envirn/Concepts
- ACCT6232 - Prof Certification: Audit
- ACCT6233 - Professional Cert: Regulation
- ACCT6234 - Prof Cert: Finan Acct/Rprting
- ACCT6240 - Ethics & the Code of Prof Cond
- ACCT6250 - Gov Not-Fr-Prof/Hlthcr Acct
- ACCT6260 - Tax Mgt/Flow-thru Ent/Strategy
- ACCT6270 - Advanced Financial Accounting
- ACCT6281 - Professional Development I
- ACCT6282 - Professional Development II
- ACCT6290 - Essential Tech for Accountants

Additional Comments:

Advisor Approved Electives (6 hours)
Type
Completion Requirement

Advisor Approved Electives (6 hours)

Students may use any 5000-level or 6000-level course offered by the College of Business, except 6010, which cannot be used as a MAcc elective.

The advisor will approve six hours of elective credit.

Additional Comments:

1-Year Completion Pathway
Type
Completion Requirement

Fall Term

The MAcc program is designed to provide two pathways for students to take in order to meet the student's academic goals and to fulfill the requirements of the CPA examination timelines.

Complete ALL of the following Courses:
- ACCT6260 - Tax Mgt/Flow-thru Ent/Strategy
- ACCT6270 - Advanced Financial Accounting
- ACCT6232 - Prof Certification: Audit
- ACCT6233 - Professional Cert: Regulation
- ACCT6282 - Professional Development II

Plus one graduate elective (3 credit hours)

Spring Term

Complete ALL of the following Courses:
- ACCT6260 - Tax Mgt/Flow-thru Ent/Strategy
- ACCT6270 - Advanced Financial Accounting
- ACCT6232 - Prof Certification: Audit
- ACCT6233 - Professional Cert: Regulation

- ACCT6282 - Professional Development II

Plus one graduate elective (3 credit hours)

Summer Term

Complete ALL of the following Courses:
- ACCT6250 - Gov Not-Fr-Prof/Hlthcr Acct
- ACCT6290 - Essential Tech for Accountants
- ACCT6234 - Prof Cert: Finan Acct/Rprting

Additional Comments:

2-Year Completion Pathway
Type
Completion Requirement

1st Fall Term

Complete ALL of the following Courses:
- ACCT6210 - Tax Management for Entities

Graduate Elective (3 credit hours)

1st Spring Term

Complete ALL of the following Courses:
- ACCT6260 - Tax Mgt/Flow-thru Ent/Strategy

Graduate Elective Credit (3 credit hours)

1st Summer Term

Complete ALL of the following Courses:
- ACCT6290 - Essential Tech for Accountants
- ACCT6233 - Professional Cert: Regulation

2nd Fall Term

Complete ALL of the following Courses:
- ACCT6220 - Auditing and Attestation
- ACCT6231 - Prof Cert:Busn Envirn/Concepts
- ACCT6240 - Ethics & the Code of Prof Cond
- ACCT6281 - Professional Development I

2nd Spring Term

Complete ALL of the following Courses:
- ACCT6270 - Advanced Financial Accounting
- ACCT6232 - Prof Certification: Audit
- ACCT6282 - Professional Development II

2nd Summer Term

Complete ALL of the following Courses:
- ACCT6250 - Gov Not-Fr-Prof/Hlthcr Acct
- ACCT6234 - Prof Cert: Finan Acct/Rprting

Additional Comments:

No Requirement Level

Tennessee Technological University

Additional Information
Information And Additional Notes

Academic Requirements and Expectations

Minimum Retention Requirements
A MAcc student is required to maintain a cumulative grade average of at least B (3.0) in all courses taken for degree purposes. Not more than six (6) hours of credit below a B grade will be allowed. If a grade of C is assigned in a MAcc-related course, the course may be repeated. However, both the original grade and the grade for repeat will be counted in the cumulative average. A MAcc degree course may be repeated only one (1) time and no more than two (2) MAcc degree courses may be repeated. In addition, any student receiving a D or an F in a MAcc degree course shall be dismissed from the program.

Probation for Unsatisfactory Performance
A graduate student is required to maintain a cumulative grade point average of at least "B" on all graduate courses taken as a graduate student. When a student's cumulative average on courses falls below 3.0, but not less than 2.00, the student will be placed on probation. If the cumulative average falls below 2.00, the student will be dismissed.

If the term average, on all courses presented as part of the hours required for graduation, during any semester is less than 2.00, the student's record will be reviewed and the student may be placed on probation.

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Generally, the Fast Track program allows selected undergraduates to enroll for up to six (6) hours of graduate courses that will count at both the undergraduate and graduate level prior to formal admission to the MAcc program. Participation does not change the requirements for the student's undergraduate or MAcc program. Currently, the MAcc only allows students to Fast Track the six hours of electives in the MAcc program. Accounting courses (designated with the ACCT prefix) are not allowed to be Fast Tracked.

Minimum requirements for admission are:

• 90 hours of undergraduate work in an AACSB accredited College of Business and successful completion of the required prerequisites
• Recommendation of a faculty member in the student's major
• Overall GPA of 3.2 and GPA of 3.2 in the student's major
• Program participants should consult with their future MAcc advisor regarding appropriate graduate courses to take during their junior/senior year.
• All requirements for full admission to Graduate School must be met upon graduation.
• Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee acceptance into the MAcc Fast Track program or the MAcc program. Students who meet the above minimum requirements must consult with the College of Business for eligibility and acceptance.

Courses

ACCT5230 - Advanced Managerial Accounting

General
College/School
Business

Course Title	Academic Level (Course Level)
Advanced Managerial Accounting	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
ACCT	5230

Credit Hours
Credit Hours Min
3

Course Description
Course focuses on the role of financial managers and managerial accountants, and the practical implementation of management financial reporting principles and reporting of financial results. Course also focuses on business ethics, data analytics methods, and excel and communication skills.

Requisites
Simple Requisites

Prerequisite: ACCT3210 Cost Accounting with a C or better.

ACCT5300 - Financial Statement Analysis

General
College/School
Business

Course Title	Academic Level (Course Level)
Financial Statement Analysis	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
ACCT	5300

Credit Hours
Credit Hours Min
3

Course Description
In-depth study of the methodologies used to analyze financial statements. Emphasis is placed on the use of technology to understand and apply ratio analysis.

Requisites
Simple Requisites

A grade of C or better in ACCT3170 Financial Acct/Reporting I or FIN3210 Principles/Managerial Fin, or permission of instructor.

ACCT5600 - Forensic Acct & Fraud Auditing

General
College/School
Business

Course Title	Academic Level (Course Level)
Forensic Acct & Fraud Auditing	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
ACCT	5600

Credit Hours

Credit Hours Min

3

Course Description

Exposure to applicable authoritative literature on the prevalence and forms of financial fraud, tools and methods of fraud auditing, and forensic tools to detect financial fraud. Includes application of Excel and other technology-based fraud detection tools. Students will not receive credit for both the 4000-level version and the 5000-level version of the class.

Requisites

Simple Requisites

Prerequisite: Junior standing in the College of Business.

ACCT5700 - Int'l Experience in Accounting

General

College/School

Business

Course Title

Int'l Experience in Accounting

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

ACCT

Course Number

5700

Credit Hours

Credit Hours Min

3

Course Description

A short-term, faculty-led study abroad program highlighting selected historical and modern contributions to accounting and business in the UK. Course will meet weekly during the semester in addition to spending approximately 8 days in the UK. A special course fee will apply. Students will not receive credit for both the 4000-level and 5000-level version of the class.

Requisites

Simple Requisites

Prerequisites: Open to Accounting majors and requires consent of instructor.

ACCT5900 - Special Topics

General

College/School

Business

Course Title

Special Topics

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

ACCT

Course Number

5900

Credit Hours

Credit Hours Min

3

Course Description

An advanced course covering advanced topics in accounting. Graduate credit will require meeting all of the criteria for the corresponding cross-listed 4000-level course, plus additional requirements established by the instructor.

Requisites

Simple Requisites

Prerequisite: Consent of Instructor and Graduate director.

ACCT6110 - Fin Acct Rpting Standards

General

College/School

Business

Course Title

Fin Acct Rpting Standards

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

ACCT

Course Number

6110

Credit Hours

Credit Hours Min

3

Course Description

Unavailable

Requisites

Simple Requisites

Prerequisites: Undergraduate accounting core, including ACCT 3170, ACCT 3180, ACCT 3330, and ACCT 3620 (or their equivalents).

ACCT6210 - Tax Management for Entities

General

College/School

Business

Course Title

Tax Management for Entities

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

ACCT

Course Number

6210

Credit Hours

Credit Hours Min

3

Course Description

Use of tax law and accounting data by management in planning, controlling, and decision making for corporations. Use of tax resources to address tax research questions. ACCT 6281 may be taken concurrently.

Requisites

Simple Requisites

Prerequisites: ACCT6281 Professional Development I and admission to Master of Accountancy program or permission of the instructor. ACCT6281 Professional Development I may be taken concurrently.

ACCT6220 - Auditing and Attestation

General

College/School
Business

Course Title
Auditing and Attestation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6220

Credit Hours

Credit Hours Min
3

Course Description
Emphasizes case studies, auditing simulations, modern authoritative pronouncements, and current events in the accounting profession.

Requisites

Simple Requisites

Prerequisites: ACCT6281 Professional Development I and admission to Master of Accountancy or permission of the instructor. ACCT6281 Professional Development I may be taken concurrently.

ACCT6231 - Prof Cert:Busn Envirn/Concepts

General

College/School
Business

Course Title
Prof Cert:Busn Envirn/Concepts

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6231

Credit Hours

Credit Hours Min
1

Course Description
Focused study and discussion of the topics covered on the BEC section of the Uniform CPA Examination. Coverage will cover review of key business and economic concepts.

Requisites

Simple Requisites

Prerequisite: Admission to Master of Accountancy.

ACCT6232 - Prof Certification: Audit

General

College/School
Business

Course Title
Prof Certification: Audit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6232

Credit Hours

Credit Hours Min
1

Course Description
Focused study and discussion of the topics covered on the AUDIT section of the Uniform CPA Examination. Coverage will cover review of key auditing concepts, theories, and techniques.

Requisites

Simple Requisites

Prerequisite: Admission to Master of Accountancy.

ACCT6233 - Professional Cert: Regulation

General

College/School
Business

Course Title
Professional Cert: Regulation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6233

Credit Hours

Credit Hours Min
1

Course Description
Focused study and discussion of the topics covered on the REG section of the Uniform CPA Examination. Coverage will cover review of key taxation concepts, theories, and techniques.

Requisites

Simple Requisites

Prerequisite: Admission to Master of Accountancy.

ACCT6234 - Prof Cert: Finan Acct/Rprting

General

College/School
Business

Course Title
Prof Cert: Finan Acct/Rprting

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6234

Credit Hours

Credit Hours Min
1

Course Description
Focused study and discussion of the topics covered on the FAR section of the Uniform CPA Examination. Coverage will cover review of key financial accounting concepts, theories, and techniques.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Master of Accountancy.

ACCT6240 - Ethics & the Code of Prof Cond

General

College/School
Business

Course Title
Ethics & the Code of Prof Cond

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6240

Credit Hours

Credit Hours Min
1

Course Description
Professional Accountants are subject to a Code of Professional Conduct. In addition, ethical conduct in both fact and appearance is a critical aspect of the practice of professional accounting. This course will focus on the concept of ethics as it applies to the profession and to the Code of Professional Conduct.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Master of Accountancy.

ACCT6250 - Gov Not-Fr-Prof/Hlthcr Acct

General

College/School
Business

Course Title
Gov Not-Fr-Prof/Hlthcr Acct

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6250

Credit Hours

Credit Hours Min
3

Course Description
Accounting, reporting, and budgeting for governmental entities and other not-for-profit organizations, including coverage of healthcare organizations.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Master of Accountancy or permission of instructor.

ACCT6260 - Tax Mgt/Flow-thru Ent/Strategy

General

College/School
Business

Course Title
Tax Mgt/Flow-thru Ent/Strategy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6260

Credit Hours

Credit Hours Min
3

Course Description
Use of tax law and accounting data by management in planning, controlling, and decision-making for flow-through entities. Use of analytic methods to address tax planning and strategy problems.

Requisites

Simple Requisites

> **Prerequisite:** ACCT6210 Tax Management for Entities and ACCT6281 Professional Development I.

ACCT6270 - Advanced Financial Accounting

General

College/School
Business

Course Title
Advanced Financial Accounting

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6270

Credit Hours

Credit Hours Min
3

Course Description
Theory and problems related to consolidated financial reporting, international accounting, corporate governance, and partnerships, and accounting analytics.

Requisites

Simple Requisites

> **Prerequisites:** <u>ACCT6281 Professional Development I</u> and admission to Master of Accountancy or permission of instructor.

ACCT6281 - Professional Development I

General

College/School
Business

Course Title
Professional Development I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6281

Credit Hours

Credit Hours Min
1

Course Description
Examination of the role of leadership, teambuilding, and technical expertise in professional accounting as it relates to professional accounting.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Master of Accountancy

ACCT6282 - Professional Development II

General

College/School
Business

Course Title
Professional Development II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6282

Credit Hours

Credit Hours Min
1

Course Description
Continuation of Professional Development I. Examination of the role of leadership, teambuilding, and technical expertise in professional accounting as it relates to professional accounting.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Master of Accountancy.

ACCT6290 - Essential Tech for Accountants

General

College/School
Business

Course Title
Essential Tech for Accountants

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6290

Credit Hours

Credit Hours Min
2

Course Description
Examination and application of current technology tools commonly used in the accounting profession including pivot tables, Vlookup tables, data filtering, graphic presentation of data, data security, and data extraction.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Master of Accountancy.

ACCT6310 - Tax Research/Strategy

General

College/School
Business

Course Title
Tax Research/Strategy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6310

Credit Hours

Credit Hours Min
3

Course Description
Prerequisites: Undergraduate accounting core, including ACCT 3170, ACCT 3180, ACCT 3330, and ACCT 3620 (or their equivalents).

ACCT6620 - Auditing and Attestation

General

College/School
Business

Course Title
Auditing and Attestation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6620

Credit Hours

Credit Hours Min
3

Course Description
Prerequisites: Undergraduate accounting core, including ACCT 3170, ACCT 3180, ACCT 3330, and ACCT 3620 (or their equivalents).

ACCT6950 - MAcc Special Topics

General

College/School
Business

Course Title
MAcc Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6950

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special Topics in Professional Accountancy. Students will engage in leading discussions, research, writing, and presentations designed to explore complex and timely issues in the field of accountancy such as data security, succession planning, legal liability, sustainability reporting, and international reporting standards.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Master of Accountancy.

LAW5100 - Business Law & Legal Env

General

College/School
Business

Course Title
Business Law & Legal Env

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LAW

Course Number
5100

Credit Hours

Credit Hours Min
3

Course Description
Basic legal instruments and legal principles comprising the legal environment of business, integrated with contemporary ethical, social, and political issues.

Requisites

Simple Requisites

> **Prerequisites:** None

Agriculture Department

Although a graduate degree is not available in the School of Agriculture, certain senior-level courses have been so designed as to generate graduate credit and these courses are dually listed as 4000 (5000). A student must register for the 5000-level course in order to get graduate credit and additional assignments will be required. Students are warned that graduate credit will not be given for a 4000-level registration.

Courses

AGBE5120 - Env/Natural Resource Econ

General

College/School
Agriculture and Human Ecology

Course Title
Env/Natural Resource Econ

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGBE

Course Number
5120

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: AGBE 2100 and/or ECON 2110, or consent of instructor. Issues and policies involving pollution, depletable and renewable resources, and sustainable development. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

AGBE5200 - Agribusiness Statistics

General

College/School
Agriculture and Human Ecology

Course Title
Agribusiness Statistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
AGBE

Course Number
5200

Credit Hours

Credit Hours Min
3

Course Description
Sampling, probability, distributions, statistical tests, analysis of variance, regressions, and interpretation of data as related to agricultural business.

AGBE5210 - Ag & Biological Statistics

General

College/School
Agriculture and Human Ecology

Course Title
Ag & Biological Statistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGBE

Course Number
5210

Credit Hours

Credit Hours Min
3

Course Description
Sampling, probability, distributions, statistical tests, analysis of variance, regression, interpretation of data. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

AGBE5940 - Agribusiness Econ Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agribusiness Econ Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGBE

Course Number
5940

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agribusiness economics under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGBE5950 - Agribusiness Econ Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agribusiness Econ Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGBE

Course Number
5950

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agribusiness economics under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGBE5960 - Agribusiness Economics Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agribusiness Economics Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGBE

Course Number
5960

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agribusiness economics under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGBE5970 - Agribusiness Economics Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agribusiness Economics Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGBE

Course Number
5970

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agribusiness economics under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGBE5980 - Agribusiness Economics Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agribusiness Economics Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGBE

Course Number
5980

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agribusiness economics under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGED5150 - Comm/Pub Rel-Ag & Extension Ed

General

College/School
Agriculture and Human Ecology

Course Title
Comm/Pub Rel-Ag & Extension Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGED

Course Number
5150

Credit Hours

Credit Hours Min
3

Course Description
Publics to be dealt with, public relations media, techniques of establishing and maintaining desirable communications and public relations in agriculture. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

AGED5200 - Meth/Techniq-Tch Ag & Ext Ed

General

College/School
Agriculture and Human Ecology

Course Title
Meth/Techniq-Tch Ag & Ext Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGED

Course Number
5200

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Theory and practice in directing learning activities. Planning and delivering instruction to formal and informal groups in Agricultural and Extension Education. Preparing instructional materials. Using instructional technology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

AGED5300 - Dev/Youth Programs-Ag & Ext Ed

General

College/School
Agriculture and Human Ecology

Course Title
Dev/Youth Programs-Ag & Ext Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGED

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description

Developing, implementing, and evaluating the 4-H and FFA youth programs in Agricultural and Extension Education. Identifying needs and interests of youth. Identifying, securing, and developing supportive resources. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

AGED5350 - Prog Pl & Eval/Ag & Extn Ed

General

College/School
Agriculture and Human Ecology

Course Title
Prog Pl & Eval/Ag & Extn Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGED

Course Number
5350

Credit Hours

Credit Hours Min
3

Course Description

Advanced principles and procedures used in planning and evaluating Agricultural and Extension Education programs. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

AGED5940 - Agricultural Ed Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agricultural Ed Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGED

Course Number
5940

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours
Operator
TO

Course Description

Special study in an approved area of Agricultural Education under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGED5950 - Agricultural Ed Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agricultural Ed Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGED

Course Number
5950

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours
Operator
TO

Course Description

Special study in an approved area of Agricultural Education under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGED5960 - Agricultural Education Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agricultural Education Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGED

Course Number
5960

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

	Credit Hours			Credit Hours
	Operator			Operator
	TO			TO

Course Description

Special study in an approved area of Agricultural Education under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Course Description

Special study in an approved area of Agricultural Education under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGED5970 - Agricultural Education Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agricultural Education Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGED

Course Number
5970

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approved area of Agricultural Education under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGED5980 - Agricultural Education Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agricultural Education Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGED

Course Number
5980

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

AGET5220 - Agri Machinery/Tractors

General

College/School
Agriculture and Human Ecology

Course Title
Agri Machinery/Tractors

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
AGET

Course Number
5220

Credit Hours

Credit Hours Min
2

Course Description

Principles of operation, selection, and economic utilization of agricultural power units and equipment. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Corequisite: AGET4225 Agri Machinery/Tractors Lab

AGET5510 - Agricultural Remote Sensing

General

College/School
Agriculture and Human Ecology

Course Title
Agricultural Remote Sensing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
AGET

Course Number
5510

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
This course will teach the fundamentals of remote sensing concepts and software used in agricultural, environmental, and natural resource applications. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

AGET5520 - Agricultural Spatial Tech II

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Agricultural Spatial Tech II	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
AGET	5520

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3
	Credit Hours Operator
	OR

Course Description
Principles and applications of geospatial technologies supporting precision agriculture/farming and planning for natural resource data management. Global positioning system (GPS), geographic information system (GIS), remote sensing (RS), yield monitoring and mapping, Internet information access, and computer software for management decisions.

Requisites
Simple Requisites

> **Prerequisite:** AGET3520 Agricultural Spatial Technolog

AGET5540 - Adv GIS for Ag & Natural Rsrcs

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Adv GIS for Ag & Natural Rsrcs	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
AGET	5540

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3
	Credit Hours Operator
	OR

Course Description
This course will teach advanced techniques using Geographic Information System (GIS) concepts, equipment, and software used in agricultural, environmental, and natural resource applications.

Requisites
Simple Requisites

> **Prerequisite:** AGET3540 Fund/GIS & GPS in AG & Nat Rsr or instructor consent.

AGET5610 - Grnhs Struct/Landscape Equip

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Grnhs Struct/Landscape Equip	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
AGET	5610

Credit Hours

Credit Hours Min
3

Course Description
Selection, design, construction, and operation of greenhouse structures and related nursery and landscaping equipment. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

AGET5620 - Agricultural Structures

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Agricultural Structures	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
AGET	5620

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3
	Credit Hours Operator
	OR

Course Description
Planning; drawing; materials; principles of construction with respect to arrangement, location, and environmental control; plan reading. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** AGET2110 Agricultural Engr Technology or consent of instructor.

AGET5720 - Agricultural Processing

General

College/School
Agriculture and Human Ecology

Course Title
Agricultural Processing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGET

Course Number
5720

Credit Hours

Credit Hours Min
3

Course Description
Managing value-added agricultural products through the application of engineering principles to fluid flow, electrical controls, refrigeration, heat transfer, drying, and hydraulic systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

AGET5940 - Ag Engr Technology Topics

General

College/School
Agriculture and Human Ecology

Course Title
Ag Engr Technology Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGET

Course Number
5940

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agricultural engineering technology under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGET5950 - Ag Engr Technology Topics

General

College/School
Agriculture and Human Ecology

Course Title
Ag Engr Technology Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGET

Course Number
5950

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agricultural engineering technology under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGET5960 - Ag Engr Technology Topics

General

College/School
Agriculture and Human Ecology

Course Title
Ag Engr Technology Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGET

Course Number
5960

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agricultural engineering technology under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

Course Description
Special study in an approved area of agricultural engineering technology under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGET5970 - Ag Engr Technology Topics

General

College/School
Agriculture and Human Ecology

Course Title
Ag Engr Technology Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGET

Course Number
5970

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agricultural engineering technology under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGET5980 - Ag Engr Technology Topics

General

College/School
Agriculture and Human Ecology

Course Title
Ag Engr Technology Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGET

Course Number
5980

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

AGHT5510 - Fruit & Vegetable Production

General

College/School
Agricultural/Human Sciences

Course Title
Fruit & Vegetable Production

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGHT

Course Number
5510

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Fundamental principles of tree fruit and small fruit, and field and greenhouse vegetable production. Cultural and environmental management; systems of harvesting, storing, marketing. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: AGHT 3400 or 3410, AGRN 4210, or consent of instructor.

AGHT5530 - Grnhs Crop Production

General

College/School
Agriculture and Human Ecology

Course Title
Grnhs Crop Production

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGHT

Course Number
5530

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Production, timing, harvesting, and marketing of bedding plants and floricultural crops grown in commercial greenhouses; nutrient film technique. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** AGHT4420 Greenhouse Production and Mgmt or consent of instructor.

AGHT5940 - Horticulture Topics

General
College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Horticulture Topics	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
AGHT	5940

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	4
	Credit Hours Operator
	TO

Course Description
Special study in an approved area of horticulture under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** Consent of instructor.

AGHT5950 - Horticulture Topics

General
College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Horticulture Topics	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
AGHT	5950

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	4
	Credit Hours Operator
	TO

Course Description
Special study in an approved area of horticulture under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** Consent of instructor.

AGHT5960 - Horticulture Topics

General
College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Horticulture Topics	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
AGHT	5960

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	4
	Credit Hours Operator
	TO

Course Description
Special study in an approved area of horticulture under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** Consent of instructor.

AGHT5970 - Horticulture Topics

General
College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Horticulture Topics	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
AGHT	5970

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	4
	Credit Hours Operator
	TO

Course Description
Special study in an approved area of horticulture under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: Consent of instructor.

AGHT5980 - Horticulture Topics

General

College/School
Agriculture and Human Ecology

Course Title
Horticulture Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGHT

Course Number
5980

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of horticulture under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: Consent of instructor.

AGR5890 - Mtng Chlnges/Diverse Workplce

General

College/School
Agriculture and Human Ecology

Course Title
Mtng Chlnges/Diverse Workplce

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
AGR

Course Number
5890

Credit Hours

Credit Hours Min
3

Course Description
This course is designed as an upper division, work-world preparation course. As students ready to leave the relative safety of the cocooned worlds of their chosen disciplines, this course provides practical tools and information necessary to succeed in a diverse and changing world of work. By combining interactive learning, current and relevant readings, and key presenters the course will help completers integrate more smoothly into the next phase of their lives.

Requisites

Simple Requisites

> Prerequisites: None

AGRN5100 - Weed Science

General

College/School
Agriculture and Human Ecology

Course Title
Weed Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5100

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Plant and seed identification, and growth habits and dissemination of weeds. Biological, cultural, and chemical methods of control in the integrated pest management (IPM) concept. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: AGRN1100 Plant Science and AGRN1110 Plant Science Laboratory or consent of instructor.

AGRN5110 - Forage Crops Prod/Mgmt

General

College/School
Agriculture and Human Ecology

Course Title
Forage Crops Prod/Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
AGRN

Course Number
5110

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description

Botany and classification, soil and climatic requirements, species adaptation, establishment and management of grasses and legumes for silage, hay, and temporary, permanent, and rotational pastures for ruminants, swine, and horses. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: AGRN1100 Plant Science , AGRN1110 Plant Science Laboratory, AGRN2300 Soils, and AGRN2310 Soil Chemical Properties.

AGRN5120 - Crop Improvement

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Crop Improvement	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
AGRN	5120

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3
	Credit Hours Operator
	OR

Course Description

Objectives, genetic principles, and methods of crop improvement by conventional and genetic engineering methods. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: AGRN1100 Plant Science and AGRN1110 Plant Science Laboratory or consent of instructor.

AGRN5130 - Forage Crops Prod & Mgmt

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Forage Crops Prod & Mgmt	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
AGRN	5130

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3

Credit Hours Operator
OR

Course Description

Botany and classification, soil and climatic requirements, species adaptation, establishment and management of grasses and legumes for silage, hay, and temporary, permanent, and rotational pastures for ruminants, swine, and horses.

Requisites

Simple Requisites

> Prerequisite: AGRN1100 Plant Science, AGRN1110 Plant Science Laboratory, AGRN2300 Soils, and AGRN2310 Soil Chemical Properties.

AGRN5210 - Soil Fertility & Fertilizers

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Soil Fertility & Fertilizers	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
AGRN	5210

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3
	Credit Hours Operator
	OR

Course Description

Properties of soils in relation to plant nutrition; fertilizer materials and their relationship to soil fertility. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: AGRN3000 Soils or consent of instructor.

AGRN5220 - Environmental Soil Chem

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Environmental Soil Chem	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
AGRN	5220

Credit Hours

Credit Hours Min
3

Course Description

Study of chemical composition of natural and anthropogenic material in soil and their reactions and movement in the soil environment. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: AGRN2210 Soils or consent of instructor.

AGRN5230 - Soil Classification

General

College/School
Agriculture and Human Ecology

Course Title
Soil Classification

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5230

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description

Soil formation, morphology, and classification; methods of soil survey, and detailed mapping of an assigned area. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: AGRN2210 Soils or consent of instructor.

AGRN5940 - Agronomy Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agronomy Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5940

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approved area of agronomy under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGRN5945 - Soil Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Soil Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5945

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approve area of soil science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

AGRN5950 - Agronomy Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agronomy Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5950

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agronomy under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGRN5955 - Soil Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Soil Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5955

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approve area of soil science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGRN5960 - Agronomy Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agronomy Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5960

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approved area of agronomy under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGRN5965 - Soil Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Soil Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5965

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Special study in an approve area of soil science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGRN5970 - Agronomy Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agronomy Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5970

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approved area of agronomy under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

Course Description

Special study in an approved area of agronomy under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGRN5975 - Soil Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Soil Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5975

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approve area of soil science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGRN5985 - Soil Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Soil Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5985

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approve area of soil science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

AGRN5980 - Agronomy Topics

General

College/School
Agriculture and Human Ecology

Course Title
Agronomy Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
AGRN

Course Number
5980

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

ANS5940 - Animal Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Animal Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ANS

Course Number
5940

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approved area of animal science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

ANS5950 - Animal Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Animal Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ANS

Course Number
5950

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approved area of animal science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

ANS5960 - Animal Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Animal Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ANS

Course Number
5960

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approved area of animal science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

ANS5970 - Animal Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Animal Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ANS

Course Number
5970

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approved area of animal science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

ANS5980 - Animal Science Topics

General

College/School
Agriculture and Human Ecology

Course Title
Animal Science Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ANS

Course Number
5980

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Special study in an approved area of animal science under the supervision of a member of the School of Agriculture faculty. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

Biology Department

The purpose of the Master of Science degree program in the Department of Biology is to prepare graduates for high-level careers in various areas of biology. The department offers the M.S. degree with the option of selecting from a variety of thesis research topics based on individual research interests of the faculty.

Programs

BIOL-MS - Biology, M.S.

Program Overview

Program Long Title
Biology, M.S.

College/School	Department(s)
Arts and Sciences	Biology

Catalog Full Description

The purpose of the Master of Science degree program in the Department of Biology is to prepare graduates for high-level careers in various areas of biology. The department offers the M.S. degree with the option of selecting from a variety of thesis research topics based on individual research interests of the faculty.

The M.S. in Biology is a 30 hour research degree program. Core requirements are defined as follows:

- **Core required courses:** 1 hour
- **Advisor Approved Electives:** 20 hours
- **Research and Thesis:** 6 hours
- **Statistics course:** 3 hours
- **Total Hours:** 30 hours

Admission Requirements

Admission Requirements

Guidelines for full admission into the program require that one of the following two requirements be met:

1. A minimum overall undergraduate grade-point average of 3.0 (on a 4-point scale) OR an undergraduate grade-point average of 3.0 in all Biology, Wildlife Fisheries Science, and related courses.

2. Combined Quantitative and Verbal Revised GRE score totaling 300, and a minimum Analytical Writing score of 3.0.

Applicants that do not meet either of these guidelines can be considered for provisional admission through an appeal to the Graduate Policies Committee within the Department of Biology.

In addition to meeting the GPA or GRE requirements, a student will not be admitted without being accepted by a faculty advisor (Advisor Acceptance Form). The advisor will serve as the student's thesis advisor during the student's pursuit of the graduate degree.

Applicants should be aware that meeting these minimum requirements does not guarantee admission to the program, since:

The Department may not be able to financially support the research of the student, regardless of whether or not a student receives a stipend in the form of teaching or research assistantship. Additional resources must be provided to Biology graduate students in order to conduct their thesis research. The cost to conduct graduate research in the Department of Biology varies widely between and within disciplines and is affected by factors such as:

whether the study will be conducted in a laboratory or the field (or both);

whether or not specialized equipment is required;

the amount of travel that may be necessary;

wages of full-time or part-time assistants.

The Department may have more students than the faculty can reasonably guide. Prospective Biology graduate students should contact a potential faculty advisor in their research area prior to applying for admission. A student will not be admitted without being accepted by a faculty advisor (Advisor Acceptance Form). The advisor will serve as the students thesis advisor during the students pursuit of the graduate degree. Acceptance of a student by the faculty advisor is dependent upon:

similarity of research interests;

experience;

recommendations;

admission standards;

number of graduate students that the faculty member is currently advising;

available funding for research.

Although the Department of Biology has no strict deadlines for application, complete applications for students being considered for teaching assistantships should be received no later than November 1 for enrollment the following Spring Semester, and April 1for enrollment the following Fall Semester. Applicants being considered for research assistantships will be evaluated as extramural funding becomes available.

For more detailed requirements and thesis research options, contact the department chair.

Provisional Admission Procedures

Students who do not meet departmental GPA and GRE General Test (GRE) requirements can be admitted provisionally by appealing the initial rejection decision to the Department of Biology Graduate Policies Committee. This committee will only consider appeals that are presented by the applicant's potential faculty advisor. Criteria commonly used by the Graduate Policies Committee regarding appeals are previous experience in the area of research and work history following graduation. Absolute minimum requirements for appeal consideration will consist of a minimum overall undergraduate grade point average of 2.5 (minimum requirement of Graduate School for non-provisional admission).

The Graduate Policies Committee will make the final decision for all appeals.

Provisional Status Requirements

All applicants who do not meet the minimum requirements established for admission to the Master of Science Program within the Department of Biology, and who are granted an appeal by the Department of Biology Graduate Policies Committee, will be admitted with provisional standing. Provisions for achieving full standing will be determined by the Graduate Policies Committee in consultation with the student's faculty advisor and departmental chair.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The M.S. in Biology is a 30 hour research degree program. Core requirements are defined as follows:

- **Core required courses:** 1 hour
- **Advisor Approved Electives:** 20 hours
- **Research and Thesis:** 6 hours
- **Statistics course:** 3 hours
- **Total Hours:** 30 hours

Degree Requirements Type

Completion Requirement

Core Required Course (1 hour)

Complete ALL of the following Courses:

- BIOL6930 - Seminar

Advisor Approved Electives (20 hours)

Selection of appropriate courses (BIOL 5000, BIOL 6000, EVSB 7000 level, EVS 7900 and WFS 5000 level) will be in consultation with the student's advisory committee and/or the graduate coordinator.

Thesis Research Requirements (6 hours)

Complete ALL of the following Courses:

- BIOL6990 - Research and Thesis

Core Statistics Requirement (3 hours)

Complete at least 1 of the following courses:

- BIOL6140 - Fish & Wildlife Biometrics
- BIOL6810 - Ecological Ordination
- MATH5470 - Probability & Statistics I
- MATH5480 - Probability & Statistics II
- MATH6070 - App Linear Stat Meth I
- MATH6080 - App Linear Stat Meth II
- MATH6170 - Experimental Design I
- MATH6180 - Experimental Design II
- MATH6270 - Mathematical Statistics
- MATH6470 - Environmental Statistics
- PSY6310 - Educational Statistics
- PSY7310 - Adv Educational Statistics
- WFS5220 - Biostatistics

Total Degree Requirements = 30 credit hours

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

Courses

BIOL5000 - General Parasitology

General

College/School
Arts and Sciences

Course Title
General Parasitology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5000

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Biology of animal agents and vectors of diseases with emphasis placed on medical parasitology and organisms that parasitize fish and wildlife species. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: BIOL1114 General Zoology and BIOL 3120 or BIOL3130 General Ecology or WFS3120 General Ecology or WFS3130 General Ecology.

BIOL5040 - Immunology

General

College/School
Arts and Sciences

Course Title
Immunology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5040

Credit Hours

Credit Hours Min
3

Course Description
Introduction to basic principles of cellular and molecular immunology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Junior standing.

BIOL5060 - Hormones & Chem Comm

General

College/School
Arts and Sciences

Course Title
Hormones & Chem Comm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5060

Credit Hours

Credit Hours Min
3

Course Description
A survey of hormones, their functions, and mechanisms of action in vertebrate animals including humans. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** BIOL 3140 and CHEM 1110 or CHEM 1210.

BIOL5070 - Vertebrate Development

General

College/School
Arts and Sciences

Course Title
Vertebrate Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5070

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Prerequisite: BIOL 1113 and BIOL 1123. Development of vertebrates from the origin of gametes through hatching or birth, including embryonic anatomy and physiology and events, mechanisms, facts, and theories influencing vertebrate development.

Requisites

Simple Requisites

> **Prerequisite:** BIOL1113 General Biology I and BIOL1123 General Biology II.

BIOL5100 - Evolutionary biology

General

College/School
Arts and Sciences

Course Title
Evolutionary biology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5100

Credit Hours

Credit Hours Min
3

Course Description
Theories, evidences, principles, and examples of organic evolution. Emphasis on anatomical, chemical, ecological, geological, anthropological, and genetic factors. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** BIOL 3810 and BIOL 3130 or WFS 3130.

BIOL5110 - Microbial Evolution

General

College/School
Arts and Sciences

Course Title
Microbial Evolution

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5110

Credit Hours

Credit Hours Min
3

Course Description
Survey of microbial diversity and an in-depth evaluation of evolutionary mechanisms that lead to microbial speciation.

Requisites

Simple Requisites

> **Prerequisite:** BIOL3200 General Microbiology or BIOL3230 Health Science Microbiology.

BIOL5120 - Protozoology

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Protozoology	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
BIOL	5120

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	4
	Credit Hours Operator
	OR

Course Description
Diversity, ecology, and taxonomy of protozoa, and the importance of protozoa as agents of human disease and as model organisms for studying eukaryotic cell biology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3200 or BIOL 3230.

BIOL5130 - Environmental Microbiology

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Environmental Microbiology	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
BIOL	5130

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3
	Credit Hours Operator
	OR

Course Description
The function of microorganisms in the environment. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3200 or 3230.

BIOL5140 - Pathogenic Bacteriology

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Pathogenic Bacteriology	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
BIOL	5140

Credit Hours

Credit Hours Min
3

Course Description
Common Bacterial pathogens will be reviewed, including: 1. How they cause disease; 2. Virulence factors and how they are identified and studied; and 3. Prevention of disease transmission. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL3200 General Microbiology or BIOL3230 Health Science Microbiology.

BIOL5150 - Molecular Genetics

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Molecular Genetics	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
BIOL	5150

Credit Hours

Credit Hours Min
3

Course Description
Molecular basis of inheritance with special emphasis on microorganisms. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3810, CHEM 3005 or 3020.

BIOL5160 - Genetic Engineering Lab

General

College/School
Arts and Sciences

Course Title
Genetic Engineering Lab

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5160

Credit Hours

Credit Hours Min
2

Course Description
Techniques of bacterial genetics and recombinant DNA methodology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite or corequisite: BIOL4150 Molecular Genetics

BIOL5170 - Population/Conserv Genetics

General

College/School
Arts and Sciences

Course Title
Population/Conserv Genetics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5170

Credit Hours

Credit Hours Min
3

Course Description
Introduction to empirical and theoretical conservation genetics. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: BIOL1114 General Zoology and BIOL 3810.

BIOL5210 - Biological Systems Modeling

General

College/School
Arts and Sciences

Course Title
Biological Systems Modeling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5210

Credit Hours

Credit Hours Min
3

Course Description
Introduction to process-based models and all aspects of the model life cycle: equation generation, parameterization, evaluation, and utilization.

Requisites

Simple Requisites

> Prerequisites: None

BIOL5220 - Biostatistics

General

College/School
Arts and Sciences

Course Title
Biostatistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5220

Credit Hours

Credit Hours Min
3

Course Description
Probability and frequency distribution; statistical populations and samples; and tests of hypotheses used in biological research. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisites: MATH 1530 or MATH1830 Applied Calculus.

BIOL5230 - Animal Behavior

General

College/School
Arts and Sciences

Course Title
Animal Behavior

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5230

Credit Hours

Credit Hours Min
3

Course Description
Introduction to basic principles underlying the behavior of animals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Junior standing.

BIOL5240 - Systematic Botany

General

College/School
Arts and Sciences

Course Title
Systematic Botany

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5240

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
A general survey of vascular plants with emphasis on identification, naming, nomenclature, and classification of the vascular flora of Tennessee. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3240.

BIOL5250 - Economic Botany

General

College/School
Arts and Sciences

Course Title
Economic Botany

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5250

Credit Hours

Credit Hours Min
3

Course Description
Interrelationships between plants and people. Topics include a survey of the past, present, and future uses of plants, and the role of conservation biology in the preservation of plant resources. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 2110 or consent of instructor.

BIOL5300 - Plant Speciation/Evolution

General

College/School
Arts and Sciences

Course Title
Plant Speciation/Evolution

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description
Principles of the evolution of plants at the micro- and macroevolution levels, including a survey of relevant primary and secondary literature. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 2110 or consent of instructor.

BIOL5310 - Plant Anatomy

General

College/School
Arts and Sciences

Course Title
Plant Anatomy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5310

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
A comparative study of the structure of vascular plants in relation to function. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL2110 and 8 semester hours of biology

BIOL5320 - Plant Physiology

General

College/School
Arts and Sciences

Course Title
Plant Physiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5320

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Physiological activities of seed plants, including photosynthesis, respiration, mineral nutrition, flowering, seed formation, and dormancy. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL5330 - Plant Ecology

General

College/School
Arts and Sciences

Course Title
Plant Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5330

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Biotic and abiotic factors affecting the distribution and abundance of plant species and the role of plants in ecosystem structure and function. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 2110 and WFS3130 General Ecology.

BIOL5340 - Plant-Animal Interactions

General

College/School
Arts and Sciences

Course Title
Plant-Animal Interactions

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5340

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Interactions of plants and animals in aquatic, terrestrial, and atmospheric environments at various ecological scales. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 2110 and junior standing.

BIOL5430 - Vascular Plant Biology

General

College/School
Arts and Sciences

Course Title
Vascular Plant Biology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5430

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Prerequisite: BIOL 2110. Morphological and phylogenetic survey of the vascular plants. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

BIOL5610 - Invertebrate Zoology

General

College/School
Arts and Sciences

Course Title
Invertebrate Zoology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5610

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Biology of invertebrates with emphasis on morphology, systematics, and ecology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 8 semester hours of biology or consent of instructor. WFS3120 General Ecology

BIOL5630 - Ornithology

General

College/School
Arts and Sciences

Course Title
Ornithology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5630

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
General survey of the class Aves with emphasis on morphology, identification, and ecology of local birds. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 8 semester hours of biology.

BIOL5650 - Marine Biology

General

College/School
Arts and Sciences

Course Title
Marine Biology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5650

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
An introduction to the study of the marine environment and marine organisms. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL3130 General Ecology or WFS3130 General Ecology.

BIOL5740 - Pollution Microbiology

General

College/School
Arts and Sciences

Course Title
Pollution Microbiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5740

Credit Hours

Credit Hours Min
3

Course Description
Introduction to microbes, waterborne pathogens, water disinfection practices, effects of chemical pollutants, microbial detoxification and biodegradation mechanisms, genetic breeding, and bioassay/toxicity testing. Demonstration labs are included. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL5750 - Medical Microbiology

General

College/School
Arts and Sciences

Course Title
Medical Microbiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5750

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
A survey of microorganisms of medical importance, with emphasis on the bacteria and viruses. Principles of infectious diseases, including diagnostic methods and treatments. Laboratory exercises demonstrating methods of isolating and identifying pathogenic microorganisms. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL3200 General Microbiology or BIOL3230 Health Science Microbiology.

BIOL5780 - Phycology

General

College/School
Arts and Sciences

Course Title
Phycology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5780

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Introduction to freshwater algae. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 8 semester hours of biology.

BIOL5810 - Ichthyology

General

College/School
Arts and Sciences

Course Title
Ichthyology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5810

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Identification, classification, anatomy, physiology, ecology, and adaptations of fishes; emphasis on North American freshwater species. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 8 semester hours of biology.

BIOL5820 - Mammalogy

General

College/School
Arts and Sciences

Course Title
Mammalogy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5820

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Classification, structure and function, phylogeny, and geographical distribution of mammals; emphasis on Tennessee mammals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 8 semester hours of biology.

BIOL5830 - Herpetology

General

College/School
Arts and Sciences

Course Title
Herpetology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5830

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Classification, adaptations, habits, life histories, and geographical distribution of amphibians and reptiles; emphasis on North American species. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus

Requisites

Simple Requisites

> **Prerequisite:** 8 semester hours of biology.

BIOL5840 - Limnology

General

College/School
Arts and Sciences

Course Title
Limnology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5840

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Physiochemical and biological dynamics of inland waters. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 8 semester hours of biology and chemistry, Junior standing, or consent of instructor.

BIOL5850 - Applied Microbiology

General

College/School
Arts and Sciences

Course Title
Applied Microbiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5850

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Microbial production of foods and chemicals; microorganisms in food spoilage. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3110 or 3130 or consent of instructor.

BIOL5860 - Disease Prevention

General

College/School
Arts and Sciences

Course Title
Disease Prevention

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5860

Credit Hours

Credit Hours Min
3

Course Description
Mechanisms of disease transmission, persistence of pathogens, and infection control.

Requisites

Simple Requisites

> **Prerequisites:** Sophomore Standing

BIOL5880 - Bioethics

General

College/School
Arts and Sciences

Course Title
Bioethics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5880

Credit Hours

Credit Hours Min
3

Course Description
Introduction to the field of bioethics focusing on practical applications of ethical principles related to healthcare, medical science, and medical technology.

Requisites

Simple Requisites

> **Prerequisites:** Junior Standing

BIOL5890 - Histology

General

College/School
Arts and Sciences

Course Title
Histology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5890

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
A detailed study of the microscopic structure of human tissues along with their cellular components, the methods used to prepare tissue samples for microscopy, and various common staining techniques.

Requisites

Simple Requisites

> **Prerequisites:** BIOL1113 General Biology I and BIOL1123 General Biology II or BIOL2010 Human Anatomy & Physiology I.

BIOL5940 - Radiation Biology

General

College/School
Arts and Sciences

Course Title
Radiation Biology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5940

Credit Hours

Credit Hours Min
3

Course Description
Effects of ionizing radiation on biological systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Senior standing or consent of departmental chairperson.

BIOL5950 - Radiation Biology Seminar

General

College/School
Arts and Sciences

Course Title
Radiation Biology Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5950

Credit Hours

Credit Hours Min
2

Course Description
In-depth discussion of specific topics in radiation biology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 4940.

BIOL5960 - Biotechnology Seminar

General

College/School
Arts and Sciences

Course Title
Biotechnology Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
5960

Credit Hours

Credit Hours Min
1

Course Description
Prerequisite: BIOL 4150 or consent of instructor. Discussion of current literature in biotechnology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

BIOL5990 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5990

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL5991 - Advanced Topics

General

College/School
Arts and Sciences

Course Title
Advanced Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5991

Credit Hours

Credit Hours Min
1

Course Description
Prerequisite: Consent of instructor and departmental chairperson. Focused study equivalent to one, two, three, or four credit hours on an advanced topic in the life sciences or wildlife/fisheries sciences under faculty supervision and approval of the departmental chairperson. Course may be repeated until a maximum of 12 hours of combined credit in BIOL (WFS) 499- (599-), Advanced Topics courses, are earned.

BIOL5992 - Advanced Topics

General

College/School
Arts and Sciences

Course Title
Advanced Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5992

Credit Hours

Credit Hours Min
2

Course Description
Focused study equivalent to one, two, three, or four credit hours on an advanced topic in the life sciences or wildlife/fisheries sciences under faculty supervision and approval of the departmental chairperson. Course may be repeated until a maximum of 12 hours of combined credit in BIOL (WFS) 499- (599-), Advanced Topics courses, are earned.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor and departmental chairperson.

BIOL5993 - Advanced Topics

General

College/School
Arts and Sciences

Course Title
Advanced Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5993

Credit Hours

Credit Hours Min
3

Course Description
Focused study equivalent to one, two, three, or four credit hours on an advanced topic in the life sciences or wildlife/fisheries sciences under faculty supervision and approval of the departmental chairperson. Course may be repeated until a maximum of 12 hours of combined credit in BIOL (WFS) 499- (599-), Advanced Topics courses, are earned.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor and departmental chairperson.

BIOL5994 - Advanced Topics

General

College/School
Arts and Sciences

Course Title
Advanced Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
5994

Credit Hours

Credit Hours Min
4

Course Description
Focused study equivalent to one, two, three, or four credit hours on an advanced topic in the life sciences or wildlife/fisheries sciences under faculty supervision and approval of the departmental chairperson. Course may be repeated until a maximum of 12 hours of combined credit in BIOL (WFS) 499- (599-), Advanced Topics courses, are earned.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor and departmental chairperson.

BIOL6060 - Aquatic Toxicology

General

College/School
Arts and Sciences

Course Title
Aquatic Toxicology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6060

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
A study of the mechanisms of toxicity in terrestrial and aquatic organisms, including the measurement of response, uptake, metabolism, and excretion of toxicants. Design and interpretation of toxicity tests, hazard evaluation, risk assessment, and toxics reduction plans. Fate and transport processes and advanced approaches in automated, computer-assisted monitoring will be evaluated. Environmental policy and laws of national and international concern will be addressed.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3530 and CHEM 3010 and 3020.

BIOL6100 - Advanced Microscopy

General

College/School
Arts and Sciences

Course Title
Advanced Microscopy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
An applied course in the use and maintenance of research-grade microscopes and various optical systems. Topics also include computer image analysis, confocal laser scanning microscopy, photography, calibration, and measurement.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

BIOL6120 - Fishery Science

General

College/School
Arts and Sciences

Course Title
Fishery Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6120

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Current concepts and practices of fishery science, especially those environmentally related.

Requisites

Simple Requisites

> **Prerequisite:** WFS 4710 or WFS5710 Fisheries Management.

BIOL6130 - Advanced Fisheries Mgmt

General

College/School
Arts and Sciences

Course Title
Advanced Fisheries Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6130

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours
Operator
OR

Course Description
An in-depth analysis of major historical developments in the theory and techniques of freshwater fisheries management.

Requisites
Simple Requisites

> **Prerequisite:** WFS 4710 or WFS5710 Fisheries Management.

BIOL6140 - Fish & Wildlife Biometrics

General
College/School
Arts and Sciences

Course Title
Fish & Wildlife Biometrics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6140

Credit Hours
Credit Hours Min
0

Credit Hours Max
3

Credit Hours
Operator
OR

Course Description
Study and application of quantitative methods used to assess fish and wildlife populations. Estimation of parameters, hypothesis testing, and use of classical fisheries and wildlife statistical techniques.

Requisites
Simple Requisites

> **Prerequisite:** WFS 4710 (WFS5710 Fisheries Management) and BIOL 4220 (5220) or equivalents.

BIOL6150 - Reservoir Fisheries Mgmt

General
College/School
Arts and Sciences

Course Title
Reservoir Fisheries Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6150

Credit Hours
Credit Hours Min
3

Course Description
A comprehensive introduction to basic and applied aspects of managing fisheries in man-made impoundments.

Requisites
Simple Requisites

> **Prerequisites:** None

BIOL6160 - Cytogenetics

General
College/School
Arts and Sciences

Course Title
Cytogenetics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6160

Credit Hours
Credit Hours Min
0

Credit Hours Max
3

Credit Hours
Operator
OR

Course Description
Normal and abnormal chromosome structure, crossing over, and control of gene action in eukaryotes.

Requisites
Simple Requisites

> **Prerequisite:** BIOL 3810 and one year of Chemistry.

BIOL6220 - Cytology

General
College/School
Arts and Sciences

Course Title
Cytology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6220

Credit Hours
Credit Hours Min
0

Credit Hours Max
3

Credit Hours
Operator
OR

Course Description
Study of the cell and its components

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3140 and CHEM 3010 and 3020.

BIOL6310 - Biological Literature

General

College/School
Arts and Sciences

Course Title
Biological Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6310

Credit Hours

Credit Hours Min
1

Course Description
A survey of literature resources, experimental design, report writing, and rules adopted by the Council of Biological Editors.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL6350 - Mgmt of Wetland Wildlife

General

College/School
Arts and Sciences

Course Title
Mgmt of Wetland Wildlife

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6350

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Ecology and management of wildlife species occurring in wetland habitats, emphasis on waterfowl and southeastern fauna.

Requisites

Simple Requisites

> **Prerequisite:** WFS 4700 or WFS5700 Habitat Management.

BIOL6360 - Wetland Ident & Assessment

General

College/School
Arts and Sciences

Course Title
Wetland Ident & Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6360

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Advanced concepts of the physical, chemical, and biological properties of wetlands and how hydrology and geomorphology interact to create wetland ecosystems. Field techniques for distinguishing wetlands from non-wetlands and for assessing functional capacity of wetland ecosystems will be covered.

Requisites

Simple Requisites

> **Prerequisite:** BIOL6350 Mgmt of Wetland Wildlife.

BIOL6370 - Mgmt of Upland Wildlife

General

College/School
Arts and Sciences

Course Title
Mgmt of Upland Wildlife

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6370

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Ecology and management of wildlife species occurring in upland habitats, emphasis on southeastern fauna.

Requisites

Simple Requisites

> **Prerequisites:** None.

BIOL6420 - Water Resources Mgmt Seminar

General

College/School
Arts and Sciences

Course Title
Water Resources Mgmt Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6420

Credit Hours

Credit Hours Min
2

Course Description
Current problems and research in water resources management.

Requisites

Simple Requisites

> **Prerequisites:** None.

BIOL6500 - Biological Photography

General

College/School
Arts and Sciences

Course Title
Biological Photography

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6500

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Photographic principles applied to biological materials; photomicrography and photomacrography; preparation of black and white prints for publication and slides for presentation.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL6600 - Microbial Ecology

General

College/School
Arts and Sciences

Course Title
Microbial Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6600

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Topics will include role of microorganisms in nutrient cycling, techniques in sampling, enumeration, and activity measurements, distribution of microorganisms, diversity and adaptation, and microbial interactions including competition, symbioses, and predation.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3200 or BIOL 3230 or BIOL 4130 or BIOL5130 Environmental Microbiology.

BIOL6630 - Animal Ecology

General

College/School
Arts and Sciences

Course Title
Animal Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6630

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
The relationship between animals and their environment; the structure, processes, and distribution of animal communities.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL6640 - Stream Ecology

General

College/School
Arts and Sciences

Course Title
Stream Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6640

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Concepts in water chemistry and physics, hydrology, and sediments of lotic systems and their influences on ecological relationships. Stream production, metabolism, and energy flux relative to river continuum concepts will be emphasized through field studies and report preparation.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL6650 - Physiological Ecology

General

College/School
Arts and Sciences

Course Title
Physiological Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6650

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Advanced concepts in ecological structure and function and how they are governed by physiological processes. Resource utilization, mineral and nutrient cycling, and energy flux in maintenance, production, and reproduction of ecological population and communities will be addressed. Applications and tests of relevant approaches to data acquisition, processing, and interpretation are emphasized. Remote sensing technologies are included.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3530 and CHEM 3010 and CHEM 3020.

BIOL6660 - Fish Ecology

General

College/School
Arts and Sciences

Course Title
Fish Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6660

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Principles of the evolutionary ecology of fishes, including reproductive guilds, morphological and behavioral polymorphism, foraging, habitat selection, intraspecific and interspecific interactions, and stability of fish assemblages.

Requisites

Simple Requisites

> **Prerequisite:** WFS 4710 or WFS5710 Fisheries Management.

BIOL6670 - Stream Ecology

General

College/School
Arts and Sciences

Course Title
Stream Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6670

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Concepts in water chemistry and physics, hydrology, and sediments of lotic systems and their influences on ecological relationships. Stream production, metabolism, and energy flux relative to river continuum concepts will be emphasized through field studies and report preparation.

BIOL6680 - Malacology

General

College/School
Arts and Sciences

Course Title
Malacology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6680

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

**Credit Hours
Operator**
OR

Course Description
Identification, classification, and ecology of freshwater bivalves. Emphasis on ecology of Ohio River basin species.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

BIOL6700 - Current Topics/Microbiology

General

College/School
Arts and Sciences

Course Title
Current Topics/Microbiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6700

Credit Hours

Credit Hours Min
2

Course Description
Discussion and literature search of current issues in medical and environmental microbiology, including scientific ethics, biotechnology issues, science, and politics.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL6810 - Ecological Ordination

General

College/School
Arts and Sciences

Course Title
Ecological Ordination

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BIOL

Course Number
6810

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

**Credit Hours
Operator**
OR

Course Description
Application of multivariate statistics in the study of ecology.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL6930 - Seminar

General

College/School
Arts and Sciences

Course Title
Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6930

Credit Hours

Credit Hours Min
1

Course Description
Current literature in biology and presentation of current or completed graduate research.

Requisites

Simple Requisites

> **Prerequisites:** None

BIOL6960 - Molecular Biology Seminar

General

College/School
Arts and Sciences

Course Title
Molecular Biology Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6960

Credit Hours

Credit Hours Min
1

Course Description
Critical review and presentation of current research from molecular biology literature.

Requisites

Simple Requisites

Prerequisites: None

BIOL6980 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BIOL

Course Number
6980

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Prerequisite: Consent of instructor. Special study in an approved field under the supervision of a member of the graduate faculty as approved by the departmental chairperson.

BIOL6990 - Research and Thesis

General

College/School
Arts and Sciences

Course Title
Research and Thesis

Academic Level (Course Level)
Graduate

Course Subject Code
BIOL

Course Number
6990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

MBIO5030 - Marine Invert Zoology

General

College/School
Arts and Sciences

Course Title
Marine Invert Zoology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5030

Credit Hours

Credit Hours Min
6

Course Description
Structure, classification, phylogeny, and function in Protozoa through the Lophophorata. Observation of their ecology and behavior. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: 16 semester hours of biology.

MBIO5040 - Parasites/Marine Animals

General

College/School
Arts and Sciences

Course Title
Parasites/Marine Animals

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5040

Credit Hours

Credit Hours Min
6

Course Description
Morphology, taxonomy, life histories, and host-parasite relationships. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: BIOL 3110, or 3130, or consent of instructor. BIOL 3200 or BIOL 3230

MBIO5050 - Marine Ecology

General

College/School
Arts and Sciences

Course Title
Marine Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5050

Credit Hours

Credit Hours Min
5

Course Description
Relationship of marine organisms to their environment. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 16 semester hours of biology, including General Zoology, General Botany, and Invertebrate Zoology.

MBIO5060 - Fauna and Faunistic

General

College/School
Arts and Sciences

Course Title
Fauna and Faunistic

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5060

Credit Hours

Credit Hours Min
4

Course Description
Taxonomy, distribution, trophic relationships, reproductive strategies and adaptations. Emphasis on northern Gulf marshes. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 16 semester hours of biology and junior standing, or consent of instructor.

MBIO5070 - Marine Aquaculture

General

College/School
Arts and Sciences

Course Title
Marine Aquaculture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5070

Credit Hours

Credit Hours Min
6

Course Description
Technology, principles, and problems of aquaculture. Emphasis of marine species. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 16 semester hours of zoology, including invertebrate and vertebrate zoology of ichthyology.

MBIO5080 - Marine Icthyology

General

College/School
Arts and Sciences

Course Title
Marine Icthyology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5080

Credit Hours

Credit Hours Min
6

Course Description
Marine Chordata, including lower groups and the mammals and birds. Emphasis on fishes. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 12 semester hours of biology and junior standing.

MBIO5090 - Marine Microbiology

General

College/School
Arts and Sciences

Course Title
Marine Microbiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5090

Credit Hours

Credit Hours Min
5

Course Description
Sampling procedures, taxonomy of marine bacteria, mineralization, microbial, fouling, pollution, and diseases of marine animals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3110 or consent of instructor. BIOL 3200 or BIOL 3230

MBIO5100 - Marine Fisheries Mgmt

General

College/School
Arts and Sciences

Course Title
Marine Fisheries Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5100

Credit Hours

Credit Hours Min
4

Course Description
Overview of practical marine fishery management program. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MBIO5200 - Marine Phycology

General

College/School
Arts and Sciences

Course Title
Marine Phycology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5200

Credit Hours

Credit Hours Min
4

Course Description
Survey of the principal groups of marine algae and maritime flowering plants. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 8 semester hours of biology, including introductory botany, or consent of instructor.

MBIO5210 - Coastal Vegetation

General

College/School
Arts and Sciences

Course Title
Coastal Vegetation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5210

Credit Hours

Credit Hours Min
3

Course Description
Aspects of coastal vegetation. Emphasis on local examples. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 10 semester hours of biology, including general biology.

MBIO5220 - Salt Marsh Plant Ecology

General

College/School
Arts and Sciences

Course Title
Salt Marsh Plant Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5220

Credit Hours

Credit Hours Min
4

Course Description
Identification, composition, structure, distribution, primary productivity, ecology, and development. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** General botany, plant taxonomy, plant physiology, general ecology, or consent of instructor.

MBIO5300 - Comp Hist Marine Organisms

General

College/School
Arts and Sciences

Course Title
Comp Hist Marine Organisms

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5300

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Identification, composition, structure, distribution, primary productivity, ecology, and development. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: General botany, plant taxonomy, plant physiology, general ecology, or consent of instructor.

MBIO5410 - Marine Chemistry

General

College/School
Arts and Sciences

Course Title
Marine Chemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5410

Credit Hours

Credit Hours Min
6

Course Description
Chemical aspects of oceans and interactions of chemistry, biology, and geology in marine environments. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: 16 semester hours of chemistry, 3-6 semester hours of biology and geology or consent of instructor.

MBIO5440 - Behavior & Neurobiology

General

College/School
Arts and Sciences

Course Title
Behavior & Neurobiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5440

Credit Hours

Credit Hours Min
4

Course Description
Behavior, neuroanatomy, and neurophysiology. Emphasis on neural mechanisms underlying behavior. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: 16 semester hours of zoology and/or psychology, or consent of instructor.

MBIO5570 - Marine Sci For Teachers

General

College/School
Arts and Sciences

Course Title
Marine Sci For Teachers

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5570

Credit Hours

Credit Hours Min
3

Course Description
Introduction to marine science. For public school teachers. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Biology background or consent of instructor.

MBIO5580 - Marine Sci-Elem Teacher

General

College/School
Arts and Sciences

Course Title
Marine Sci-Elem Teacher

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5580

Credit Hours

Credit Hours Min
3

Course Description
Materials and methods in teaching marine science to elementary students. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** 6 semester hours of biology.

MBIO5900 - Spec Prob-Marine Science

General

College/School
Arts and Sciences

Course Title
Spec Prob-Marine Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5900

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Research oriented problems reported in writing. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** To be set by problem director.

MBIO5910 - Sp Top: Marine Biology

General

College/School
Arts and Sciences

Course Title
Sp Top: Marine Biology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
5910

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Prerequisite: To be set by topics advisor. Special study in a field topic approved by the GCRL topics advisor and the student's institutional advisor. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

MBIO6040 - Early Life Hist Marine

General

College/School
Arts and Sciences

Course Title
Early Life Hist Marine

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBIO

Course Number
6040

Credit Hours

Credit Hours Min
4

Course Description
Reproductive strategies and early developmental processes.

Requisites

Simple Requisites

> **Prerequisite:** Ichthyology, Fisheries, Biology, Ecology and/or consent of instructor.

WFS5220 - Biostatistics

General

College/School
Arts and Sciences

Course Title
Biostatistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5220

Credit Hours

Credit Hours Min
3

Course Description
Probability and frequency distribution; statistical populations and samples; and tests of hypotheses used in biological research. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None.

WFS5230 - Animal Behavior

General

College/School
Arts and Sciences

Course Title
Animal Behavior

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number	Credit Hours
WFS	5230	

Credit Hours

Credit Hours Min
3

Operator
OR

Course Description

Introduction to basic principles underlying the behavior of animals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Course Description

General survey of the class Aves with emphasis on morphology, identification, and ecology of local birds. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Junior standing.

Requisites

Simple Requisites

Prerequisite: Junior Standing.

WFS5500 - National Wildlife Policy

General

College/School
Arts and Sciences

Course Title	Academic Level (Course Level)
National Wildlife Policy	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
WFS	5500

Credit Hours

Credit Hours Min
3

Course Description

Policies, agencies, and laws that influence wildlife management on a national level. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: 8 semester hours of biology.

WFS5630 - Orinthology

General

College/School
Arts and Sciences

Course Title	Academic Level (Course Level)
Orinthology	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
WFS	5630

Credit Hours

Credit Hours Min	Credit Hours Max
0	3

WFS5640 - Waterfowl Ecology & Mgmt

General

College/School
Arts and Sciences

Course Title	Academic Level (Course Level)
Waterfowl Ecology & Mgmt	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
WFS	5640

Credit Hours

Credit Hours Min	Credit Hours Max
0	3

Credit Hours

Operator
OR

Course Description

Advanced ecological principles as illustrated by ducks, geese, and swans, including habitat selection, morphological and behavioral adaptations, intraspecific and interspecific interactions, and reproductive ecology. Field techniques for identifying species and management approaches are emphasized in the laboratory. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: WFS 3130 and 4720 or consent of instructor.

WFS5650 - Marine Biology

General

College/School
Arts and Sciences

Course Title	Academic Level (Course Level)
Marine Biology	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
WFS	5650

Credit Hours

Credit Hours Min	Credit Hours Max
0	4

Credit Hours
Operator
OR

Credit Hours
Operator
OR

Course Description

An introduction to the study of the marine environment and marine organisms. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Course Description

The natural history and ecology of selected mammal species, emphasizing game species, furbearers, endangered species, predators, and pests. Anatomy and identification are the focus of the laboratories. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: 12 semester hours of biology to include BIOL/WFS 3130 or equivalent.

Requisites

Simple Requisites

Prerequisites: BIOL 1110 and WFS/BIOL 3130, or equivalent.

WFS5660 - Wild Bird Ecology

General

College/School
Arts and Sciences

Course Title
Wild Bird Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5660

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description

The ecology and natural history of selected avian species, emphasizing game species, endangered species, predators, and pests. Anatomy and procedures for identification are the focus of laboratories. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: BIOL 3130 or WFS 3130 or concurrent enrollment

WFS5670 - Wild Mammal Ecology

General

College/School
Arts and Sciences

Course Title
Wild Mammal Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5670

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

WFS5700 - Habitat Management

General

College/School
Arts and Sciences

Course Title
Habitat Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5700

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description

Description, principles, and techniques of quantitative characterization of wildlife habitat types. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: PSS 2450, WFS 4240, or equivalent.

WFS5710 - Fisheries Management

General

College/School
Arts and Sciences

Course Title
Fisheries Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5710

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite:** BIOL 3130 or WFS 3130.

WFS5711 - Fisheries Management

General

College/School
Arts and Sciences

Course Title
Fisheries Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5711

Credit Hours

Credit Hours Min
3

Course Description
Classroom-based overview of theory, methods, and techniques of freshwater fisheries management. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** WFS 4810 and WFS 4840 or equivalent, or consent of instructor.

WFS5720 - Wildlife Principles/Techniques

General

College/School
Arts and Sciences

Course Title
Wildlife Principles/Techniques

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5720

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Prerequisite: 8 semester hours of biology, Junior standing, WFS 4630 and WFS 4820 or equivalent, or consent of instructor. Principles, objectives and techniques of game management. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

WFS5730 - Conservation Biology

General

College/School
Arts and Sciences

Course Title
Conservation Biology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5730

Credit Hours

Credit Hours Min
3

Course Description
Advanced concepts of plant and animal conservation, including biodiversity, population genetics, habitat fragmentation, endangered and threatened species, and ecosystem management. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: BIOL3130 General Ecology or WFS3130 General Ecology

WFS5740 - Wildlife Principles

General

College/School
Arts and Sciences

Course Title
Wildlife Principles

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5740

Credit Hours

Credit Hours Min
2

Course Description
Classroom-based theory and principles of wildlife management. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** BIOL3130 General Ecology or WFS3130 General Ecology and Junior standing or consent of instructor.

WFS5760 - Fish Culture

General

College/School
Arts and Sciences

Course Title
Fish Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5760

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Classroom-based theory and principles of wildlife management. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: BIOL3130 General Ecology or WFS3130 General Ecology and Junior standing or consent of instructor.

WFS5770 - Nongame Species Management

General

College/School
Arts and Sciences

Course Title
Nongame Species Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5770

Credit Hours

Credit Hours Min
3

Course Description
Advanced concepts of managing non-game species. Topics include urban wildlife, funding mechanisms, monitoring and inventory techniques, habitat management, rare species, and state wildlife action plans.

Requisites

Simple Requisites

Prerequisite: Junior Standing.

WFS5810 - Ichthyology

General

College/School
Arts and Sciences

Course Title
Ichthyology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5810

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Identification, classification, anatomy, physiology, ecology and adaptations of fishes, with emphasis on North American freshwater species. Students enrolled in the 5000-level course will be required to completely additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Junior Standing

WFS5820 - Mammalogy

General

College/School
Arts and Sciences

Course Title
Mammalogy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5820

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Classification, structure and function, phylogeny, and geographical distribution of mammals; emphasis on Tennessee mammals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Junior Standing.

WFS5830 - Herpetology

General

College/School
Arts and Sciences

Course Title
Herpetology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5830

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Classification, adaptions, habits, life histories, and geographical distribution of amphibians and reptiles, with emphasis on North American species. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Junior Standing.

WFS5840 - Limnology

General

College/School
Arts and Sciences

Course Title
Limnology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5840

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Physiochemical and biological dynamics of inland waters. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Junior Standing.

WFS5870 - GIS for Wildlife/Fisheries

General

College/School
Arts and Sciences

Course Title
GIS for Wildlife/Fisheries

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5870

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Introduction to Geographic Information Systems (GIS) using both raster and vector spatial data models, with hands on experience utilizing computers to aid problem solving in wildlife and fisheries science.

Requisites

Simple Requisites

Prerequisite: Junior Standing.

WFS5991 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5991

Credit Hours

Credit Hours Min
1

Course Description
Focused study equivalent to one, two, three, or four credit hours on an advanced topic in the life sciences or wildlife/fisheries sciences under faculty supervision and approval of the departmental chairperson. Course may be repeated until a maximum of 12 hours of combined credit in BIOL (WFS) 499- (599-), Advanced Topics courses, are earned.

Requisites

Simple Requisites

Prerequisite: Consent of instructor and departmental chairperson.

WFS5992 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5992

Credit Hours

Credit Hours Min
2

Course Description
Focused study equivalent to one, two, three, or four credit hours on an advanced topic in the life sciences or wildlife/fisheries sciences under faculty supervision and approval of the departmental chairperson. Course may be repeated until a maximum of 12 hours of combined credit in BIOL (WFS) 499- (599-), Advanced Topics courses, are earned.

Requisites

Simple Requisites

Prerequisite: Consent of instructor and departmental chairperson.

WFS5993 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5993

Credit Hours

Credit Hours Min
3

Course Description
Focused study equivalent to one, two, three, or four credit hours on an advanced topic in the life sciences or wildlife/fisheries sciences under faculty supervision and approval of the departmental chairperson. Course may be repeated until a maximum of 12 hours of combined credit in BIOL (WFS) 499- (599-), Advanced Topics courses, are earned.

Requisites

Simple Requisites

Prerequisite: Consent of instructor and departmental chairperson.

WFS5994 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
WFS

Course Number
5994

Credit Hours

Credit Hours Min
4

Course Description
Focused study equivalent to one, two, three, or four credit hours on an advanced topic in the life sciences or wildlife/fisheries sciences under faculty supervision and approval of the departmental chairperson. Course may be repeated until a maximum of 12 hours of combined credit in BIOL (WFS) 499- (599-), Advanced Topics courses, are earned.

Requisites

Simple Requisites

Prerequisite: Consent of instructor and departmental chairperson.

Business Department

The Tennessee Tech MBA is fully accredited by AACSB International–the highest attainable level of accreditation. The MBA degree may be obtained completely online or through a combined online/on-campus program of study.

The MBA program offers the option for 100% online completion, in as little as one year. The online learning environment is highly interactive and incorporates case discussions, teamwork, simulations, and other active-learning approaches. MBA courses make a strong connection between academic subjects and the practical issues facing managers in today's globally competitive, high tech, and analytically-focused business environment.

Programs

AGBU-CER - Agribusiness Certificate, M.B.A.

Program Overview

Program Long Title
Agribusiness Certificate, M.B.A.

College/School
Business

Department(s)
Business

Catalog Full Description
The Agribusiness Certificate is designed for current or prospective graduate students who have completed a Bachelor of Science degree in Agriculture or related field. The Agribusiness Certificate consists of 15 hours of industry-relevant graduate course credit and may be acquired in conjunction with, or independent from, other graduate credentials- including the Master of Business Administration (MBA). If in conjunction with the MBA, 9 hours of (specifically directed) course credit may be counted toward both the MBA and the Agribusiness Certificate. Students will also have the option to focus their certificate by taking courses in finance and risk management or general agribusiness.

MBA with a Certificate

- **MBA Core Required Courses:** 24 hours
- **Certificate Courses*:** 15 hours
- **Total:** 39 hours

*2 MBA electives courses (6 hours) count toward the 5 certificate courses (15 hours) required.

As many as nine (9) semester hours may be transferred from other AACSB accredited schools. Credit will not be allowed for courses taken more than five (5) years prior to application to Tennessee Tech. Enrollment in required common courses requires the approval of the MBA Director. All core courses should be complete prior to any 6000-level work.

Note: Participants from the Graduate School of Banking at LSU or the Barrette School of Banking may, upon approval, substitute 6 hours of course credit towards the TTU MBA program.

Admission Requirements

Admission Requirements

MBA Admission Requirements

Tennessee Tech's AACSB-accredited Master of Business Administration (MBA) program maintains an admission process that considers applicants' total academic and work-life achievements. Admission is open to qualified students with a bachelor's degree from a regionally accredited institution. No GMAT or GRE test score is required to apply. Applications are accepted for fall, spring, and summer semester admission. Application deadlines are listed on the University's Graduate Studies webpage.

To Apply: Visit the online application portal, create an account, complete the application, and upload the following required documents

• A current resume, containing dates for all work experience and degrees received.

• Official transcripts from all institutions where classes were taken and/or a degree received. Factors that may be considered in the admission decision are:

• Undergraduate GPA*

• Professional Work Experience◇

• Graduate Degrees and Relevant Achievements[1]

◇Professional work experience is post-undergraduate professional or military experience and should be described on the applicant's resume.

[1]Graduate degrees (e.g., MD, JD, MS, MA, PharmD, etc.) should be documented on the applicant's transcript(s) and denoted on the resume.

Timely application is important. Applicants are advised to submit their completed application and all required documentation early to be given full consideration for upcoming semesters. Visit the Graduate Admissions Calendar for a complete list of application deadlines.

Important to Note: Additional information is required by Graduate Studies for international students (see Graduate Studies website). A score of 550 (79 internetbased) on the TOEFL or a band score of 6.0 on the IELTS is required for all students whose native language is other than English. Students must be proficient in the use of word processing, spreadsheet, and presentation software including the integration of all three of the above.

Academic Background

The Tennessee Tech MBA welcomes applicants from all academic majors. An undergraduate business degree or prerequisite business courses are not required to be admitted to the program. In lieu of prerequisite coursework, the program provides a self-paced orientation experience that allows students to start the MBA with foundational knowledge. Further details about orientation arrive to accepted students in their admissions information packet.

Standing Upon Admission

Students may be admitted in Full Standing or with Provisional Standing. Admission in Full gives students the greatest flexibility in taking MBA courses. Students admitted provisionally must take ECON 6050 within the first nine (9) hours of their program and maintain a 3.0 GPA on the first nine (9) hours of MBA core content completed. Upon meeting these requirements, the provisional student will be moved to Full Standing

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Agribusiness Certificate is designed for current or prospective graduate students who have completed a Bachelor of Science degree in Agriculture or related field. The Agribusiness Certificate consists of 15 hours of industry-relevant graduate course credit and may be acquired in conjunction with, or independent from, other graduate credentials- including the Master of Business Administration (MBA). If in conjunction with the MBA, 9 hours of (specifically directed) course credit may be counted toward both the MBA and the Agribusiness Certificate. Students will also have the option to focus their certificate by taking courses in finance and risk management or general agribusiness.

MBA with a Certificate

- **MBA Core Required Courses:** 24 hours
- **Certificate Courses*:** 15 hours
- **Total:** 39 hours

*2 MBA electives courses (6 hours) count toward the 5 certificate courses (15 hours) required.

As many as nine (9) semester hours may be transferred from other AACSB accredited schools. Credit will not be allowed for courses taken more than five (5) years prior to application to Tennessee Tech. Enrollment in required common courses requires the approval of the MBA Director. All core courses should be complete prior to any 6000-level work.

Note: Participants from the Graduate School of Banking at LSU or the Barrette School of Banking may, upon approval, substitute 6 hours of course credit towards the TTU MBA program.

Certificate Requirements

The Agribusiness Certificate allows the student to choose one of two focus areas: Finance and Risk Management; or General Agribusiness.

MBA Core Required Courses
Type
Completion Requirement

Core required Courses

Complete ALL of the following Courses:
- ACCT6010 - Acct Info for Mgmt Decisions
- BMGT6200 - Organizational Leadership
- BMGT6950 - Business Strategy
- DS6220 - Management of Info Technology
- ECON6000 - Managerial Economics
- ECON6050 - Analytical Decision Making
- FIN6020 - Financial Management
- MKT6100 - Strategic Marketing

Additional Comments:

Certificate Requirements Type
Completion Requirement
Finance and Risk Management Focus **Complete ALL of the following Courses:** • AGBE4110 - Ag Futures Marketing & Options • AGBE3400 - Agricultural Finance • ACCT5300 - Financial Statement Analysis • FIN6920 - Banking and Financial Services • Plus 3 credit hours of graduate agricultural coursework
General Agribusiness Focus **Complete ALL of the following Courses:** • ECON4120 - Natural Resource Economics • AGBE4130 - Agricultural Policy   **OR** AGBE5200 - Agribusiness Statistics • AGBE3400 - Agricultural Finance • Plus 3 credit hours of MBA economics coursework • Plus 3 credit hours of agricultural graduate coursework
Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Fast Track allows selected undergraduates to enroll for up to six (6) hours of graduate courses that will count at both the undergraduate and graduate level prior to formal admission to the MBA program. Once admitted to Fast Track, the student will be allowed to enroll in appropriate MBA courses in the senior year with the consent of the student's undergraduate advisor and the director of Graduate Business Programs. Participation does not change the requirements for the student's undergraduate or MBA program.

Admission to Fast-Track Minimum requirements for admission are:

• 90 hours of undergraduate work or senior standing and successful completion of any required prerequisites

• Recommendation of a faculty member in the student's major

• Overall GPA of 3.2 and GPA of 3.2 in the student's major

• Program participants should consult with their future MBA advisor regarding appropriate graduate courses to take during their senior year.

• All requirements for full admission to Graduate School must be met upon graduation.

• Students who do not receive a grade of B or better in the fast-tracked course will be advised to withdraw from the Fast Track program and complete their B.S. degree as normal.

Fulfilling the above minimum requirements does not guarantee acceptance into the Master of Business Administration Fast Track program or the MBA program. Students who meet the above minimum requirements must consult with the College of Business for eligibility and acceptance.

BFS-CER - Banking and Financial Services Certificate, M.B.A.

Program Overview

Program Long Title
Banking and Financial Services Certificate, M.B.A.

College/School	**Department(s)**
Business	Business

Catalog Full Description

Banking and Financial Services Certificate

The certificate aims to serve professionals in all areas of banking, including but not limited to bank management, financial services management and marketing, commercial lending and basic risk assessment, and derivative products. The certificate will also provide fundamental knowledge in data analytics and cyber management.

MBA with a Certificate

- **MBA Core Required Courses:** 24 hours

- **Certificate Courses*:** 15 hours

- **Total:** 39 hours

*2 MBA electives courses (6 hours) count toward the 5 certificate courses (15 hours) required.

As many as nine (9) semester hours may be transferred from other AACSB accredited schools. Credit will not be allowed for courses taken more than five (5) years prior to application to Tennessee Tech. Enrollment in required common courses requires the approval of the MBA Director. All core courses should be complete prior to any 6000-level work.

Note: Participants from the Graduate School of Banking at LSU or the Barrette School of Banking may, upon approval, substitute 6 hours of course credit towards the TTU MBA program.

Admission Requirements

Admission Requirements

MBA Admission Requirements

Tennessee Tech's AACSB-accredited Master of Business Administration (MBA) program maintains an admission process that considers applicants' total academic and work-life achievements. Admission is open to qualified students with a bachelor's degree from a regionally accredited institution. No GMAT or GRE test score is required to apply. Applications are accepted for fall, spring, and summer semester admission. Application deadlines are listed on the University's Graduate Studies webpage.

To Apply: Visit the online application portal, create an account, complete the application, and upload the following required documents

• A current resume, containing dates for all work experience and degrees received.

• Official transcripts from all institutions where classes were taken and/or a degree received. Factors that may be considered in the admission decision are:

• Undergraduate GPA*

• Professional Work Experience◇

• Graduate Degrees and Relevant Achievements[1]

◇Professional work experience is post-undergraduate professional or military experience and should be described on the applicant's resume.

[1]Graduate degrees (e.g., MD, JD, MS, MA, PharmD, etc.) should be documented on the applicant's transcript(s) and denoted on the resume.

Timely application is important. Applicants are advised to submit their completed application and all required documentation early to be given full consideration for upcoming semesters. Visit the Graduate Admissions Calendar for a complete list of application deadlines.

Important to Note: Additional information is required by Graduate Studies for international students (see Graduate Studies website). A score of 550 (79 internet based) on the TOEFL or a band score of 6.0 on the IELTS is required for all students whose native language is other than English. Students must be proficient in the use of word processing, spreadsheet, and presentation software including the integration of all three of the above.

Academic Background

The Tennessee Tech MBA welcomes applicants from all academic majors. An undergraduate business degree or prerequisite business courses are not required to be admitted to the program. In lieu of prerequisite coursework, the program provides a self-paced orientation experience that allows students to start the MBA with foundational knowledge. Further details about orientation arrive to accepted students in their admissions information packet.

Standing Upon Admission

Students may be admitted in Full Standing or with Provisional Standing. Admission in Full gives students the greatest flexibility in taking MBA courses. Students admitted provisionally must take ECON 6050 within the first nine (9) hours of their program and maintain a 3.0 GPA on the first nine (9) hours of MBA core content completed. Upon meeting these requirements, the provisional student will be moved to Full Standing.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

MBA with a Certificate

- **MBA Core Required Courses:** 24 hours
- **Certificate Courses*:** 15 hours
- **Total:** 39 hours

*2 MBA electives courses (6 hours) count toward the 5 certificate courses (15 hours) required.

As many as nine (9) semester hours may be transferred from other AACSB accredited schools. Credit will not be allowed for courses taken more than five (5) years prior to application to Tennessee Tech. Enrollment in required common courses requires the approval of the MBA Director. All core courses should be complete prior to any 6000-level work.

Note: Participants from the Graduate School of Banking at LSU or the Barrette School of Banking may, upon approval, substitute 6 hours of course credit towards the TTU MBA program.

Requirements
Type
Completion Requirement

MBA Core Required Courses

Complete ALL of the following Courses:
- ACCT6010 - Acct Info for Mgmt Decisions
- BMGT6200 - Organizational Leadership
- BMGT6950 - Business Strategy
- DS6220 - Management of Info Technology
- ECON6000 - Managerial Economics
- ECON6050 - Analytical Decision Making

- FIN6020 - Financial Management
- MKT6100 - Strategic Marketing

Total Hours for Core Courses: 24

Certificate Requirements

Complete ALL of the following Courses:
- DS6540 - Network Security
- DS6570 - Cyber Security Mgmt.
- FIN6920 - Banking and Financial Services
- MKT6510 - Services Marketing
- ACCT5300 - Financial Statement Analysis

Total Hours: 15

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Fast Track allows selected undergraduates to enroll for up to six (6) hours of graduate courses that will count at both the undergraduate and graduate level prior to formal admission to the MBA program. Once admitted to Fast Track, the student will be allowed to enroll in appropriate MBA courses in the senior year with the consent of the student's undergraduate advisor and the director of Graduate Business Programs. Participation does not change the requirements for the student's undergraduate or MBA program.

Admission to Fast-Track Minimum requirements for admission are:

• 90 hours of undergraduate work or senior standing and successful completion of any required prerequisites

• Recommendation of a faculty member in the student's major

• Overall GPA of 3.2 and GPA of 3.2 in the student's major

• Program participants should consult with their future MBA advisor regarding appropriate graduate courses to take during their senior year.

• All requirements for full admission to Graduate School must be met upon graduation.

• Students who do not receive a grade of B or better in the fast-tracked course will be advised to withdraw from the Fast Track program and complete their B.S. degree as normal.

Fulfilling the above minimum requirements does not guarantee acceptance into the Master of Business Administration Fast Track program or the MBA program. Students who meet the above minimum requirements must consult with the College of Business for eligibility and acceptance.

CMA-CER - Cyber Management and Analytics Certificate, M.B.A.

Program Overview

Program Long Title
Cyber Management and Analytics Certificate, M.B.A.

College/School	Department(s)
Business	Business

Catalog Full Description

Cybersecurity has become a global concern requiring the utmost attention from all sectors of academia, government, and industry. Despite the growing demand and tremendous job opportunities in the industry, there is a shortage of skilled professionals regionally, nationally, and globally. This certificate aims to help address that talent gap by providing students with basic managerial and business knowledge of IT analytics and data resources management, policy compliance and ethics, strategic management of personnel and network security, risk detection and mitigation, cyber audit, and IT project management.

MBA with a Certificate

- **MBA Core Required Courses:** 24 hours
- **Certificate Courses*:** 15 hours
- **Total:** 39 hours

*2 MBA electives courses (6 hours) count toward the 5 certificate courses (15 hours) required.

As many as nine (9) semester hours may be transferred from other AACSB accredited schools. Credit will not be allowed for courses taken more than five (5) years prior to application to Tennessee Tech. Enrollment in required common courses requires the approval of the MBA Director. All core courses should be complete prior to any 6000-level work.

Note: Participants from the Graduate School of Banking at LSU or the Barrette School of Banking may, upon approval, substitute 6 hours of course credit towards the TTU MBA program.

Admission Requirements

Admission Requirements

MBA Admission Requirements

Tennessee Tech's AACSB-accredited Master of Business Administration (MBA) program maintains an admission process that considers applicants' total academic and work-life achievements. Admission is open to qualified students with a bachelor's degree from a regionally accredited institution. No GMAT or GRE test score is required to apply. Applications are accepted for fall, spring, and summer semester admission. Application deadlines are listed on the University's Graduate Studies webpage.

To Apply: Visit the online application portal, create an account, complete the application, and upload the following required documents

• A current resume, containing dates for all work experience and degrees received.
• Official transcripts from all institutions where classes were taken and/or a degree received.

Factors that may be considered in the admission decision are:

• Undergraduate GPA*
• Professional Work Experience◇
• Graduate Degrees and Relevant Achievements[1]

◇Professional work experience is post-undergraduate professional or military experience and should be described on the applicant's resume. [1]Graduate degrees (e.g., MD, JD, MS, MA, PharmD, etc.) should be documented on the applicant's transcript(s) and denoted on the resume.

Timely application is important. Applicants are advised to submit their completed application and all required documentation early to be given full consideration for upcoming semesters. Visit the Graduate Admissions Calendar for a complete list of application deadlines.

Important to Note: Additional information is required by Graduate Studies for international students (see Graduate Studies website). A score of 550 (79 internet based) on the TOEFL or a band score of 6.0 on the IELTS is required for all students whose native language is other than English. Students must be proficient in the use of word processing, spreadsheet, and presentation software including the integration of all three of the above.

Academic Background

The Tennessee Tech MBA welcomes applicants from all academic majors. An undergraduate business degree or prerequisite business courses are not required to be admitted to the program. In lieu of prerequisite coursework, the program provides a self-paced orientation experience that allows students to start the MBA with foundational knowledge. Further details about orientation arrive to accepted students in their admissions information packet.

Standing Upon Admission

Students may be admitted in Full Standing or with Provisional Standing. Admission in Full gives students the greatest flexibility in taking MBA courses. Students admitted provisionally must take ECON 6050 within the first nine (9) hours of their program and maintain a 3.0 GPA on the first nine (9) hours of MBA core content completed. Upon meeting these requirements, the provisional student will be moved to Full Standing.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

MBA with a Certificate

- **MBA Core Required Courses:** 24 hours
- **Certificate Courses*:** 15 hours
- **Total:** 39 hours

*2 MBA electives courses (6 hours) count toward the 5 certificate courses (15 hours) required.

As many as nine (9) semester hours may be transferred from other AACSB accredited schools. Credit will not be allowed for courses taken more than five (5) years prior to application to Tennessee Tech. Enrollment in required common courses requires the approval of the MBA Director. All core courses should be complete prior to any 6000-level work.

Note: Participants from the Graduate School of Banking at LSU or the Barrette School of Banking may, upon approval, substitute 6 hours of course credit towards the TTU MBA program.

Certificate Requirements
Type
Completion Requirement

Certificate Requirements

Complete ALL of the following Courses:
- DS6540 - Network Security
- DS6570 - Cyber Security Mgmt.
- DS6550 - Database Management
- EMGT6210 - Project Management 1
  OR ACCT6290 - Essential Tech for Accountants
- DS6530 - Advanced Data Analytics

- MAcc students ACCT6290 Essential Tech for Accountants - Essential Tech for Accountants Cr. 2.

Total Hours: 14 or 15

Additional Comments:

MBA degree requirements
Type
Completion Requirement
Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Fast Track allows selected undergraduates to enroll for up to six (6) hours of graduate courses that will count at both the undergraduate and graduate level prior to formal admission to the MBA program. Once admitted to Fast Track, the student will be allowed to enroll in appropriate MBA courses in the senior year with the consent of the student's undergraduate advisor and the director of Graduate Business Programs. Participation does not change the requirements for the student's undergraduate or MBA program.

Admission to Fast-Track

Minimum requirements for admission are:

• 90 hours of undergraduate work or senior standing and successful completion of any required prerequisites

• Recommendation of a faculty member in the student's major

• Overall GPA of 3.2 and GPA of 3.2 in the student's major

• Program participants should consult with their future MBA advisor regarding appropriate graduate courses to take during their senior year.

• All requirements for full admission to Graduate School must be met upon graduation.

• Students who do not receive a grade of B or better in the fast-tracked course will be advised to withdraw from the Fast Track program and complete their B.S. degree as normal.

Fulfilling the above minimum requirements does not guarantee acceptance into the Master of Business Administration Fast Track program or the MBA program. Students who meet the above minimum requirements must consult with the College of Business for eligibility and acceptance.

HCI-CER - Healthcare Informatics Certificate, M.B.A.

Program Overview

Program Long Title
Healthcare Informatics Certificate, M.B.A.

College/School	Department(s)
Business	Business

Catalog Full Description
The Tennessee Tech MBA is fully accredited by AACSB International-the highest attainable level of accreditation. The MBA degree may be obtained completely online or through a combined online/on-campus program of study.

The MBA program offers the option for 100% online completion, in as little as one year. The online learning environment is highly interactive and incorporates case discussions, teamwork, simulations, and other active-learning approaches .MBA courses make a strong connection between academic subjects and the practical issues facing managers in todays globally competitive, high tech, and analytically-focused business environment.

Certificate Tracks

For an additional 6-9 hours beyond the 30-hour MBA, interested students can add an industry-focused Graduate Certificate. There are four certificate options:
-Banking & Financial Services.
-Cyber Management & Analytics
-Healthcare Informatics
-Agribusiness

Each certificate requires 15 hours of directed electives. For more information on electives that comprise each certificate, see Industry-Focused Certificates on the MBA website. Students may apply the six hours of electives that are part of the MBA toward a certificate then add on the additional courses to complete the certificate.

MBA with a Certificate

- **Core Required Courses:** 21 hours

- **Certificate Courses*:** 15 hours

- **Total:** 36 hours

Admission Requirements

Admission Requirements

MBA Admission Requirements

Tennessee Techs AACSB-accredited Master of Business Administration (MBA) program maintains an admission process that considers applicants total academic and work-life achievements. Admission is open to qualified students with a bachelor's degree from a regionally accredited institution. No GMAT or GRE test score is required to apply. Applications are accepted for fall, spring, and summer semester admission. Application deadlines are listed on the University's Graduate Studies webpage.

To Apply: Visit the online application portal Apply Here, create an account, complete the application, and upload the following required documents:

A current resume, containing dates for all work experience and degrees received.

Official transcripts from all institutions where classes were taken and/or a degree received. Factors that may be considered in the admission decision are:

Undergraduate GPA*

Professional Work Experience

Graduate Degrees and Relevant Achievements

Professional work experience is post-undergraduate professional or military experience and should be described on the applicants resume.

Graduate degrees (e.g., MD, JD, MS, MA, PharmD, etc.) should be documented on the applicant's transcript(s) and denoted on the resume.

Timely application is important. Applicants are advised to submit their completed application and all required documentation early to be given full consideration for upcoming semesters. Visit the Graduate Admissions Calendar for a complete list of application deadlines.

Important to Note: Additional information is required by Graduate Studies for international students (see Graduate Studies website). A score of 550 (79 internet based) on the TOEFL or a band score of 6.0 on the IELTS is required for all students whose native language is other than English. Students must be proficient in the use of word processing, spreadsheet, and presentation software including the integration of all three of the above.

Academic Background

The Tennessee Tech MBA welcomes applicants from all academic majors. An undergraduate business degree or prerequisite business courses are not required to be admitted to the program. In lieu of prerequisite coursework, the program provides a self-paced orientation experience that allows students to start the MBA with foundational knowledge. Further details about orientation arrive to accepted students in their admissions information packet.

Standing Upon Admission

Students may be admitted in Full Standing or with Provisional Standing. Admission in Full gives students the greatest flexibility in taking MBA courses. Students admitted provisionally must take ECON 6050 within the first nine (9) hours of their program and maintain a 3.0 GPA on the first nine (9) hours of MBA core content completed. Upon meeting these requirements, the provisional student will be moved to Full Standing.

Quality of Work

An MBA student is required to maintain a cumulative grade average of at least B (3.0) on all courses taken for degree purposes, and must achieve a grade of B or better in BMGT 6950 . Students must repeat BMGT 6950 until a grade of B or better is obtained. Other courses may be repeated at the discretion of the student, and both the original grade and the grade for the repeat will be counted in the cumulative average. Any student receiving a D or an F in an MBA degree course shall be dismissed from the program.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

MBA with a Certificate

- **Core Required Courses:** 21 hours
- **Certificate Courses*:** 15 hours
- **Total:** 36 hours

*3 out of the 5 Certificate courses count as the 9 credits for the MBA approved electives.

As many as nine (9) semester hours may be transferred from other AACSB accredited schools. Credit will not be allowed for courses taken more than five (5) years prior to application to Tennessee Tech. Enrollment in required common courses requires the approval of the MBA Director. All core courses should be complete prior to any 6000-level work.

Note: Participants from the Graduate School of Banking at LSU or the Barrette School of Banking may, upon approval, substitute 6 hours of course credit towards the TTU MBA program.

Degree Requirements
Type
Completion Requirement

Core Required Courses

Complete ALL of the following Courses:
- ACCT6010 - Acct Info for Mgmt Decisions
- BMGT6200 - Organizational Leadership
- BMGT6950 - Business Strategy
- DS6220 - Management of Info Technology
- ECON6050 - Analytical Decision Making
- ECON6000 - Managerial Economics
- FIN6020 - Financial Management
- MKT6100 - Strategic Marketing

Total Hours for Core Courses: 24

Certificate Requirements

Complete ALL of the following Courses:
- DS6900 - Special Topics
- DS6570 - Cyber Security Mgmt.
- ECON6900 - Special Topics
- EMGT6210 - Project Management 1

- PRST6570 - Public Health

*PRST6570 Public Health is an MPS course. PRST6570 Public Health only counts as a certificate course and not an MBA elective.

Total Hours: 15

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Fast Track allows selected undergraduates to enroll for up to six (6) hours of graduate courses that will count at both the undergraduate and graduate level prior to formal admission to the MBA program. Once admitted to Fast Track, the student will be allowed to enroll in appropriate MBA courses in the senior year with the consent of the student's undergraduate advisor and the director of Graduate Business Programs. Participation does not change the requirements for the students undergraduate or MBA program.

Admission to Fast-Track

Minimum requirements for admission are:

90 hours of undergraduate work or senior standing and successful completion of any required prerequisites

Recommendation of a faculty member in the students major

Overall GPA of 3.2 and GPA of 3.2 in the students major

Program participants should consult with their future MBA advisor regarding appropriate graduate courses to take during their senior year.

All requirements for full admission to Graduate School must be met upon graduation.

Students who do not receive a grade of B or better in the fast-tracked course will be advised to withdraw from the Fast Track program and complete their B.S. degree as normal.

Fulfilling the above minimum requirements does not guarantee acceptance into the Master of Business Administration Fast Track program or the MBA program. Students who meet the above minimum requirements must consult with the College of Business for eligibility and acceptance.

HCI2-CER - Healthcare Informatics Certificate, M.P.S.

Program Overview

Program Long Title
Healthcare Informatics Certificate, M.P.S.

College/School	Department(s)
Interdisciplinary Studies	Business, Professional Studies

Catalog Full Description
Graduate Certificates Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Certificate requires 15 credit hours.

Admission Requirements

Admission Requirements

For Full Standing: The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale.

And, applicants must meet one of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE® General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio.

The portfolio is to include:

- a resume;

- a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

- two (2) sealed letters of professional reference.

Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognition's. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree. Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Graduate Certificates Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the

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student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Certificate requires 15 credit hours.

Certificate Course Requirements
Type
Completion Requirement

Certificate Requirements

Note, the student's advisor may allow for a course substitution in certificate requirements.

Complete ALL of the following Courses:
- PRST6530 - Healthcare Systems Economics
- PRST6540 - Health Informatics
- PRST6550 - Comp-Based Dec Modlng-Hlth Adm
- PRST6560 - Bio Sciences for Hlthcr Admin
- PRST6570 - Public Health

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the student's junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study.

The MPS Fast-track program applies to all MPS concentrations. Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program.

Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of "B" in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors whom meet the following admissions requirements:

• Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

• Overall undergraduate GPA of 3.0 or better;

• GPA of 3.25 in undergraduate major;

• Recommendation from the student's undergraduate advisor Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with

classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

MBA-MBA - Business Administration, M.B.A.

Program Overview

Program Long Title
Business Administration, M.B.A.

College/School
Business

Department(s)
Business

Catalog Full Description
The Tennessee Tech MBA is fully accredited by AACSB International-the highest attainable level of accreditation. The MBA degree may be obtained completely online or through a combined online/on-campus program of study.

The MBA program offers the option for 100% online completion, in as little as one year. The online learning environment is highly interactive and incorporates case discussions, teamwork, simulations, and other active-learning approaches. MBA courses make a strong connection between academic subjects and the practical issues facing managers in today's globally competitive, high tech, and analytically focused business environment.

MBA Program

MBA Program Website

The MBA program requires no prerequisites and is designed for college graduates regardless of major. In all organizations, career success and advancement require knowledge of finance, marketing, accounting, information technology, analytics, and management. In addition, the teamwork, leadership, technological and communication skills along with the networking opportunities provided throughout the MBA experience add value for full time students, working professionals, and their current employers.

The Tennessee Tech MBA is a 30-hour program. It consists of eight 3-hour core courses (24 credit hours) and two 3-hour general electives (6 credit hours). Full-time students can complete the program in one (1) calendar year. Part-time students take courses at their preferred pace, often taking only one or two courses per term. Students have up to six (6) years to complete the program.

The MBA core consists of eight 3-hour common courses:

- Economics 6000 (ECON6000) - Managerial Economics

- Accounting 6010 (ACCT6010) - Accounting Information for Management Decisions

- Finance 6020 (FIN6020) - Financial Management

- Economics 6050 (ECON6050) - Analytical Decision Making

- Marketing 6100 (MKT6100) - Strategic Marketing

- Business Management 6200 (BMGT6200) - Organizational Leadership

- Decision Sciences 6220 (DS6220) - Management of Information Technology

- Business Management 6950 (BMGT6950) - Business Strategy

The core courses provide technical and contextual knowledge as they develop students' managerial competence. In addition to assuring a working knowledge of primary business functions, these career-relevant courses provide opportunities to work individually and in teams through a variety of case studies, simulations, and research projects. The six (6) credit hours of electives are used to develop special competencies of interest to the student.

MBA degree requirements

- **Core Required Courses:** 24 hours

- **Advisor Approved Electives:** 6 hours

- **Total:** 30 hours

Certificate Tracks

With an additional 6-9 hours beyond the 30-hour MBA, interested students may add an industry-focused *Graduate Certificate*. There are four certificate options:
-Banking & Financial Services.
-Cyber Management & Analytics
-Healthcare Informatics
-Agribusiness
Each certificate requires 15 hours of directed electives. For more information on electives that comprise each certificate, see Industry-Focused Certificates on the MBA website. Students may apply the six hours of electives that are part of the MBA toward a certificate then add on the additional courses to complete the certificate.

Quality of Work

An MBA student is required to maintain a cumulative grade average of at least B (3.0) on all courses taken for degree purposes and must achieve a grade of B or better in BMGT 6950. Students must repeat BMGT 6950 until a grade of B or better is obtained. Other courses may be repeated at the discretion of the student, and both the original grade and the grade for the repeat will be counted in the cumulative average. Any student receiving a Dor an F in an MBA degree course shall be dismissed from the program.

Admission Requirements

Admission Requirements
Tennessee Tech's AACSB-accredited Master of Business Administration (MBA) program maintains an admission process that considers the applicants total academic and work-life achievements. Admission is open to qualified students with a bachelor's degree from a regionally accredited institution. No GMAT or GRE test score is required to apply. Applications are accepted for fall, spring, and summer semester admission. Application deadlines are listed on the University's Graduate Studies webpage.

To Apply: Visit the online application portal located on the College of Graduate Studies webpage, create an account, complete the application, and upload the following required documents:

1. A current resume, containing dates for all work experience and degrees received.

   2. Official transcripts from all institutions where classes were taken and/or a degree received. Factors that may be considered in the admission decision are:

3. Undergraduate GPA

4. Professional Work Experience

5. Graduate Degrees and Relevant Achievements:

- Professional work experience is post-undergraduate professional or military experience and should be described on the applicants resume.

- Graduate degrees (e.g., MD, JD, MS, MA, PharmD, etc.) should be documented on the applicant's transcript(s) and denoted on the resume.

- Timely application is important. Applicants are advised to submit their completed application and all required documentation early to be given full consideration for upcoming semesters. Visit the Graduate Admissions Calendar for a complete list of application deadlines.

- Important to note for international applicants: Additional information is required by Graduate Studies for international students (see Graduate Studies website). A score of 550 (79 internet based) on the TOEFL or a band score of 6.0 on the IELTS is required for all students whose native language is other than English. Students must be

proficient in the use of word processing, spreadsheet, and presentation software including the integration of all three of the above.

Academic Background

The Tennessee Tech MBA welcomes applicants from all academic majors. An undergraduate business degree or prerequisite business courses are not required to be admitted to the program.

Standing Upon Admission

Students may be admitted in Full Standing or with Provisional Standing. Admission in Full gives students the greatest flexibility in taking MBA courses. Students admitted provisionally must take ECON 6050 within the first nine (9) hours of their program and maintain a 3.0 GPA on the first nine (9) hours of MBA core content completed. Upon meeting these requirements, the provisional student will be moved to Full Standing.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

As many as nine (9) semester hours may be transferred from other AACSB accredited schools. Credit will not be allowed for courses taken more than five (5) years prior to application to Tennessee Tech. Enrollment in required common courses requires the approval of the MBA Director. All core courses should be complete prior to any 6000-level work.

MBA

- **Core Required Courses:** 24 hours
- **Advisor Approved Electives:** 6 hours
- **Total:** 30 hours

Degree Requirements
Type
Completion Requirement

Core Required Courses

Complete ALL of the following Courses:
- ACCT6010 - Acct Info for Mgmt Decisions
- BMGT6200 - Organizational Leadership
- BMGT6950 - Business Strategy
- DS6220 - Management of Info Technology
- ECON6050 - Analytical Decision Making
- ECON6000 - Managerial Economics
- FIN6020 - Financial Management
- MKT6100 - Strategic Marketing

Total Hours for Core Courses: 24

Elective Courses (6 hours)

Any 5000-level or 6000-level course offered by the College of Business (ACCT, BMGT, DS, ECON, FIN, LAW, MKT or MBA) may be accepted to fulfill the six hours of elective credit required of the MBA degree.

Additional Comments:

Total hours: 30

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

Fast Track allows pre-approved TTU undergraduates to enroll for up to six (6) hours of graduate courses that will count at both the undergraduate and graduate level prior to formal admission to the MBA program. Once admitted to Fast Track, the student will be allowed to enroll in appropriate MBA courses in the senior year with the consent of the student's undergraduate advisor and the director of Graduate Business Programs. Participation does not change the requirements for the students undergraduate or MBA program.

Admission to Fast-Track

Minimum requirements for admission are:

- 90 hours of undergraduate work or senior standing and successful completion of any required prerequisites
- Recommendation of a faculty member in the students major
- Overall GPA of 3.2 and GPA of 3.2 in the students major
- Program participants should consult with their future MBA advisor regarding appropriate graduate courses to take during their senior year.
- All requirements for full admission to Graduate School must be met upon graduation.
- Students who do not receive a grade of B or better in the fast-tracked course will be advised to withdraw from the Fast Track program and complete their B.S. degree as normal.

Fulfilling the above minimum requirements does not guarantee acceptance into the Master of Business Administration Fast Track program or the MBA program. Students who meet the above minimum requirements must consult with the College of Business for eligibility and acceptance.

Courses

ACCT6010 - Acct Info for Mgmt Decisions

General

College/School
Business

Course Title
Acct Info for Mgmt Decisions

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ACCT

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Analysis, interpretation, and use of accounting information by managers in directing the operations of organizations.

Requisites

Simple Requisites

> **Prerequisite:** None

ACCT6300 - Financial Accounting/Reporting

General

College/School
Business

Course Title
Financial Accounting/Reporting

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ACCT

Course Number
6300

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: ACCT 6010. A case study course for nonaccounting managers exploring the development and use of financial accounting information in reporting to management and external parties.

ACCT6320 - Management Control Systems

General

College/School
Business

Course Title
Management Control Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ACCT

Course Number
6320

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: FIN 6020. Case course on control systems aimed at encouraging managers to use resources effectively and efficiently in achieving the organization's objectives.

ACCT6360 - Tax Conseq of Bus Decisions

General

College/School
Business

Course Title
Tax Conseq of Bus Decisions

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ACCT

Course Number
6360

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: ACCT 6010. A case study course for nonaccounting managers developing an awareness of tax implications involved in common business decisions.

ACCT6900 - Special Topics

General

College/School
Business

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ACCT

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
A case course dealing with current topics in business.

Requisites

Simple Requisites

> **Prerequisites:** None

BA5400 - Econ & Legal Environ/Business

General

College/School
Business

Course Title
Econ & Legal Environ/Business

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BA

Course Number
5400

Credit Hours

Credit Hours Min
5

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

BA5500 - Accounting & Finance

General

College/School
Business

Course Title
Accounting & Finance

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BA

Course Number
5500

Credit Hours

Credit Hours Min
5

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

BA5600 - Mgmt, Mkt & Quantitative Meth

General

College/School
Business

Course Title
Mgmt, Mkt & Quantitative Meth

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BA

Course Number
5600

Credit Hours

Credit Hours Min
5

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

BMGT6200 - Organizational Leadership

General

College/School
Business

Course Title
Organizational Leadership

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
BMGT

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description
An examination of behavioral concepts required for effective leadership within business organizations.

Requisites

Simple Requisites

> **Prerequisites:** None

BMGT6400 - Employee Relations

General

College/School
Business

Course Title
Employee Relations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
6400

Credit Hours

Credit Hours Min
3

Course Description
A case course focusing on employee-employer relations issues faced by line managers.

Requisites

Simple Requisites

> **Prerequisites:** None

BMGT6510 - International Business

General

College/School
Business

Course Title
International Business

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
6510

Credit Hours

Credit Hours Min
3

Course Description
A case course designed to acquaint students with the economic, political, and cultural aspects of international business.

Requisites

Simple Requisites

> **Prerequisites:** None

BMGT6710 - Concepts/Mgmt of Technology

General

College/School
Business

Course Title
Concepts/Mgmt of Technology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
6710

Credit Hours

Credit Hours Min
3

Course Description
A case course in the concepts and implementation of management of technology.

Requisites

Simple Requisites

> **Prerequisites:** None

BMGT6800 - Strategic HR Staff

General

College/School
Business

Course Title
Strategic HR Staff

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
6800

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

BMGT6810 - Strategic Hum Res Perf Mgmt

General

College/School
Business

Course Title
Strategic Hum Res Perf Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
6810

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on the development, protection, and compensation of human resources within organizations. Specific topics will include performance appraisal and feedback, compensation, benefits, training, and health and safety. The strategic importance of these topics will be addressed by considering the legal, social, organization, and technological environments in which labor relations decisions are made.

Requisites

Simple Requisites

> **Prerequisites:** None

BMGT6820 - Prof Issues/Hum Res Mgmt

General

College/School
Business

Course Title
Prof Issues/Hum Res Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
6820

Credit Hours

Credit Hours Min
3

Course Description
This course will prepare students to function as competent human resource professionals and strategic business partners. Specific topics will include current issues in human resource management, interaction with organizational stakeholders, and human resource interventions.

Requisites

Simple Requisites

> **Prerequisites:** Permission of instructor.

BMGT6900 - Special Topics

General

College/School
Business

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
A case course dealing with current topics in business.

Requisites
Simple Requisites

> **Prerequisites:** None

BMGT6940 - International Management

General

College/School
Business

Course Title
International Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
6940

Credit Hours

Credit Hours Min
3

Course Description
Theory and practice of managing across borders. This course is about global management. It demonstrates how cultural factors influence behavior in the workplace and examines the skills needed to manage across national borders.

Requisites
Simple Requisites

> **Prerequisites:** None

BMGT6950 - Business Strategy

General

College/School
Business

Course Title
Business Strategy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
6950

Credit Hours

Credit Hours Min
3

Course Description
An integrative capstone course dealing with the formulation and implementation of corporate strategy.

Requisites
Simple Requisites

> **Prerequisite:** ACCT6010 Acct Info for Mgmt Decisions, FIN6020 Financial Management, DS6050 Analytical Decision Making/ECON6050 Analytical Decision Making, MKT6100 Strategic Marketing, BMGT6200 Organizational Leadership.

DS6050 - Analytical Decision Making

General

College/School
Business

Course Title
Analytical Decision Making

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
6050

Credit Hours

Credit Hours Min
3

Course Description
Analytical decision making for business operations, including statistics, quantitative methods, and other optimization and simulation models.

Requisites
Simple Requisites

> **Prerequisites:** None

DS6120 - Operations/Supply Chain Mgmt

General

College/School
Business

Course Title
Operations/Supply Chain Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
6120

Credit Hours

Credit Hours Min
3

Course Description
A case study course about management decisions on topics relating to design, control, and improvement of operations management systems and processes within the enterprise and in the supply chain.

Requisites
Simple Requisites

> **Prerequisites:** None

DS6220 - Management of Info Technology

General

College/School
Business

Course Title
Management of Info Technology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
DS

Course Number
6220

Credit Hours

Credit Hours Min
3

Course Description
Concepts of current components of information technology and their management as it relates to the support of the strategic business plan

Requisites

Simple Requisites

Prerequisites: None

DS6430 - Managing Quality

General

College/School
Business

Course Title
Managing Quality

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
6430

Credit Hours

Credit Hours Min
3

Course Description
A case course on the total quality approach to management, examining theories and tools for measuring, developing, maintaining, and improving organizational quality.

Requisites

Simple Requisites

Prerequisites: None

DS6530 - Advanced Data Analytics

General

College/School
Business

Course Title
Advanced Data Analytics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
6530

Credit Hours

Credit Hours Min
3

Course Description
An introduction to expert systems, decision support systems, and executive information systems as they are employed in business organizations.

Requisites

Simple Requisites

Prerequisites: None

DS6540 - Network Security

General

College/School
Business

Course Title
Network Security

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
DS

Course Number
6540

Credit Hours

Credit Hours Min
3

Course Description
Introduces students to the concepts of telecommunications, wide and local area networks, and other state-of-the-art communications technologies.

Requisites

Simple Requisites

Prerequisites: None

DS6550 - Database Management

General

College/School
Business

Course Title
Database Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
6550

Credit Hours

Credit Hours Min
3

Course Description
Introduces students to the concepts, terminology, tools, and techniques comprising the general area of data resources management.

Requisites
Simple Requisites

Prerequisites: None

DS6560 - Information Systems Dev

General
College/School
Business

Course Title
Information Systems Dev

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
6560

Credit Hours
Credit Hours Min
3

Course Description
Introduces students to state-of-the-art concepts, tools, and techniques necessary for successful analysis, design, and development of business systems.

Requisites
Simple Requisites

Prerequisite: DS 6540, 6550.

DS6900 - Special Topics

General
College/School
Business

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
6900

Credit Hours
Credit Hours Min
3

Course Description
A case course dealing with current topics in business.

Requisites
Simple Requisites

Prerequisites: None

ECON6050 - Analytical Decision Making

General
College/School
Business

Course Title
Analytical Decision Making

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECON

Course Number
6050

Credit Hours
Credit Hours Min
3

Course Description
Analytical decision making for business operations, including statistics, quantitative methods, and other optimization and simulation models.

Requisites
Simple Requisites

Prerequisites: None

ECON6900 - Special Topics

General
College/School
Business

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
6900

Credit Hours
Credit Hours Min
3

Course Description
A case course dealing with current topics in business.

Requisites
Simple Requisites

Prerequisites: None

ECON6920 - International Economics

General
College/School
Business

Course Title
International Economics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
6920

Credit Hours

Credit Hours Min
3

Course Description
A case study course emphasizing the global environment in which today's businesses function.

Requisites

Simple Requisites

> **Prerequisites:** None

FIN6020 - Financial Management

General

College/School
Business

Course Title
Financial Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6020

Credit Hours

Credit Hours Min
3

Course Description
A case study course surveying tools, techniques, and applications of business financial management.

FIN6350 - Small/Micro-Cap Portfolio Mgmt

General

College/School
Business

Course Title
Small/Micro-Cap Portfolio Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6350

Credit Hours

Credit Hours Min
3

Course Description
A case course rigorously applying investment theory to the management of a real portfolio of small and micro-capitalization common stocks.

Requisites

Simple Requisites

> **Prerequisite:** MBA 6020.

FIN6730 - Risk Management Modeling

General

College/School
Business

Course Title
Risk Management Modeling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6730

Credit Hours

Credit Hours Min
3

Course Description
This course will introduce students to mathematical and simulation modeling of risk. The first part of the course reviews the basic mathematics of optimization, and then develops conceptual models of preference and choice. These models are then used to model uncertainty, risk aversion, and theories of information. The second part of the course reviews statistics, introduces students to simulation, and then provides hands-on experience with simulation modeling.

Requisites

Simple Requisites

> **Prerequisites:** None

FIN6740 - Current Issues/Risk Mgmt & Ins

General

College/School
Business

Course Title
Current Issues/Risk Mgmt & Ins

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6740

Credit Hours

Credit Hours Min
3

Course Description
This course is an in-depth study of current topics in risk management and insurance. Topics will include, but are not limited to, insuring against and managing risks associated with natural and anthropogenic catastrophic events.

Requisites

Simple Requisites

> **Prerequisites:** Either FIN6710 Perspectives/Risk & Insurance, FIN 6720, or FIN6730 Risk Management Modeling.

FIN6900 - Special Topics

General

College/School
Business

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
A case course dealing with current topics in business.

FIN6910 - Multinational Finance

General

College/School
Business

Course Title
Multinational Finance

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6910

Credit Hours

Credit Hours Min
3

Course Description
International markets and instruments, global financing strategies, global capital budgeting, global working capital management, international tax planning.

Requisites

Simple Requisites

> **Prerequisites:** None

LAW6450 - Organizational Ethics

General

College/School
Business

Course Title
Organizational Ethics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LAW

Course Number
6450

Credit Hours

Credit Hours Min
3

Course Description
A case course examining ethical issues and systems for solving complex ethical problems in domestic and multinational organization.

Requisites

Simple Requisites

> **Prerequisites:** None

MBA6800 - Strategic Hum Res Staffing

General

College/School
Business

Course Title
Strategic Hum Res Staffing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBA

Course Number
6800

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on the recruitment, selection, and retention of human resources within organizations. Specific topics will include workforce planning, recruiting, selection, and organizational entry. The strategic importance of these topics will be addressed by considering the legal, social, organizational, and technological environments in which staffing decisions are made.

MBA6830 - Business Research

General

College/School
Business

Course Title
Business Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBA

Course Number
6830

Credit Hours

Credit Hours Min
2

Course Description
Focus on business research methods, effective report construction with emphasis on expository strategy, case analysis, and oral presentation.

MBA6840 - Field Research Project

General

College/School
Business

Course Title
Field Research Project

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBA

Course Number
6840

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Research and writing of a business case or research problem. Requires approval of MBA Studies Committee.

Requisites

Simple Requisites

> Prerequisites: None

MBA6980 - International Experience

General

College/School
Business

Course Title
International Experience

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MBA

Course Number
6980

Credit Hours

Credit Hours Min
3

Course Description
A faculty-led, short-term travel-study experience designed to develop knowledge and understanding of international business. Course includes a limited number of pre- and - post-trip class meetings. Topics covered may include host-country cultural differences; economic, political, and legal environment; and international business operations and strategies including marketing, finance, and service methods. Student must be enrolled in the MBA program. Course may be taken for credit only one time.

Requisites

Simple Requisites

> Prerequisite: None

MKT6100 - Strategic Marketing

General

College/School
Business

Course Title
Strategic Marketing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MKT

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
Strategic marketing issues and opportunities that inpact both the marketing process and marking program. Decisions will also consider environmental variables as well as the internal elements of an organization.

Requisites

Simple Requisites

> Prerequisites: None

MKT6500 - Advanced Marketing Analysis

General

College/School
Business

Course Title
Advanced Marketing Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MKT

Course Number
6500

Credit Hours

Credit Hours Min
3

Course Description
A case course including an intensive study of analysis of marketing information for marketing decisions.

Requisites

Simple Requisites

> Prerequisites: ACCT 6100.

MKT6510 - Services Marketing

General

College/School
Business

Course Title
Services Marketing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MKT

Course Number
6510

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on service organizations and services marketing issues to make students aware of the unique challenges involved in marketing and managing organizations in sectors such as finance, health care, entertainment, hospitality, professional services, retailing, education and transportation. Specific topics will

include learning and developing strategies for real life business cases to close potential service gaps such as customer, knowledge, service development/design, performance, and communication gaps that have negative impact on service performance and quality perceptions of customers about the service offering.

Requisites

Simple Requisites

> **Prerequisites:** None

MKT6630 - Entrepr & Small Bus Mgmt

General

College/School
Business

Course Title
Entrepr & Small Bus Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MKT

Course Number
6630

Credit Hours

Credit Hours Min
3

Course Description
A case course concentrating on the salient issues and management decisions covering entrepreneurship, the formation and management of new business ventures, and the complex managerial process of small business ownership.

Requisites

Simple Requisites

> **Prerequisites:** None

MKT6900 - Special Topics

General

College/School
Business

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MKT

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
A case course dealing with current topics in business.

Requisites

Simple Requisites

> **Prerequisites:** None

MKT6930 - International Marketing

General

College/School
Business

Course Title
International Marketing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MKT

Course Number
6930

Credit Hours

Credit Hours Min
3

Course Description
International markets, instruments, and global marketing strategies. This course will focus on the study of consumer behavior and buying cultures in all major regions of the world, and it relates this information to the creation of international marketing plans and strategies.

Requisites

Simple Requisites

> **Prerequisites:** None

Chemical Engineering Department

The Master of Science degree program in the Department of Chemical Engineering is available to individuals who have completed a BS degree in Chemical Engineering or a closely allied field. The MS program's technical content and research component prepares the individual to enter the profession with advanced engineering skills.

Graduate students pursuing the MS degree develop a program of study tailored to their objectives and complete a master's thesis. Research topics in the areas of electric field-based processes and systems, biological engineering processes and systems, molecularly-based engineered materials and interfacial systems, and computational mathematics are among those available.

The faculty of the Department of Chemical Engineering actively participates in the Doctor of Philosophy program in Engineering. Admission to the doctoral program is open to individuals with outstanding academic records and potential for original research. The departmental faculty and graduate students work cooperatively with the three State funded Centers of Excellence: two within the College of Engineering and one under the Office of Research & Economic Development.

The Department of Chemical Engineering offers a 13 credit-hour graduate certificate in the area of Cultural and Interdisciplinary Training at the Food-Energy-Water Nexus. This certificate program is designed to increase the cultural awareness and interdisciplinary training of holistic professionals working in a wide array of academic, governmental, social, and industrial settings. Students may earn this certificate as a part of an approved M.S. or Ph.D. program.

Programs

CHE-MS - Chemical Engineering, M.S.

Program Overview

Program Long Title
Chemical Engineering, M.S.

College/School	Department(s)
Engineering	Chemical Engineering

Catalog Full Description
The Master of Science degree program in the Department of Chemical Engineering is available to individuals who have completed a BS degree in Chemical Engineering or a closely allied field.

The MS program's technical content and research component prepares the individual to enter the profession with advanced engineering skills.

Graduate students pursuing the MS degree develop a program of study tailored to their objectives and complete a master's thesis. Research topics in the areas of electric field-based processes and systems, biological engineering processes and systems, molecularly based engineered materials and interfacial systems, and computational mathematics are among those available.

The departmental faculty and graduate students work cooperatively with the three State funded Centers of Excellence: two within the College of Engineering and one under the Office of Research & Economic Development.

Master's Degree Options

Degree Requirements (Thesis)

- Core Required Course: 12 hours
- **Advisor Approved Electives*:** 12 hours
- **Thesis Research Hours:** 6 hours
- **Total Requirements - Thesis Option:** 30 hours

Degree Requirements (Non-Thesis)

- **Core Required Course:** 13 hours
- **Advisor Approved Electives*:** 18 hours
- **Non-Thesis Project Course:** 3 hours
- **Total Requirements - Non-Thesis Option:** 34 hours

Admission Requirements

Admission Requirements

Departmental Admission Requirements

An applicant for admission to the College of Engineering is expected to have earned a BS degree from an approved program, or its equivalent.

Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department: *undergraduate GPA of at least 3.0 on a 4.0 scale,

*GRE® General Test (GRE) scores with Quantitative greater than or equal to 50%; Verbal greater than or equal to 33%; Analytical Writing greater than or equal to 33%. Students with BS degrees in related fields from TTU are not required to take the GRE.

*Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

*Availability of appropriate faculty to serve as research advisor(s).

*Participation in undergraduate research.

*Post-BS degree professional experience relevant to planned degree of study.

*Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission.

Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Note: The program is designed for graduates of approved undergraduate programs. Thus, a baccalaureate degree in chemical engineering is required for full standing. Applicants that have an undergraduate degree in a closely related field will be evaluated on a case-by-case basis and may be admitted to full standing upon completion of identified background courses.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Thesis Option

An MS-CHE program of study with thesis option requires a minimum of 30 semester hours of graduate-level coursework which are on the program of study approved by the student's graduate advisory committee, including a minimum of six (6) hours of thesis complete under the supervision of the graduate advisor. No more than nine (9) credit hours at the 5000-level are permitted. A minimum GPA of 3.0 is also required. Other departmental requirements may apply.

Degree Requirements

- **Core Required Courses**: 12 hours
- **Advisor Approved Electives:** 12 hours
- **Thesis Research Hours:** 6 hours
- **Total Requirements - Thesis Option:** 30 hours

Non-Thesis Option

An MS-CHE program of study with non-thesis option requires a minimum of 34 credit hours of graduate coursework, as specified in the student's approved Program of Study. The program of study shall include 30 semester hours of graduate-level coursework, three (3) credits of CHE 6970, and one (1) semester hour of CHE 6920-CHE Graduate Seminar. No more than nine (9) credit hours at the 5000-level are permitted. Other departmental requirements may apply.

Degree Requirements

- **Core Required Course:** 13 hours
- **Advisor Approved Electives:** 18 hours
- **Non-Thesis Project Course:** 3 hours
- **Total Requirements - Non-Thesis Option:** 34 hours

Thesis Option (30 hours)
Type
Completion Requirement

Thesis Core Requirement (12 hours)

Complete ALL of the following Courses:

- CHE6010 - Adv Chem Engr Thermodynamics
- CHE6140 - Physics of Transport
  OR ME6040 - Intermediate Fluid Mechanics
- CHE6210 - Advanced Kinetics
- MATH5510 - Adv Math for Engineers

Thesis Advisor Approved Electives (12 hours)

12 credits hours of advisor approved electives must be completed. Selection of advisor approved electives will be made in consultation with the student's advisory committee and /or the graduate coordinator. Courses may include, but are not limited to, other relevant engineering disciplines such as CEE, CSC, ECE, EMGT, ENGR, or ME or outside of engineering such as BIOL, CHEM, ESS, EVS, GEOG, GEOL, or MATH.

Thesis Research Requirement (6 hours)

6 hours of CHE6990 Research & Thesis Research and Thesis. The required thesis should document the student's research to the satisfaction of both the student's graduate advisory committee and the Graduate School. The student must also successfully defend the thesis before the graduate advisory committee.

Additional Comments:
Total Degree Hours: 30

Non-Thesis Option (34 hours)
Type
Completion Requirement

Non-Thesis Core Requirement (13 hours)

Complete ALL of the following Courses:
- CHE6010 - Adv Chem Engr Thermodynamics
- CHE6140 - Physics of Transport
  OR ME6040 - Intermediate Fluid Mechanics
- CHE6210 - Advanced Kinetics
- CHE6920 - Chem Engr Grad Seminar
- MATH5510 - Adv Math for Engineers

Non-Thesis Advisor Approved Electives (30 hours)

18 hours of advisor approved electives must be completed. Selection of advisor approved electives will be made in consultation with the student's advisory committee and /or the graduate coordinator. Courses may include, but are not limited to, other relevant engineering disciplines such as CEE, CSC, ECE, EMGT, ENGR, or ME or outside of engineering such as BIOL, CHEM, ESS, EVS, GEOG, GEOL, or MATH.

Non-Thesis Project Requirement (3 hours)

Non thesis MS-CHE degree-seeking students, as part of the CHE6970 Non-Thesis Design Project project course, will maintain and submit a project binder and present details regarding the project to reflect comprehensive knowledge gained throughout the student's program of study.

Additional Comments:
Total Degree Hours: 34

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Chemical Engineering Fast-track Master of Science (MS) program is designed to enable Tennessee Technological University ChE undergraduates to take up to six (6) hours of graduate coursework during the students junior/senior year which can be used to satisfy both undergraduate and graduate degree requirements. ChE Fast-track MS students receiving their bachelor's degrees at the end of the Spring semester will be expected to complete the MS by the end of the summer term of the following year.

The minimum requirements for acceptance into the Fast-track program are:

Be enrolled as an undergraduate ChE student at TTU with at least Junior standing

- Have at least an overall GPA of 3.25 and have at least a 3.25 GPA in ChE

- The student must earn a minimum grade of B in the graduate courses in order to apply them to their M.S. program of study and to continue in the Fast Track program. Students who do not succeed in their first graduate course during their senior year (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

- In addition to the requirements for admission to the ChE Fast-track MS program, all requirements for admission to the ChE graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The departments graduate committee will review the application and make a decision for approval.

Participation in the ChE Fast-track MS program does not change the requirements for either the undergraduate or graduate degree. All students in the MS program take 30 credit hours: 24 hours of coursework and 6 hours of research and thesis.

ENGR-DCHE - Engineering, Chemical Engineering Concentration, Ph.D.

Program Overview

Program Long Title
Engineering, Chemical Engineering Concentration, Ph.D.

College/School	Department(s)
Engineering	Chemical Engineering

Catalog Full Description
The faculty of the Department of Chemical Engineering actively participates in the Doctor of Philosophy program in Engineering. Admission to the doctoral program is open to individuals with outstanding academic records and potential for original research. The departmental faculty and graduate students work cooperatively with the three State funded Centers of Excellence: two within the College of Engineering and one under the Office of Research & Economic Development.

Admission Requirements

Admission Requirements
The basic admission standards for the Ph.D. program are the same as for the Master of Science in Engineering (see requirement list below), in addition, an applicant is expected to have completed an MS degree in an academic area appropriate to the proposed area of study and to have earned an MS GPA of at least 3.5 on a 4.0 scale.

Though the general requirement for admission to the Ph.D. program is a master's degree in an appropriate discipline, students with a bachelor's degree may be admitted to the Ph.D. program directly on exceptional basis, provided the applicant

has a record of excellent academic performance in an appropriate engineering program undergraduate program. The applicant's test scores, personal recommendations, and relevant work experience must indicate a high potential for success in doctoral studies and research. In addition, factors such as appropriateness of the applicant's research objectives to the research interests of the program faculty, availability of faculty to supervise the applicant's research, and prior research accomplishments of the applicant will also influence the admission decision.

Fulfilling the minimum requirement does not guarantee admission; an applicant who does not meet the above minimum, but appears to have reasonable potential for success as a Ph.D. student, may be admitted to provisional standing. His/her status may be changed to full standing after satisfying requirements specified by the Associate Dean of Engineering for Graduate Studies and Research, in consultation with the appropriate departmental chairperson, at the time of admission.

If admitted in provisional standing at either the MS or Ph.D. level, the student must remove all deficiencies and apply for reclassification to full standing prior to the completion of 15 graduate hours.

Sometimes a master's-level student takes more graduate-level courses than are required for the degree because the student is expecting to continue on to the Ph.D. program and hopes to use the extra courses to satisfy the Ph.D. coursework requirement. When this is the case, the student can request when registering for the course(s) that the course(s) be "banked" for the Ph.D. program. If the student lacks no more than 12 semester hours on the master's degree, he/she may accumulate a maximum of nine (9) semester hours which may be applied toward the Ph.D. When this is the case, the student's advisory committee must initiate approval via memo with consensus of the departmental chairperson, dean of the college, and the Associate Dean of Graduate Studies. Banked courses then show up on the student's transcript as courses taken for the Ph.D. rather than being shown as a part of his/her M.S. program. Banking course does not guarantee admission to the Ph.D. program, or, if admitted, that the student's Ph.D. advisory committee will approve the course as part of the student's Ph.D. program of study.

MS Engineering Program Admission Requirements

An applicant for admission to any of the MS programs offered by the departments of the College of Engineering is expected to have earned a BS degree from an approved program, or its equivalent. Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department:

- undergraduate GPA of at least 3.0 on a 4.0 scale,

- GRE® General Test (GRE) scores with Quantitative greater than or equal to 150 (50%); Verbal greater than or equal to 147 (33%); Analytical Writing greater than or equal to 3.5 (33%). Students with BS degrees in related fields from Tennessee Tech are not required to take the GRE.

- Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

- Availability of appropriate faculty to serve as research advisor(s).

- Participation in undergraduate research.

- Post-BS degree professional experience relevant to planned degree of study.

- Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

- International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission. Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

The Ph.D. is a research degree. The minimum requirements for a Ph.D. degree in the College of Engineering stated below are the same for all departments. Each department may include additional degree requirements for students pursuing a concentration in that department.

Students Admitted with a Master's Degree

- Advisor Approved Coursework (6 credit hours must be 7000 level courses)*: 18 hours

- Concentration Coursework*: 6 hours

- Research and Dissertation (7990 COURSE): 24 hours

- Total Degree Requirement: 48 hours

1. A minimum of 48 credits of course work and doctoral research and dissertation as follows:

A. A minimum of eighteen (18) credit hours of course work beyond the master's degree, including six (6) credit hours of 7000-level courses acceptable to the student's advisory committee. Additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department. No 5000-level courses are to be used to meet the minimum requirements of course work.

B. A minimum of twenty four (24) credit hours of doctoral research and dissertation built upon the student's course of study and making a significant contribution to the state of knowledge or to the art of the engineering profession, is required; not more than nine (9) credit hours may be earned in a particular semester.

2. Residence of four (4) semesters beyond the master's degree, with at least two (2) semesters in continuous residence, is required. All requirements, including the dissertation, must be completed within a period of eight (8) consecutive years.

3. Maintenance of a minimum quality point average of 3.0 and adherence to the general regulations of the College of Graduate Studies are expected. All students in the program must follow a plan of study and research developed in conjunction with an advisory committee, satisfactorily complete a comprehensive examination, achieve candidacy, and satisfactorily defend their dissertation.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Degree Program

- Advisor Approved Coursework (minimum 6 credit hours of 7000-level courses) (maximum 9 credit hours of 5000-level courses)*: 42 hours

- Concentration Coursework*: 6 hours

- Research and Dissertation (7990 COURSE): 24 hours

- Total Degree Requirements: 72 hours

A student admitted with a bachelor's degree on exceptional basis must successfully complete a qualifying examination based mostly on undergraduate materials before the end of the second semester of enrollment. Students with a Bachelor of Science (B.S.) degree from ABET-accredited programs are exempted from this examination. Other students without such a degree, or M.S. students without an ABET-accredited B.S. degree, switching to direct Ph.D. will have to take a qualifying exam through a formal process established by the department. The process should include at a minimum an examination of the student's fundamental knowledge managed by the Graduate Committee of the department.

Based on the student's performance on the qualifying examination, the student may be (i) permitted to continue in the doctoral program, or (ii) advised to transfer to an M.S. degree program in an appropriate discipline in the college, or (iii) recommended for termination from the graduate program of the college. If permitted to continue in the doctoral program, the student, as described elsewhere in the catalog, will select a research advisor, form an advisory committee, and submit a program of study satisfying the following requirements.

The program of study should have a minimum total of seventy two (72) credit hours of academic work, consisting of course work and dissertation work, beyond baccalaureate work, subject to the following:

• The program of study should include a minimum of forty two (42) credit hours of appropriate graduate level course work consisting of a minimum of six (6) credit hours at the 7000-level and a maximum of nine (9) credit hours at the 5000-level, acceptable to the student's advisory committee.

• It should also include an additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department.

• A minimum of 24 credit hours of doctoral research and dissertation, built upon the student's course of study and making significant contribution to the state of knowledge and the art of the engineering profession, is required; no more than nine (9) credit hours may be earned in a particular semester.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Program Earning a Non-thesis M.S. en route

All conditions stated above for the students admitted directly into the Ph.D. program apply. In addition:

Nine (9) credit hours will count toward the non-thesis M.S. degree and toward the Ph.D. degree. If the departmental non-thesis M.S. requires a three (3) credit hour non-thesis project course, those three (3) credit hours can be counted as three (3) credit hours of dissertation research toward the Ph.D. degree. Six (6) credit hours of M.S. coursework can be counted toward the Ph.D. coursework. If no project course is required for the non-thesis M.S., then nine (9) credit hours of M.S. coursework can be counted toward the Ph.D.. (Mechanical Engineering students may apply three (3) credit hours of either ME 6990 Research and Thesis or ME 7990 Research and Dissertation to satisfy the independent learning requirment for the non thesis M.S. program.)

* Advisor Approved Electives and Concentration Coursework:

Selection of appropriate courses will be made in consultation with the student's advisory committee and/or the graduate coordinator. Courses for each concentration area and Advisor Approved Electives will include:

• Chemical Engineering (CHE 6000, CHE 7000 level courses)

• Computer Science (CSC 6000, CSC 7000 level courses)

• Civil Engineering (CEE 6000, CEE 7000 level courses)

• Electrical and Computer Engineering (ECE 6000, ECE 7000 level courses)

• Mechanical Engineering (ME 6000, ME 7000 level courses)

Limitation on Graduate Assistantships

It is expected that a full-time, post master's Ph.D. Engineering student should be able to achieve candidacy within the first three (3) calendar years after enrollment, and a direct admit Ph.D. Engineering student after four (4) calendar years. If candidacy is not achieved within the aforementioned periods, a student must request and receive approval for an extension of assistantship following the College of Engineering's established procedure. An extension may be granted by the Associate Dean of Engineering for Research and Innovation. This limitation is regardless of student funding or the source of support for the student.

Students Admitted with a Master's Degree
Type
Completion Requirement

Courses as defined by the student's committee

• Advisor Approved Coursework (minimum 6 credit hours of 7000-level courses) (maximum 9 credit hours of 5000-level courses)*: 42 hours

• Concentration Coursework*: 6 hours

• Research and Dissertation (7990 COURSE): 24 hours

• Total Degree Requirements: 72 hours

Complete ALL of the following Requirement Sets:

No selection provided

Additional Comments:

Direct Admit from BS to PhD
Type
Completion Requirement

Program of Study is defined by committee

Advisor Approved Coursework (maximum 9 credit hours of 5000 level courses): 42 hours
Concentration Coursework: 6 hours
Research and Dissertation (7990 course): 24 hours
Total Degree Requirements: 72 hours

Complete ALL of the following Courses:

No selection provided

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

FEW-CER - Cultural and Interdisciplinary Training at the Food-Energy-Water (FEW) Nexus Certificate

Program Overview

Program Long Title
Cultural and Interdisciplinary Training at the Food-Energy-Water (FEW) Nexus Certificate

College/School
Engineering

Department(s)
Chemical Engineering

Catalog Full Description
The Department of Chemical Engineering offers a 13 credit-hour graduate certificate in the area of Cultural and Interdisciplinary Training at the Food-Energy-Water Nexus. This certificate program is designed to increase the cultural awareness and interdisciplinary training of holistic professionals working in a wide array of academic, governmental, social, and industrial settings. Students may earn this certificate as a part of an approved M.S. or Ph.D. program.

Admission Requirements

Admission Requirements

Students must be accepted into an approved STEM M.S. or Ph.D. program, such as:

- Biology, M.S.
- Chemical Engineering, M.S. or Ph.D.
- Chemistry, M.S.
- Civil and Environmental Engineering, M.S. or Ph.D.
- Community Health and Nutrition, M.S.
- Electrical and Computer Engineering, M.S. or Ph.D.
- Environmental Sciences - Agriculture, Ph.D.
- Environmental Sciences - Biology, Ph.D.
- Environmental Sciences - Chemistry, Ph.D.
- Environmental Sciences - Geology, Ph.D.
- Environmental Sciences - Integrated Research, Ph.D.
- Mechanical Engineering, M.S. or Ph.D.
- Professional Science Master's (PSM)

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> ### Students must complete the following required coursework:
>
> - CHE6100 Intro to Food, Energy, Water Intro to FEW: Problem Identification, Teamwork, and Prototyping (1 Credit Hour)
> - SOC6100 Interdisc Cultural Training or HIST6100 Interdisc Cultural Training Cultural Training (3 Credit Hours)

Courses

CHE5050 - Transfer Science III: Diffusion and Mass Transfer

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Trans Sci III: Diff/Mass Trans	Doctoral, Graduate, Undergraduate
Course Subject Code	**Course Number**
CHE	5050

Credit Hours

Credit Hours Min
3

Course Description

Mathematical description of diffusion and diffusive-convective mass transfer. Mass transfer with reaction. Dimensional analysis. Mass transfer in one and two-dimensions in Cartesian, cylindrical, and spherical coordinates. Integrated labs demonstrating the concept of diffusion, computational experiments, and demonstrating the effect of geometry, flow, etc., on mass transfer.

- CHE6130 FEW Nexus Challenge FEW Nexus Challenge (3 Credit Hours)
- CHE6150 Interdisc Integration/Techniq. Interdisciplinary Integration and Techniques (3 Credit Hours)

And complete of one (1) of the following directed electives:

- CHE6950 Dir. Studies/Immer. Experience Directed Studies – Immersion Experience (3 Credit Hours)*
- CHE6960 FEW Nexus Capstone FEW Nexus Capstone (3 Credit Hours)
- Food at the FEW Nexus (3 Credit Hours)
- Water at the FEW Nexus (3 Credit Hours)
- Energy at the FEW Nexus (3 Credit Hours)
- EVSS6010 Environmental Social Policy Environmental Policy Analysis (3 Credit Hours)

*3 elective credit hours of the 13 required may be certified by completing the equivalent of 45 clock hours (1 credit hour = 15 clock hours) of immersion and service learning experiences within NRT partnering communities (rural, Appalachian, or indigenous). These hours must be pre-approved by the TTU Office of Service Learning who will track hours accumulated and maintain records of completion. Students will be able to count these hours in the certificate by enrolling in a Service Learning course (zero credits; no cost) in the semester in which the hours are completed.

Total Credit Hours for Certificate: 13

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

Requisites

Simple Requisites

> **Prerequisites:** CHE3010 Thermodynamics-Chem Processes, CHE3050 TS I: Cond., Rad., Diff, CHE3051 TS 1: Cond., Rad., Diff. Lab, CHE3510 Sep & Solutions Thermo 2, CHE3511 Sep & Solution Thermo 2 Lab, CHE3550 TS II: Fluid Mechanics, CHE3551 TS II: Fluid Mechanics Lab.
>
> **Co-requisites:** CHE4051 TS III: Mass Transfer Lab or CHE5051 TS III: Diff/Mass Transfer Lab.

CHE5051 - Transfer Science III: Diffusion and Mass Transfer Lab

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
TS III: Diff/Mass Transfer Lab	Doctoral, Graduate, Undergraduate
Course Subject Code	**Course Number**
CHE	5051

Credit Hours

Credit Hours Min
1

Course Description
Mathematical description of diffusion and diffusive-convective mass transfer. Mass transfer with reaction. Dimensional analysis. Mass transfer in one and two-dimensions in Cartesian, cylindrical, and spherical coordinates. Integrated labs demonstrating the concept of diffusion, computational experiments, and demonstrating the effect of geometry, flow, etc., on mass transfer.

Requisites

Simple Requisites

> **Corequisite:** CHE4050 TS III: Mass Transfer or CHE5050 Trans Sci III: Diff/Mass Trans.

CHE5060 - Chemical Reaction Engineering

General

College/School
Engineering

Course Title
Chemical Reaction Engineering

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
5060

Credit Hours

Credit Hours Min
3

Course Description
Chemical reaction kinetics and chemical reactor design. There is an emphasis on homogeneous reactions and ideal and non-ideal reactors. Introduction to laboratory experiments to illustrate typical situations found in chemical reacting systems: kinetics parameter determination, resident time visualization, and introduction to different types of reactors, (i.e. batch , tubular and gradient-less).

Requisites

Simple Requisites

> **Prerequisites:** CHE3010 Thermodynamics-Chem Processes, CHE3050 TS I: Cond., Rad., Diff, CHE3051 TS 1: Cond., Rad., Diff. Lab, CHE3510 Sep & Solutions Thermo 2, CHE3511 Sep & Solution Thermo 2 Lab, CHE3550 TS II: Fluid Mechanics, CHE3551 TS II: Fluid Mechanics Lab.
>
> **Corequisites:** CHE4061 Chemical Reaction Engr Lab or CHE5061 Chemical Reaction Engr Lab.

CHE5061 - Chemical Reaction Engineering Lab

General

College/School
Engineering

Course Title
Chemical Reaction Engr Lab

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
5061

Credit Hours

Credit Hours Min
1

Course Description
Chemical reaction kinetics and chemical reactor design. There is an emphasis on homogeneous reactions and ideal and non-ideal reactors. Introduction to laboratory experiments to illustrate typical situations found in chemical reacting systems: kinetics parameter determination, resident time visualization, and introduction to different types of reactors, (i.e., batch, tubular and gradient-less).

Requisites

Simple Requisites

> **Corequisite:** CHE5060 Chemical Reaction Engineering.

CHE5110 - Intro-Comp Heat, Mass/Mo Trans

General

College/School
Engineering

Course Title
Intro-Comp Heat, Mass/Mo Trans

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
5110

Credit Hours

Credit Hours Min
3

Course Description
General equations describing heat, mass, and momentum transport. Similarities and differences in transport properties are studied. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CHE3110 Transfer Science I.

CHE5130 - Transfer Science III

General

College/School
Engineering

Course Title
Transfer Science III

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
5130

Credit Hours

Credit Hours Min
3

Course Description
Principles, design, and operation of equipment for separation and purification of materials. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisite: CHE2010 Intro to Chem Engr Analysis.

CHE5131 - Trans Sci III: D&D Mass Trans

General

College/School
Engineering

Course Title
Trans Sci III: D&D Mass Trans

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
5131

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Course description not available.

Requisites
Simple Requisites

Prerequisites: CHE 3010, CHE 3021, CHE 3111 and CHE 3121.

CHE5210 - Chemical Reaction Engr

General

College/School
Engineering

Course Title
Chemical Reaction Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
5210

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Chemical reaction kinetics and chemical reactor design. Emphasis on homogeneous reactions. Ideal and nonideal reactors. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisite: CHE3020 Chem Engr Thermodynamics II or consent of instructor. CHE 3010, CHE 3021, CHE 3111, and CHE 3121.

CHE5300 - Intro to Air Pollution

General

College/School
Engineering

Course Title
Intro to Air Pollution

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description
Problems of air pollution and their solutions. Analysis and design of devices for the control of air pollutants from chemical processes. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisite: CHE3110 Transfer Science I. CHE 4131 (CHE5131 Trans Sci III: D&D Mass Trans).

CHE5330 - Polymer Engineering

General

College/School
Engineering

Course Title
Polymer Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
5330

Credit Hours

Credit Hours Min
3

Course Description
Polymerization kinetics for key commercial polymers, structure/property relationships and characterization of key polymers, processing fundamentals, fundamentals of formulation of polymer composites and blends (nanocomposites, biopolymers.)

Requisites

Simple Requisites

> **Prerequisite:** CHEM 3020. CHEM 3010.

CHE5410 - Process Design I

General

College/School
Engineering

Course Title
Process Design I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
5410

Credit Hours

Credit Hours Min
3

Course Description
Synthesis, design, economics, and optimization of chemical process systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** Graduate standing in CHE and/or consent of instructor.

CHE5420 - Process Design II

General

College/School
Engineering

Course Title
Process Design II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
5420

Credit Hours

Credit Hours Min
3

Course Description
Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** CHE5410 Process Design I and graduate standing in CHE and/or consent of instructor.

CHE5470 - Intdis Stud/Cermc Mtrl Process

General

College/School
Engineering

Course Title
Intdis Stud/Cermc Mtrl Process

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
5470

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Materials processing; surface phenomena; particle size reduction; forming; consolidation by sintering and reaction processes; application of fracture mechanics; failure models; research on selected fabrication and synthesis routes for metals, ceramics and their composites; mechanical, chemical and morphological characterization theory and practice; materials design project using several onsite laboratories. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** graduate standing in engineering or science. Senior Standing in Engineering, Mathematics, Chemistry (Calculus-based), or Physics.

CHE5510 - Applied Math in Chem Engr

General

College/School
Engineering

Course Title
Applied Math in Chem Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
5510

Credit Hours

Credit Hours Min
3

Course Description
Applied numerical methods and the solution of differential equations, both analytically and numerically, in chemical engineering. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CHE3020 Chem Engr Thermodynamics II, CHE3120 Transfer Science II, and Math2910. CHE 3021, CHE 3121, MATH 2120 and Senior Standing.

CHE5660 - Biochemical Engineering

General

College/School
Engineering

Course Title
Biochemical Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
5660

Credit Hours

Credit Hours Min
3

Course Description
Applications of chemical engineering principles to the study of biochemical systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CHE 4210 (CHE5210 Chemical Reaction Engr) or consent of instructor. Senior Standing.

CHE5661 - Transport in Biochem/Biol Proc

General

College/School
Engineering

Course Title
Transport in Biochem/Biol Proc

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
5661

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: CHE 3111, CHE 3121, CHE 4131 (CHE5131 Trans Sci III: D&D Mass Trans), CHE 4210 (CHE5210 Chemical Reaction Engr).

CHE5730 - Chem Engr Operations

General

College/School
Engineering

Course Title
Chem Engr Operations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
5730

Credit Hours

Credit Hours Min
3

Course Description
Decision-making techniques as applied to management of chemical processing plants. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: senior or graduate standing.

CHE5911 - CHE Grad Sem/MS, BS/MS Fst Trk

General

College/School
Engineering

Course Title
CHE Grad Sem/MS, BS/MS Fst Trk

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
5911

Credit Hours

Credit Hours Min
1

Course Description
Research methodology, ethics, and preparing for graduate studies in Chemical Engineering.

Requisites

Simple Requisites

Prerequisite: Graduate standing in Chemical Engineering.

CHE5950 - Intro to MEMS

General

College/School
Engineering

Course Title
Intro to MEMS

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
5950

Credit Hours

Credit Hours Min
3

Course Description
Introduce the design, fabrication and performance of MEMS devices. Topics include bulk and surface micromachining, photolithography, sensors, actuation systems, optical MEMS, micro cantilever-based systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Senior standing in engineering or consent of instructor.

CHE6010 - Adv Chem Engr Thermodynamics

General

College/School
Engineering

Course Title
Adv Chem Engr Thermodynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Advanced thermodynamic concepts, especially phase and chemical equilibria, estimation and correlation of thermodynamic properties, and intermolecular forces

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

CHE6040 - Intermediate Fluid Mechanics

General

College/School
Engineering

Course Title
Intermediate Fluid Mechanics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6040

Credit Hours

Credit Hours Min
3

Course Description
Formulation of mass and momentum transfer equations; exact solutions of laminar parallel flows; similarity and approximate solutions; potential flow; laminar momentum boundary layers.

Requisites

Simple Requisites

Prerequisite: ME 3720.

CHE6060 - Electrochemical Power Sources

General

College/School
Engineering

Course Title
Electrochemical Power Sources

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6060

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
The lecture will start from the electrochemical thermodynamics and kinetics, with emphasis on electrochemical techniques, fundamental principles and technologies of batteries, fuel cells, and supercapacitors. A unique feature of the course is the fact that 20 percent of the time is spent in the laboratory using state of the art electrochemical instrumentation under the guidance of course instructor.

Requisites

Simple Requisites

Prerequisite: CHE 3010, ME 3210 or equivalent thermodynamics-related course.

CHE6100 - Intro to Food, Energy, Water

General

College/School
Engineering

Course Title
Intro to Food, Energy, Water

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6100

Credit Hours

Credit Hours Min
1

Course Description
Students will engage in problem identification at the FEW (Food-Energy-Water) nexus with guidelines to consider the sociology components, political and legal components, and environmental components at these intersections using the Renaissance Foundry Model. Concepts of sustainability and ethical design will be highlighted leveraging the Engineering for One Planet framework.

Requisites

Simple Requisites

> **Prerequisites:** None

CHE6110 - Comp Heat, Mass/Momentum Trans

General

College/School
Engineering

Course Title
Comp Heat, Mass/Momentum Trans

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6110

Credit Hours

Credit Hours Min
3

Course Description
An advanced study of fluid flow, heat transfer, and mass transfer.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CHE6120 - Comp Heat, Mass/Momentum Trans

General

College/School
Engineering

Course Title
Comp Heat, Mass/Momentum Trans

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6120

Credit Hours

Credit Hours Min
3

Course Description
An advanced study of fluid flow, heat transfer, and mass transfer.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CHE6130 - FEW Nexus Challenge

General

College/School
Engineering

Course Title
FEW Nexus Challenge

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6130

Credit Hours

Credit Hours Min
3

Course Description
Building on the Intro to FEW and Cultural Training courses, students will engage in problem identification at the FEW Nexus with guidelines to consider the sociology components, political and legal components, and environmental components at these intersections using the Renaissance Foundry Model. Concepts of sustainability and ethical design will be highlighted leveraging the Engineering for One Planet framework. Further, students will engage in both knowledge acquisition and knowledge transfer activities that will help build their collaborative, critical thinking, and innovation-driven learning skills to apply to the food-energy-water challenges identified in the course.

Requisites

Simple Requisites

> **Prerequisites:** None

CHE6140 - Physics of Transport

General

College/School
Engineering

Course Title
Physics of Transport

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
6140

Credit Hours

Credit Hours Min
3

Course Description

Course Description: Course is focused on learning fundamentals of conservation principles in chemical engineering applications. It reviews fundamentals of vector algebra and vector mechanics. The course introduces students to principles of conservation of momentum, total and species mass, and energy. Of particular interest, is the integral equation-based formulation of these principles and their scaling to the microscopic scale. Systems for both traditional chemical engineering applications and more recent ones including biotechnology and environmental areas are selected for illustrations.

Requisites

Simple Requisites

> **Prerequisites:** None

CHE6150 - Interdisciplinary Integration and Techniques

General

College/School
Engineering

Course Title
Interdisc Integration/Techniq.

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
6150

Credit Hours

Credit Hours Min
3

Course Description

The purpose of this course is to provide structure and guidance working across disciplines by emphasizing interdisciplinary collaboration in tandem with the concepts introduced in the introduction to Food-Energy-Water, Cultural Training, and FEW Nexus Challenge courses by having students leverage the Foundry, critical thinking, and cultural training skills as applied to directed research prototyping experiences in practical applications in industry.

Requisites

Simple Requisites

> **Prerequisites:** CHE6100 Intro to Food, Energy, Water, SOC6100 Interdisc Cultural Training OR HIST6100 Interdisc Cultural Training, and CHE6130 FEW Nexus Challenge, or consent of instructor.

CHE6210 - Advanced Kinetics

General

College/School
Engineering

Course Title
Advanced Kinetics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6210

Credit Hours

Credit Hours Min
3

Course Description

Study of complex chemical reaction systems, catalytic and non-catalytic reactions, homogeneous and heterogeneous systems, and heat effects.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CHE6410 - Adv Process Engr Design

General

College/School
Engineering

Course Title
Adv Process Engr Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6410

Credit Hours

Credit Hours Min
3

Course Description

Applications of thermodynamics, kinetics, transfer operations, and economics to optimum design of processes, equipment, and plants.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CHE6530 - Process Optimization

General

College/School
Engineering

Course Title
Process Optimization

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6530

Credit Hours

Credit Hours Min
3

Course Description

Application of the principles of optimization and related techniques to the problems of chemical processes.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CHE6540 - Process Dynamics

General

College/School
Engineering

Course Title
Process Dynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6540

Credit Hours

Credit Hours Min
3

Course Description
Continuation of Chemical Engineering 4540. Frequency response methods, nonlinear methods, process applications, and computer simulation.

Requisites

Simple Requisites

> **Prerequisite:** CHE 4540 or equivalent.

CHE6552 - Adv Special Topics ENEV

General

College/School
Engineering

Course Title
Adv Special Topics ENEV

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6552

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: MATH 2120. Minimum Grade of C. Special current topics in Chemical Engineering with engineering content in nuclear power, solar power, alternative energy storage or production, carbon sequestration, economics of energy infrastructure. This course will cover the regulation, economics, process safety and technical developments associated with power production with consideration of how greener forms of energy production raise issues associated with environmental engineering stewardship

CHE6810 - Special Topics/Chem Engr

General

College/School
Engineering

Course Title
Special Topics/Chem Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
6810

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Consent of instructor. Topics such as polymeric materials, biochemical engineering, pollution abatement, air and liquid filtration, energy conversion, processing in extreme conditions.

CHE6910 - Chem Engr Grad Seminar

General

College/School
Engineering

Course Title
Chem Engr Grad Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6910

Credit Hours

Credit Hours Min
1

Course Description
Current literature in Chemical Engineering and presentation of current or completed graduate research.

Requisites

Simple Requisites

> **Prerequisite:** Graduate standing in Chemical Engineering.

CHE6920 - Chem Engr Grad Seminar

General

College/School
Engineering

Course Title
Chem Engr Grad Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6920

Credit Hours

Credit Hours Min
1

Course Description
Current literature in Chemical Engineering and presentation of current or completed graduate research.

Requisites

Simple Requisites

> **Prerequisite:** Graduate standing in Chemical Engineering.

CHE6950 - Direct Studies - Immersion Experienc

General

College/School
Engineering

Course Title
Dir. Studies/Immer. Experience

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
CHE

Course Number
6950

Credit Hours

Credit Hours Min
3

Course Description
The purpose of this course is to build on concepts introduced in the Introduction to Food-Energy-Water, Cultural Training, and FEW Nexus Challenge courses by having students leverage the Foundry, critical thinking, and cultural training skills as applied to research immersion experiences.

Requisites

Simple Requisites

> Prerequisites: CHE6100 Intro to Food, Energy, Water, SOC6100 Interdisc Cultural Training OR HIST6100 Interdisc Cultural Training, and CHE6130 FEW Nexus Challenge , or consent of instructor.

CHE6960 - FEW Nexus Capstone

General

College/School
Engineering

Course Title
FEW Nexus Capstone

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
CHE

Course Number
6960

Credit Hours

Credit Hours Min
3

Course Description
Building on scaffolding from prior courses, the full Renaissance Foundry Model will be leveraged to have students identify challenges related to stakeholder communities and areas of emphasis in their programs of study.

Requisites

Simple Requisites

> **Prerequisites:** CHE6100 Intro to Food, Energy, Water, SOC6100 Interdisc Cultural Training or HIST6100 Interdisc Cultural Training, and CHE6130 FEW Nexus Challenge, or consent of instructor.

CHE6970 - Non-Thesis Design Project

General

College/School
Engineering

Course Title
Non-Thesis Design Project

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6970

Credit Hours

Credit Hours Min
3

Course Description
Scientific investigation into a topic in chemical engineering

Requisites

Simple Requisites

> **Prerequisites:** Admission to CHE MS degree program (non-thesis option) or admission to Direct Admit PhD program.

CHE6990 - Research & Thesis

General

College/School
Engineering

Course Title
Research & Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
6990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

CHE7030 - Molecular Thermodynamics

General

College/School
Engineering

Course Title
Molecular Thermodynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7030

Credit Hours

Credit Hours Min
3

Course Description

Prediction and correlation of thermodynamic properties used in vapor-liquid and liquid-liquid phase equilibrium calculations. Monte-Carlo and Molecular Dynamics Simulation techniques.

Requisites

Simple Requisites

> **Prerequisites:** None

CHE7040 - Thermodynamics

General

College/School
Engineering

Course Title
Thermodynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7040

Credit Hours

Credit Hours Min
3

Course Description

Methods for presenting thermodynamic data of hydrocarbons; P-V-T correlations, K and alpha values, fugacity and activity coefficients.

Requisites

Simple Requisites

> **Prerequisites:** None

CHE7140 - Separation Processes

General

College/School
Engineering

Course Title
Separation Processes

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7140

Credit Hours

Credit Hours Min
3

Course Description

Separation processes including multicomponent distillation, azeotropic and extractive distillation, gas absorption, and liquid-liquid extraction.

Requisites

Simple Requisites

> **Prerequisites:** None

CHE7220 - Chem Reactors-Heterog Systems

General

College/School
Engineering

Course Title
Chem Reactors-Heterog Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7220

Credit Hours

Credit Hours Min
3

Course Description

Design of reactors for heterogeneous systems.

Requisites

Simple Requisites

> **Prerequisites:** None

CHE7230 - Adv Nanocomposite Engr Tech

General

College/School
Engineering

Course Title
Adv Nanocomposite Engr Tech

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
7230

Credit Hours

Credit Hours Min
3

Course Description

Nanoscience requires application of both continuum mechanics and quantum mechanics to aid materials design. The course will reflect interdisciplinary studies in composite engineering and chemistry to illuminate advanced principles of mechanics, characterization and thermodynamics in the emerging field of nanoscience/surface science. Modeling methodologies, scaling and modern processing techniques are taught.

Requisites

Simple Requisites

> **Prerequisites:** ChE 6010.

CHE7240 - Adv/Fuel Cell Electrocatalysis

General

College/School
Engineering

Course Title
Adv/Fuel Cell Electrocatalysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
7240

Credit Hours

Credit Hours Min
3

Course Description
This course probes the state-of-the-art advances in electrocatalyst development and catalyst layer engineering for a variety of fuel feeds and fuel cell types. Nano-catalyst structure is a central issue. Characterization methodologies, redox reaction mechanisms and durability limitations will be covered.

Requisites

Simple Requisites

> **Prerequisite:** CHE6010 Adv Chem Engr Thermodynamics.

CHE7410 - Adv Top/Comp Molecular Dsgn

General

College/School
Engineering

Course Title
Adv Top/Comp Molecular Dsgn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7410

Credit Hours

Credit Hours Min
3

Course Description
Strategies, techniques and applications associated with recent advances in the inverse design process of computational molecular design.

Requisites

Simple Requisites

> **Prerequisite:** CHE6010 Adv Chem Engr Thermodynamics and consent of instructor.

CHE7420 - Adv Top/ Multi-Scale Sim/Matr

General

College/School
Engineering

Course Title
Adv Top/ Multi-Scale Sim/Matr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7420

Credit Hours

Credit Hours Min
3

Course Description
This course will develop the concept of multi-scale analysis and mathematical approaches and illustrate them for a number of applications.

Requisites

Simple Requisites

> **Prerequisite:** CHE5510 Applied Math in Chem Engr, CHE6110 Comp Heat, Mass/Momentum Trans or equivalents with consent of instructor.

CHE7430 - Comp Modeling/Electochem Sys

General

College/School
Engineering

Course Title
Comp Modeling/Electochem Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7430

Credit Hours

Credit Hours Min
3

Course Description
Modeling methodologies, recent techniques and tools required to simulat electrochemical systems and in particular batteries.

Requisites

Simple Requisites

> **Prerequisite:** CHE6110 Comp Heat, Mass/Momentum Trans or similar with consent of the instructor.

CHE7440 - Electrokinetic-Bsd Separations

General

College/School
Engineering

Course Title
Electrokinetic-Bsd Separations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7440

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on the learning of key fundamental principles related to Electrokinetics-Hydrodynamics (EKHD) with selected applications to bio-separation including electrophoresis, electro-field flow fractionation, and electrokinetic-based separations.

Requisites

Simple Requisites

> **Prerequisite:** CHE6110 Comp Heat, Mass/Momentum Trans.

CHE7970 - Selected Topics

General

College/School
Engineering

Course Title
Selected Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7970

Credit Hours

Credit Hours Min
3

Course Description
Advanced special topics in chemical engineering taught on an as-needed basis.

CHE7980 - Directed Study

General

College/School
Engineering

Course Title
Directed Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHE

Course Number
7980

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

CHE7990 - Research & Dissertation

General

College/School
Engineering

Course Title
Research & Dissertation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHE

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Chemistry Department

The Department of Chemistry offers a program of study leading to an M.S. in Chemistry designed to prepare graduates for a successful career in industry or to continue their education in a doctoral program or professional school. By offering courses in the five (5) major areas of chemistry, the students have an opportunity to reinforce their background and expand their knowledge in areas not covered by their undergraduate degree. The faculty maintains a wide variety of research programs, which gives each student a chance to conduct, evaluate, and report on original research. A low student-to-faculty ratio allows for individual attention and produces a stimulating intellectual atmosphere conducive to learning.

Fast-Track M.S. Program

The Fast-Track M.S. Chemistry program is designed for chemistry majors in the A.C.S.-certified concentration, enabling them to earn the M.S. degree in Chemistry by staying at Tech one (1) additional academic year and two (2) summers. A senior who opts for the fast-track program will take nine (9) hours graduate coursework as a senior. These hours can include either 4000/5000 dually-listed chemistry courses taken at the 5000-level OR can include 6000-level chemistry and 7000-level environmental science courses. Up to six (6) hours of this graduate coursework, exclusive of directed study, taken during the student's senior year can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University and must be approved as appropriate substitutions in the undergraduate curriculum for senior CHEM electives. The admission requirements are:

1. Subject to approval by the chair and the chemistry graduate committee
2. Overall GPA = 2.8 or above, 3.0 or above in upper-division chemistry courses
3. Application allowed once Junior Standing is earned
4. Can begin Fast-Track Program as a Senior
5. Final B.S. must include a minimum of:

- two (2) semesters of calculus
- two (2) semesters each of general, organic, and physical chemistry
- one (1) semester each of analytical chemistry and biochemistry.

Entrance to the Fast-Track program can be granted if the student has met requirements 1 and 2 above.

TTU seniors who do not fully qualify for the Fast-Track program but who plan to seek an M.S. Chemistry degree at TTU may take up to nine (9) graduate-level coursework hours as a senior. Subject to instructor approval, these hours can include either 4000/5000 dually-listed chemistry courses taken at the 5000-level OR can include 6000-level 60 chemistry and 7000-level environmental science courses. Up to six (6) hours of this graduate coursework taken during the student's senior year can be used to satisfy both undergraduate and graduate degree requirements.

Programs

CHEM-MS - Chemistry, M.S.

Program Overview

Program Long Title
Chemistry, M.S.

College/School
Arts and Sciences

Department(s)
Chemistry

Catalog Full Description
The Department of Chemistry offers a program of study leading to an M.S. in Chemistry designed to prepare graduates for a successful career in industry or to continue their education in a doctoral program or professional school. By offering courses in the five (5) major areas of chemistry, the students have an opportunity to reinforce their background and expand their knowledge in areas not covered by their undergraduate degree. The faculty maintains a wide variety of research programs, which gives each student a chance to conduct, evaluate, and report on original research. A low student-to-faculty ratio allows for individual attention and produces a stimulating intellectual atmosphere conducive to learning.

Degree Requirements

- **Core Required Courses:** 9 hours
- **Advanced Electives:** 12 hours
- **Additional Electives:** 9 hours
- **Total:** 30 hours

Admission Requirements

Admission Requirements
Students seeking admission to full standing in the M.S. program in Chemistry are required to have a Bachelor's degree in Chemistry that has been certified by the American Chemical Society or course work equivalent to this degree, with an undergraduate GPA of at least 2.5 on a 4.0 scale. Applicants lacking prerequisite coursework may be admitted to provisional standing and required to pass the prerequisite coursework before being admitted to full standing.

Applicants with an undergraduate GPA less than 3.0 and an application packet (including a statement of purpose and letter of recommendation) that does not demonstrate a strong justification for admission may be required to take the general portion of the GRE General Test (GRE). To be admitted to full standing an applicant must score at least 300 (Quantitative and Verbal combined) on the GRE General Test, and at least 3.5 on the Analytical Writing portion. An applicant with an undergraduate GPA of less than 3.0 who does not submit GRE scores, or whose scores do not meet the requirements, may still be considered for admission, if the applicant has demonstrated outstanding potential for advanced study and research through research or work experience. Applicants with an undergraduate GPA greater than 3.0 MAY submit GRE scores, but the GRE is not required.

All students must submit a short (2-3 page) Statement of Purpose. The Statement of Purpose must address skills and achievements from previous academic, research, or industrial experience, and must identify specific research topics of interest to pursue at TTU. Applicants will not be considered without a Statement of Purpose. The statement of purpose is reviewed as a criterion for admission, a generic statement of purpose is discouraged.

All students must supply at least one letter of recommendation from a work or research supervisor or mentor in a STEM discipline or enterprise.

International students are required to demonstrate competency in spoken and written English by taking appropriate standardized tests. Common examples include TOEFL examination (minimum score of 550 for the paper-based test or 79 for the Internet-based test with no sub score below 20) and the IELTS examination (minimum score 6.0)

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
- **Core Required Courses:** 9 hours
- **Advanced Electives:** 12 hours
- **Additional Electives:** 9 hours
- **Total:** 30 hours

The program of study for the M.S. in Chemistry includes satisfactory completion of a thesis, and coursework as detailed below:

Degree Requirements
Type
Completion Requirement

Required Core

Fulfill ALL of the following requirements:

Seminars (2 hours)

Complete ALL of the following Courses:
- CHEM6910 - Chemistry Literature Seminar
- CHEM6911 - Chemistry Thesis Seminar

—— AND ——

Research & Thesis (6 hours)

Complete ALL of the following Courses:
- CHEM6990 - Research and Thesis

—— AND ——

Directed Studies (1 hour)

Complete ALL of the following Courses:
- CHEM6900 - Dir Studies-Chemistry

CHEM6900 Dir Studies-Chemistry (Directed Studies) includes a comprehensive oral examination administered by the student's graduate committee.

Advanced Electives (12 hours)

Advanced Electives may be selected from any coursework that meets the department's expectations, based on the student's Program of Study and in consultation with the student's graduate committee and the program academic advisor. Any CHEM 6000 OR 7000 LEVEL OR EVS 7000 LEVEL

Additional Electives (9 hours)

Additional Electives may be selected from any coursework that meets the department's expectations, based on the student's Program of Study and in consultation with the student's graduate committee and the program academic advisor. Any CHEM 5000 OR 6000 Level

Additional Comments:

Total Degree Requirements: 30 hours

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast-Track M.S. Chemistry program is designed for chemistry majors in the A.C.S.-certified concentration, enabling them to earn the M.S. degree in Chemistry by staying at Tech one (1) additional academic year and two (2) summers. A senior who opts for the fast-track program will take nine (9) hours graduate coursework

as a senior. These hours can include either 4000/5000 dually-listed chemistry courses taken at the 5000-level OR can include 6000-level chemistry and 7000-level environmental science courses. Up to six (6) hours of this graduate coursework, exclusive of directed study, taken during the student's senior year can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University and must be approved as appropriate substitutions in the undergraduate curriculum for senior CHEM electives. The admission requirements are:

1. Subject to approval by the chair and the chemistry graduate committee
2. Overall GPA = 2.8 or above, 3.0 or above in upper-division chemistry courses
3. Application allowed once Junior Standing is earned
4. Can begin Fast-Track Program as a Senior
5. Final B.S. must include a minimum of:
• two (2) semesters of calculus
• two (2) semesters each of general, organic, and physical chemistry
• one (1) semester each of analytical chemistry and biochemistry.

Entrance to the Fast-Track program can be granted if the student has met requirements 1 and 2 above.

TTU seniors who do not fully qualify for the Fast-Track program but who plan to seek an M.S. Chemistry degree at TTU may take up to nine (9) graduate-level coursework hours as a senior. Subject to instructor approval, these hours can include either 4000/5000 dually-listed chemistry courses taken at the 5000-level OR can include 6000-level 60 chemistry and 7000-level environmental science courses. Up to six (6) hours of this graduate coursework taken during the student's senior year can be used to satisfy both undergraduate and graduate degree requirements.

Courses

CHEM5000 - Grad Teaching Asst. Training

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Grad Teaching Asst. Training	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
CHEM	5000

Credit Hours

Credit Hours Min
1

Course Description
Laboratory safety procedures, safe management of chemical waste, and teaching pedagogy.

Requisites

Simple Requisites

Prerequisite: Full Standing in Chemistry M.S. Program and instructor consent.

CHEM5110 - Inorganic Chemistry

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Inorganic Chemistry	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
CHEM	5110

Credit Hours

Credit Hours Min
3

Course Description
Correlation of physical and chemical properties of inorganic compounds and atomic structure. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CHEM2010 Intro to Inorganic Chemistry and CHEM 3500 or 3510.

CHEM5150 - Inorganic Chemistry

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Inorganic Chemistry	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
CHEM	5150

Credit Hours

Credit Hours Min
1

Course Description
Synthesis, isolation, and characterization of inorganic compounds, using conventional as well as microscale and inert gas techniques. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Corequisite:** CHEM4110 Inorganic Chemistry (CHEM5110 Inorganic Chemistry)

CHEM5210 - Chemistry of Polymers

General

College/School
Arts and Sciences

Course Title	Academic Level (Course Level)
Chemistry of Polymers	Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
CHEM	5210

Credit Hours

Credit Hours Min
3

Course Description
Preparation, structure, physical andchemical properties of organic polymers. Experimental determination of average molar massand its correlation to macriscopic properties. Thermal and viscoelastic behavior. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** CHEM 3020 and CHEM 3500 or 3510.

CHEM5310 - Nuclear Chem & Radiochemistry

General

College/School
Arts and Sciences

Course Title	Academic Level (Course Level)
Nuclear Chem & Radiochemistry	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
CHEM	5310

Credit Hours

Credit Hours Min	Credit Hours Max
0	3

Credit Hours Operator
OR

Course Description
Introduction to theory of nuclear stability and decay processes. The laboratory emphasizes the detection, safe handling, and use of radioisotopes in chemical investigations.

Requisites

Simple Requisites

> **Prerequisite:** CHEM3500 Elements/Physical Chemistry or 3510 (may be taken concurrently).

CHEM5320 - Spectrometic ID/Organ Comp

General

College/School
Arts and Sciences

Course Title	Academic Level (Course Level)
Spectrometic ID/Organ Comp	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
CHEM	5320

Credit Hours

Credit Hours Min	Credit Hours Max
0	3

Credit Hours Operator
OR

Course Description
The isolation and identification of organic compounds by both chemical and physical means with emphasis on spectroscopic methods.

Requisites

Simple Requisites

> **Prerequisites:** CHEM 3020 and CHEM 3500 or 3510.

CHEM5410 - Forensic Chemistry

General

College/School
Arts and Sciences

Course Title	Academic Level (Course Level)
Forensic Chemistry	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
CHEM	5410

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description

This course will examine the application of chemical concepts and methods to the analysis of crime scene evidence.

Requisites

Simple Requisites

Prerequisite: CHEM 1120, 3020 and 3410.

CHEM5520 - Instrumental Analysis I

General

College/School
Arts and Sciences

Course Title
Instrumental Analysis I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHEM

Course Number
5520

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description

Theory and practice of atomic spectroscopy, chromatography, and electroanalysis; discussion of selected instrumental techniques for analysis of surfaces, molecules, and particles. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CHEM 3410, 3510.

CHEM5610 - General Biochemistry I

General

College/School
Arts and Sciences

Course Title
General Biochemistry I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHEM

Course Number
5610

Credit Hours

Credit Hours Min
3

Course Description

Chemistry of amino acides, proteins, lipids, carbohydrates, membranes and nucleic acids. Includes study of pH, enzyme kinetics, three-dimensional structure and biochemical separation methods and analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CHEM3010 Organic Chemistry I and CHEM3020 Organic Chemistry II , or consent of instructor.

CHEM5620 - General Biochemistry II

General

College/School
Arts and Sciences

Course Title
General Biochemistry II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHEM

Course Number
5620

Credit Hours

Credit Hours Min
3

Course Description

Intermediary metabolism and its regulation, bioenergetics and photosynthesis, biosynthesis or proteins and nucleic acids. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CHEM4610 General Biochemistry I(CHEM5610 General Biochemistry I)

CHEM5650 - General Biochemistry Lab

General

College/School
Arts and Sciences

Course Title
General Biochemistry Lab

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHEM

Course Number
5650

Credit Hours

Credit Hours Min
2

Course Description
Laboratory techniques associated with contemporary general biochemistry to include buffer preparation, pKa determination, amino acid analysis, protein expression, separation and purification techniques, protein determination, enzymology, equilibrium and binding constant determinations, and carbohydrate analysis. The CHEM 5650 student will engage in additional procedures in some of the experiments. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CHEM 4610 (5610) or CHEM 4300.

CHEM5710 - Environmental Chemistry

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Environmental Chemistry	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
CHEM	5710

Credit Hours

Credit Hours Min
3

Course Description
Basic concepts of environmental chemistry. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** CHEM 3005 or 3010, and CHEM 3410 or 3500 or 3510 (courses from the latter group may be taken concurrently).

CHEM5720 - Adv Environmental Chemistry

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Adv Environmental Chemistry	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
CHEM	5720

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3
	Credit Hours Operator
	OR

Course Description
Advanced topics within environmental chemistry, including emphasis on organic, inorganic and analytical environmental chemistry. Case studies and contemporary literature in the field will be discussed. CHEM 5720 students will be required to carry out a more extensive field project and present a paper on an advanced topic in environmental chemistry. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CHEM4710 Environmental Chemistry(CHEM5710 Environmental Chemistry).

CHEM5970 - Special Topics

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Special Topics	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
CHEM	5970

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	4
	Credit Hours Operator
	TO

Course Description
Timely topics in chemistry. Course may be taken for credit more than once. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

CHEM6110 - Adv Inorganic Chemistry

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Adv Inorganic Chemistry	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
CHEM	6110

Credit Hours

Credit Hours Min
3

Course Description
The correlation of the physical and chemical properties of inorganic compounds with their structure.

Requisites
Simple Requisites

> Prerequisite: CHEM4110 Inorganic Chemistry

CHEM6210 - Adv Organic Chemistry

General
College/School
Arts and Sciences

Course Title
Adv Organic Chemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHEM

Course Number
6210

Credit Hours
Credit Hours Min
3

Course Description
Application of physical principles to the understanding of the structure and dynamics of organic compounds.

Requisites
Simple Requisites

> Prerequisite: CHEM 3120.

CHEM6320 - Adv Physical Chemistry

General
College/School
Arts and Sciences

Course Title
Adv Physical Chemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHEM

Course Number
6320

Credit Hours
Credit Hours Min
3

Course Description
Advanced topics in physical chemistry to include aspects of statistical thermodynamics, quantum mechanics, spectroscopy, and kinetics.

Requisites
Simple Requisites

> Prerequisite: CHEM 3520.

CHEM6350 - Advanced Molecular Modeling

General
College/School
Arts and Sciences

Course Title
Advanced Molecular Modeling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHEM

Course Number
6350

Credit Hours
Credit Hours Min
3

Course Description
Molecular graphics and visualization, computational quantum chemistry for molecular structure prediction, molecular mechanics force fields and their application, molecular dynamics simulations, QSAR, biochemical macromolecule modeling and analysis.

Requisites
Simple Requisites

> Prerequisites: CHEM 3510 or equivalent and consent of instructor.

CHEM6410 - Adv Analytical Chemistry

General
College/School
Arts and Sciences

Course Title
Adv Analytical Chemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHEM

Course Number
6410

Credit Hours
Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Statistical interpretation of data; electronics of instrumentation; optimization of chromatographic methods; recent developments in spectroscopy, chromatography, and mass spectrometry.

Requisites
Simple Requisites

> Prerequisite: CHEM 4520.

CHEM6610 - Advanced Biochemistry

General

College/School
Arts and Sciences

Course Title
Advanced Biochemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CHEM

Course Number
6610

Credit Hours

Credit Hours Min
3

Course Description
Current advanced topics in Biochemistry selected from recent peer-reviewed literary journals. Instruction, with practical exercises, in the step-by-step stages of grant planning, locating funding sources, and writing successful grant proposals.

Requisites

Simple Requisites

> **Prerequisite**: CHEM4610 General Biochemistry I or CHEM5610 General Biochemistry I

CHEM6900 - Dir Studies-Chemistry

General

College/School
Arts and Sciences

Course Title
Dir Studies-Chemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHEM

Course Number
6900

Credit Hours

Credit Hours Min
1

Course Description
Investigation of a current area of research which is compatible with the student's interest and abilities. (Maximum credit toward degree is one hour.)

Requisites

Simple Requisites

> **Prerequisite**: Graduate standing in chemistry.

CHEM6910 - Chemistry Literature Seminar

General

College/School
Arts and Sciences

Course Title
Chemistry Literature Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHEM

Course Number
6910

Credit Hours

Credit Hours Min
1

Course Description
Review and oral presentation of current topic in chemical literature. (Maximum credit toward degree is one hour.)

Requisites

Simple Requisites

> **Prerequisite**: Consent of thesis advisor.

CHEM6911 - Chemistry Thesis Seminar

General

College/School
Arts and Sciences

Course Title
Chemistry Thesis Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHEM

Course Number
6911

Credit Hours

Credit Hours Min
1

Course Description
Oral presentation of student's thesis research. (Maximum credit toward degree is one hour.)

Requisites

Simple Requisites

> **Prerequisites**: Full standing in Chemistry, M.S. program, and consent of thesis advisor.

CHEM6970 - Advanced Special Topics

General

College/School
Arts and Sciences

Course Title
Advanced Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CHEM

Course Number
6970

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Prerequisite: Consent of instructor. An advanced course for current topics in chemistry. Course may be taken for credit more than once.

CHEM6990 - Research and Thesis

General

College/School
Arts and Sciences

Course Title
Research and Thesis

Course Subject Code
CHEM

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Number
6990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Civil and Environmental Engr Department

The Department of Civil and Environmental Engineering offers advanced studies leading to the Master of Science degree in Civil Engineering and the Doctor of Philosophy degree in Engineering with specialization in Civil Engineering. The goals of the Ph.D. program are listed under the College of Engineering and administered by the Associate Dean of Engineering for Graduate Studies and Research. The goal of the MS program is to provide the strong academic programs necessary to prepare students to become educated members of society who can join and make significant contributions to the civil engineering profession.

This is accomplished by allowing MS graduate students to specialize in specific engineering topics through advanced and in-depth studies in these topics; by providing guidance to students in fundamental and applied research; by helping them to develop powers of analysis, synthesis and critical thinking; and by preparing outstanding graduate students to continue academic and research careers through doctoral-level studies.

The department offers the Master of Science Degree in Civil Engineering with concentrations in environmental engineering, structural engineering, and transportation engineering. The departmental faculty have expertise and conduct research in the following areas: environmental and water resources engineering; structural engineering, transportation and paving materials; engineering mechanics; and computational mechanics. Faculty advisors assist graduate students in developing individual programs of study depending on their career goals and thesis research interests. The student's advisory committee assists the student in the development and execution of the program of study and monitors and evaluates the student's work towards the degree.

Many departmental faculty actively participate in research related to the three Centers of Excellence operated within the University: two within the College of Engineering and one under the Office of Research & Economic Development. The resources and facilities of the Centers greatly enhance the graduate program of the Department.

Programs

CE-MS - Civil Engineering, M.S.

Program Overview

Program Long Title
Civil Engineering, M.S.

College/School
Engineering

Department(s)
Civil and Environmental Engr

Catalog Full Description
The Department of Civil and Environmental Engineering offers advanced studies leading to the Master of Science degree in Civil Engineering and the Doctor of Philosophy degree in Engineering with specialization in Civil Engineering. The goals of the Ph.D. program are listed under the College of Engineering and administered by the Associate Dean of Engineering for Graduate Studies and Research. The goal of the MS program is to provide the strong academic programs necessary to prepare students to become educated members of society who can join and make significant contributions to the civil engineering profession.

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The department offers the Master of Science Degree in Civil Engineering with concentrations in environmental engineering, structural engineering, and transportation engineering. The departmental faculty have expertise and conduct research in the following areas: environmental and water resources engineering; structural engineering, transportation and paving materials; engineering mechanics; and computational mechanics. Faculty advisors assist graduate students in developing individual programs of study depending on their career goals and thesis research interests. The student's advisory committee assists the student in the development and execution of the program of study and monitors and evaluates the student's work towards the degree.

Many departmental faculty actively participate in research related to the three Centers of Excellence operated within the University: two within the College of Engineering and one under the Office of Research & Economic Development. The resources and facilities of the Centers greatly enhance the graduate program of the Department.

Degree Requirements (Thesis)

- **Core Required Course:** 1 hour
- **Concentration Area Requirement*:** 15 hours
- **Advisor Approved Electives*:** 9 hours
- **Research Requirement:** 6 hours
- **Degree Total Requirements:** 31 hours

Degree Requirements (Non Thesis)

- **Core Required Course:** 1 hour
- **Concentration Area Requirement*:** 21 hours
- **Advisor Approved Electives*:** 9 hours
- **Total Degree Requirements:** 31 hours

Admission Requirements

Admission Requirements

An applicant for admission to the College of Engineering is expected to have earned a BS degree from an approved program, or its equivalent.

Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department: *undergraduate GPA of at least 3.0 on a 4.0 scale,

*GRE® General Test (GRE) scores with Quantitative greater than or equal to 50%; Verbal greater than or equal to 33%; Analytical Writing greater than or equal to 33%. Students with BS degrees in related fields from TTU are not required to take the GRE.

*Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

*Availability of appropriate faculty to serve as research advisor(s).

*Participation in undergraduate research.

*Post-BS degree professional experience relevant to planned degree of study.

*Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission.

Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Note: The program is designed for graduates of approved undergraduate programs. Thus, a baccalaureate degree in civil engineering is required for full standing. Applicants that have an undergraduate degree in a closely related field will be evaluated on a case-by-case basis and may be admitted to full standing upon completion of identified background courses.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> # Departmental Degree Requirements
>
> To receive an MS degree in CEE, the student should complete all the MS requirements specified by the University and the College of Engineering. Additionally, certain departmental requirements listed below shall also be satisfied:
>
> ## Thesis Option (31 hours)
>
> An MSCE program of study with thesis option requires a minimum of 31 semester hours of graduate-level coursework which are on the program of study approved by the student's graduate advisory committee, including one semester hour of CEE6910 Graduate Seminars - CEE Graduate Seminar, and a minimum of six (6) hours of thesis completed under the supervision of the graduate advisor (31 hours). At least 15 credit hours of graduate coursework must be CEE courses. The required thesis should document the student's research to the satisfaction of both the student's graduate advisory committee and the Graduate School. The student must also successfully defend his/her thesis before the graduate advisory committee. A minimum GPA of 3.0 is also required. Other departmental requirements may apply.

> **Degree Requirements**
>
> - **Core Required Course:** 1 hour
> - **Concentration Area Requirement*:** 15 hours
> - **Advisor Approved Electives*:** 9 hours
> - **Research Requirement:** 6 hours
> - **Degree Total Requirements:** 31 hours

* Concentration Area and Advisor Approved Electives maybe selected from CEE, CHE, CSC, EMGT, ENGR, ME, BIOL, ESS, EVS, GEOG, MATH, OR CHEM 5000, 6000, 7000 level courses.

Non-Thesis Option (31 hours)

An MSCE program of study with non-thesis option requires a minimum of 31 credit hours of graduate course work, as specified in the student's approved Program of Study. This program is offered in a fully online delivery mode. The program of study shall include 30 semester hours of graduate-level coursework, one semester hour of CEE6910 Graduate Seminars - CEE Graduate Seminar. At least 21 credit hours of graduate coursework must be CEE courses. No more than 9 credit hours at the 5000 level are permitted. Non-thesis MSCE will complete a culminating exam to reflect comprehensive knowledge gained from coursework. Successful completion of the exam is required for graduation. Other departmental requirements may apply.

Degree Requirements

- **Core Required Course:** 1 hour
- **Concentration Area Requirement*:** 21 hours
- **Advisor Approved Electives*:** 9 hours
- **Total Degree Requirements:** 31 hours

* Selection of appropriate courses (CEE 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator. Courses may include, but are not limited to, other relevant engineering disciplines (such as CHE, CSC, EMGT, ENGR, or ME) or outside of engineering such as (BIOL, CHEM, ESS, EVS, GEOG, GEOL, or MATH).

> **Thesis Option (31 hours)**
> **Type**
> Completion Requirement
>
> > Core Required Course (1 hour)
> >
> > **Complete ALL of the following Courses:**
> > - CEE6910 - Graduate Seminars
>
> > Concentration Area Requirement (15 hours)
> >
> > **Selection of appropriate courses (CEE 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator.**
>
> > Advisor Approved Electives (9 hours)
> >
> > **Selection of appropriate courses (CEE 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator.**
>
> > Research Requirement (6 hours)
> >
> > **Complete ALL of the following Courses:**
> > - CEE6990 - Research & Thesis
>
> **Additional Comments:**

Non-Thesis Option (31 hours)
Type
Completion Requirement

Core Required Courses (1 hour)

Complete ALL of the following Courses:
- CEE6910 - Graduate Seminars

Concentration Area Requirements (21 hours)

Selection of appropriate courses (CEE 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Advisor Approved Electives (9 hours)

Selection of appropriate courses (CEE 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator. Courses may include, but are not limited to other relevant engineering disciplines (such as CHE, CSC, EMGT, ENGR, or ME) or outside of engineering (such as BIOL, CHEM, ESS, EVS, GEOG, GEOL, or MATH).

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast-track M.S. Program in Civil Engineering will provide an opportunity for promising CEE undergraduate students to accelerate the completion of the M.S. by allowing undergraduates to accumulate up to six (6) credit hours of graduate coursework while still pursuing their undergraduate degree and to transition to the graduate program smoothly. Up to six hours of graduate coursework, exclusive of directed study, taken during the student's senior year can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University and must be approved as appropriate substitutions in the undergraduate curriculum for senior CEE electives.

Students must apply to the CEE Fast-track M.S. program by the end of their second junior term. Students must apply and take the GRE(R) General Test (GRE) during their second senior term (one [1] semester prior to their anticipated graduation). The CEE Fast-track students should be aware that they need to consult with their future M.S. advisor for the 5000-level courses taken during their senior terms, especially for the courses not in their area of concentration. The minimum requirements for acceptance into the Fast-track program are:

- Enrolled in TTU Civil Engineering student with Junior or Senior standing

- Overall GPA of 3.25 and a GPA for CEE courses of at least 3.5

- Recommendation of a CEE faculty mentor

- All requirements for admission to Graduate School must be met upon graduation

ENGR-DCE - Engineering, Civil Engineering Concentration, Ph.D.

Program Overview

Program Long Title
Engineering, Civil Engineering Concentration, Ph.D.

College/School	Department(s)
Engineering	Civil and Environmental Engr

Catalog Full Description

The Department of Civil and Environmental Engineering offers advanced studies leading to the Master of Science degree in Civil Engineering and the Doctor of Philosophy degree in Engineering with specialization in Civil Engineering. The goals of the Ph.D. program are listed under the College of Engineering and administered by the Associate Dean of Engineering for Graduate Studies and Research. The goal of the MS program is to provide the strong academic programs necessary to prepare students to become educated members of society who can join and make significant contributions to the civil engineering profession.

This is accomplished by allowing MS graduate students to specialize in specific engineering topics through advanced and in-depth studies in these topics; by providing guidance to students in fundamental and applied research; by helping them to develop powers of analysis, synthesis and critical thinking; and by preparing outstanding graduate students to continue academic and research careers through doctoral-level studies.

The department offers the Master of Science Degree in Civil Engineering with concentrations in environmental engineering, structural engineering, and transportation engineering. The departmental faculty have expertise and conduct research in the following areas: environmental and water resources engineering; structural engineering, transportation and paving materials; engineering mechanics; and computational mechanics. Faculty advisors assist graduate students in developing individual programs of study depending on their career goals and thesis research interests. The student's advisory committee assists the student in the development and execution of the program of study and monitors and evaluates the student's work towards the degree.

Many departmental faculty actively participate in research related to the three Centers of Excellence operated within the University: two within the College of Engineering and one under the Office of Research & Economic Development. The resources and facilities of the Centers greatly enhance the graduate program of the Department.

Admission Requirements

Admission Requirements

The basic admission standards for the Ph.D. program are the same as for the Master of Science in Engineering (see requirement list below), in addition, an applicant is expected to have completed an MS degree in an academic area appropriate to the proposed area of study and to have earned an MS GPA of at least 3.5 on a 4.0 scale.

Though the general requirement for admission to the Ph.D. program is a master's degree in an appropriate discipline, students with a bachelor's degree may be admitted to the Ph.D. program directly on exceptional basis, provided the applicant has a record of excellent academic performance in an appropriate engineering program undergraduate program. The applicant's test scores, personal recommendations, and relevant work experience must indicate a high potential for success in doctoral studies and research. In addition, factors such as appropriateness of the applicant's research objectives to the research interests of the program faculty, availability of faculty to supervise the applicant's research, and prior research accomplishments of the applicant will also influence the admission decision.

Fulfilling the minimum requirement does not guarantee admission; an applicant who does not meet the above minimum, but appears to have reasonable potential for success as a Ph.D. student, may be admitted to provisional standing. His/her status may be changed to full standing after satisfying requirements specified by the Associate Dean of Engineering for Graduate Studies and Research, in consultation with the appropriate departmental chairperson, at the time of admission.

If admitted in provisional standing at either the MS or Ph.D. level, the student must remove all deficiencies and apply for reclassification to full standing prior to the completion of 15 graduate hours.

Sometimes a master's-level student takes more graduate-level courses than are required for the degree because the student is expecting to continue on to the Ph.D. program and hopes to use the extra courses to satisfy the Ph.D. coursework

requirement. When this is the case, the student can request when registering for the course(s) that the course(s) be "banked" for the Ph.D. program. If the student lacks no more than 12 semester hours on the master's degree, he/she may accumulate a maximum of nine (9) semester hours which may be applied toward the Ph.D. When this is the case, the student's advisory committee must initiate approval via memo with consensus of the departmental chairperson, dean of the college, and the Associate Dean of Graduate Studies. Banked courses then show up on the student's transcript as courses taken for the Ph.D. rather than being shown as a part of his/her M.S. program. Banking course does not guarantee admission to the Ph.D. program, or, if admitted, that the student's Ph.D. advisory committee will approve the course as part of the student's Ph.D. program of study.

MS Engineering Program Admission Requirements

An applicant for admission to any of the MS programs offered by the departments of the College of Engineering is expected to have earned a BS degree from an approved program, or its equivalent. Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department:

- undergraduate GPA of at least 3.0 on a 4.0 scale,

- GRE® General Test (GRE) scores with Quantitative greater than or equal to 150 (50%); Verbal greater than or equal to 147 (33%); Analytical Writing greater than or equal to 3.5 (33%). Students with BS degrees in related fields from Tennessee Tech are not required to take the GRE.

- Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

- Availability of appropriate faculty to serve as research advisor(s).

- Participation in undergraduate research.

- Post-BS degree professional experience relevant to planned degree of study.

- Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

- International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission. Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Doctor of Philosophy Degree Requirements

The Ph.D. is a research degree. The minimum requirements for a Ph.D. degree in the College of Engineering stated below are the same for all departments. Each department may include additional degree requirements for students pursuing specialization in that department.

Students Admitted with a Master's Degree

1. A minimum of 48 credits of course work and doctoral research and dissertation as follows:

A. A minimum of eighteen (18) credit hours of course work beyond the master's degree, acceptable to the student's advisory committee. Additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department. No 5000-level courses are to be used to meet the minimum requirements of course work.

B. A minimum of twenty four (24) credit hours of doctoral research and dissertation built upon the student's course of study and making a significant contribution to the state of knowledge or to the art of the engineering profession, is required; not more than nine (9) credit hours may be earned in a particular semester.

2. Residence of four (4) semesters beyond the master's degree, with at least two (2) semesters in continuous residence, is required. All requirements, including the dissertation, must be completed within a period of eight (8) consecutive years.

3. Maintenance of a minimum quality point average of 3.0 and adherence to the general regulations of the College of Graduate Studies are expected. All students in the program must follow a plan of study and research developed in conjunction with an advisory committee, satisfactorily complete a comprehensive examination, achieve candidacy, and satisfactorily defend their dissertation.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Degree Program

A student admitted with a bachelor's degree on exceptional basis must successfully complete a qualifying examination based mostly on undergraduate materials before the end of the second semester of enrollment. Students with a Bachelor of Science (B.S.) degree from ABET-accredited programs are exempted from this examination. Other students without such a degree, or M.S. students without an ABET-accredited B.S. degree, switching to direct Ph.D. will have to take a qualifying exam through a formal process established by the department. The process should include at a minimum an examination of the student's fundamental knowledge managed by the Graduate Committee of the department.

Based on the student's performance on the qualifying examination, the student may be (i) permitted to continue in the doctoral program, or (ii) advised to transfer to an M.S. degree program in an appropriate discipline in the college, or (iii) recommended for termination from the graduate program of the college.

If permitted to continue in the doctoral program, the student, as described elsewhere in the catalog, will select a research advisor, form an advisory committee, and submit a program of study satisfying the following requirements.

The program of study should have a minimum total of seventy two (72) credit hours of academic work, consisting of course work and dissertation work, beyond baccalaureate work, subject to the following:

• The program of study should include a minimum of forty two (42) credit hours of appropriate graduate level course work consisting of a maximum of nine (9) credit hours at the 5000-level, acceptable to the student's advisory committee.

• It should also include an additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department.

• A minimum of 24 credit hours of doctoral research and dissertation, built upon the student's course of study and making significant contribution to the state of knowledge and the art of the engineering profession, is required; no more than nine (9) credit hours may be earned in a particular semester.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Program Earning a Non-thesis M.S. en route

All conditions stated above for the students admitted directly into the Ph.D. program apply. In addition: Nine (9) credit hours will count toward the non-thesis M.S. degree and toward the Ph.D. degree. If the departmental non-thesis

M.S. requires a three (3) credit hour non-thesis project course, those three (3) credit hours can be counted as three (3) credit hours of dissertation research toward the Ph.D. degree. Six (6) credit hours of M.S. coursework can be counted toward the Ph.D. coursework. If no project course is required for the non-thesis M.S., then nine (9) credit hours of M.S. coursework can be counted toward the Ph.D.

Limitation on Graduate Assistantships

It is expected that a full-time, post master's Ph.D. Engineering student should be able to achieve candidacy within the first three (3) calendar years after enrollment, and a direct admit Ph.D. Engineering student after four (4) calendar years. If candidacy is not achieved within the aforementioned periods, a student must request and receive approval for an extension of assistantship following the College of Engineering's established procedure. An extension may be granted by the Associate Dean of Engineering for Research and Innovation. This limitation is regardless of student funding or the source of support for the student.

Students Admitted with a Master's Degree
Type
Completion Requirement
Program of Study is defined by the committee
48 hours required, comprised of:
18 credit hours (minimum) of coursework beyond the master's degree
6 credit hours of concentration coursework
24 hours research and dissertation

Complete ALL of the following :
Additional Comments:

Direct Admit from BS to PhD
Type
Completion Requirement
Program of Study defined by committee
72 credit hours required and comprised of:
42 hours of coursework (maximum 9 hours at the 5000 level)
6 hours of coursework or research experience
24 hours of research and dissertation
Complete ALL of the following :

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

Courses

CEE5130 - Matrix & Finite Element Method

General

College/School
Engineering

Course Title
Matrix & Finite Element Method

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5130

Credit Hours

Credit Hours Min
3

Course Description
Matrix formulations using flexibility and stiffness methods for structural analysis of skeletal structures. Finite element formulations and applications. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CEE3320 Structural Mechanics CEE3320 or ME4640 Dynamics of Machinery II ME 4640 AND MATH2010 or MATH 4510

CEE5160 - Experiment Stress Analysis

General

College/School
Engineering

Course Title
Experiment Stress Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
5160

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Prerequisite: CEE 3110, MATH 2910. Introduction to theory of elasticity; photoelasticity; theory and application of strain gages and rosettes; brittle coatings; holographic interferometry; moire' analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

CEE5170 - Intro-Mechanics of Composites

General

College/School
Engineering

Course Title
Intro-Mechanics of Composites

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5170

Credit Hours

Credit Hours Min
3

Course Description

Introduction to mechanics of fibrous, laminated composites. Micromechanics, mechanical properties, stiffness and strength, and classical laminate theory. Thermal and moisture effects. Effective engineering properties of laminates. Failure theories, design criteria, and computational implementation.

Requisites

Simple Requisites

Prerequisite: CEE3110 Mechanics of Materials

CEE5190 - Adv Mechanics of Materials

General

College/School
Engineering

Course Title
Adv Mechanics of Materials

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5190

Credit Hours

Credit Hours Min
3

Course Description

Advanced topics; fracture mechanics, elastic support, noncircular shafts, curved beams, thick-walled cylinders, introduction to plates, thin shells of revolution. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CEE3110 Mechanics of Materials, MATH2120 Differential Equations, or consent of instructor.

CEE5350 - Advanced Structural Design

General

College/School
Engineering

Course Title
Advanced Structural Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5350

Credit Hours

Credit Hours Min
3

Course Description

Special topics in analysis and design of steel structures. Plastic design, composite design, plate girders, special connections, and introduction to timber design. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CEE4310 Structural Steel Design.

CEE5360 - Adv Top/Struc Concrete Design

General

College/School
Engineering

Course Title
Adv Top/Struc Concrete Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5360

Credit Hours

Credit Hours Min
3

Course Description

Special topics in the design of concrete structures. Combined footings; retaining walls, two-way slabs, and prestressed concrete. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CEE4320 Reinforced Concrete Design.

CEE5370 - Masonry Design

General

College/School
Engineering

Course Title
Masonry Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5370

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours
Operator
OR

Course Description
Masonry materials and construction. Design of masonry beams, walls, and columns. Seismic design of masonry structures.

Requisites

Simple Requisites

> **Prerequisite:** CEE3030 Civil Engineering Materials and CEE4320 Reinforced Concrete Design.

CEE5380 - Bridge Design

General

College/School
Engineering

Course Title
Bridge Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5380

Credit Hours

Credit Hours Min
3

Course Description
Design of structural steel and reinforced concrete bridges. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CEE4310 Structural Steel Design.

CEE5390 - Bridge Design II

General

College/School
Engineering

Course Title
Bridge Design II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
5390

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: CEE 4380 (5380). Steel plate girder design; prestressed concrete girder design; bridge substructure design including multi-post piers, spread footings, point bearing piles, and friction piles.

CEE5410 - Solid & Hazard Waste Mgmt

General

College/School
Engineering

Course Title
Solid & Hazard Waste Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5410

Credit Hours

Credit Hours Min
3

Course Description
The collection and disposal of solid wastes. Treatment and disposal technologies of hazardous wastes. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CEE 3413 or consent of instructor.

CEE5420 - Engineering Hydrology

General

College/School
Engineering

Course Title
Engineering Hydrology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5420

Credit Hours

Credit Hours Min
3

Course Description
Fundamental processes in the hydrologic cycle, including precipitation, infiltration, and runoff. Development of quantitative approaches for engineering hydrology problems such as watershed modeling and storm water analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CEE3420 Hydraulics or consent of instructor.

CEE5430 - Water/Wastewater Engr

General

College/School
Engineering

Course Title
Water/Wastewater Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5430

Credit Hours

Credit Hours Min
3

Course Description
Analytical methods for use in water quality management of streams, lakes, reservoirs, and groundwater systems. Project design of water and wastewater treatment plants. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: CEE3413 Environmental Engineering or consent of instructor. CHEM 1120

CEE5440 - Water Resources Engineering

General

College/School
Engineering

Course Title
Water Resources Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5440

Credit Hours

Credit Hours Min
3

Course Description
Problems related to the planning and design of systems to manage water resources for flood-damage reduction, hydropower, and river navigation. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: CEE3420 Hydraulics or consent of instructor.

CEE5450 - Water Quality Modeling

General

College/School
Engineering

Course Title
Water Quality Modeling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
5450

Credit Hours

Credit Hours Min
3

Course Description
Mathematical modeling of chemical and biological processes occurring in streams, lakes, and estuaries, emphasizing oxygen demand and nutrient processes. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: CEE3413 Environmental Engineering or consent of instructor. CHEM 1120

CEE5460 - Geospatial Model/Analysis Engr

General

College/School
Engineering

Course Title
Geospatial Model/Analysis Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5460

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: CEE 3600 and CEE 3420 or consent of instructor. GIS & spatial data models; projections and coordinate systems; maps data entry, editing & output; basic spatial analysis; GPS & GNSS; aerial & satellite images; terrain analysis; raster analysis; and spatial estimation.

CEE5500 - Engr Construction Mgmt

General

College/School
Engineering

Course Title
Engr Construction Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5500

Credit Hours

Credit Hours Min
3

Course Description
The design and management of the construction phase of a project: scheduling, estimating, contracts, laws, financing, and safety. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisite: Within two semesters of graduation or consent of instructor.

CEE5600 - Civil Engineering Materials II

General

College/School
Engineering

Course Title
Civil Engineering Materials II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
5600

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Design and testing of high-strength Portland Concrete Cement, self-consolidating PCC, high volume fly ash PCC and pervious PCC. Controlled low-strength materials. Concrete formwork design. Masonry materials evaluation. Aggregate production and improvement. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisite: CEE 3030.

CEE5610 - Pavement Design

General

College/School
Engineering

Course Title
Pavement Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
5610

Credit Hours

Credit Hours Min
3

Course Description
Structural design of flexible and rigid pavements. Pavement rehabilitation. Properties of subgrades, base courses and paving materials. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisite: CEE3610 Transportation Engineering.

CEE5620 - Photogrammetry

General

College/School
Engineering

Course Title
Photogrammetry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
5620

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Course description not available.

Requisites
Simple Requisites

Prerequisites: None

CEE5630 - Traffic Engineering

General

College/School
Engineering

Course Title
Traffic Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5630

Credit Hours

Credit Hours Min
3

Course Description
Techniques of traffic engineering measurements, investigations, and data analysis; design, application, and operation of traffic control systems and devices. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CEE3610 Transportation Engineering.

CEE5640 - Highway Engineering

General

College/School
Engineering

Course Title
Highway Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5640

Credit Hours

Credit Hours Min
3

Course Description
Theory and practice of highway geometric design; highway plans; construction practices; computer applications to highway design. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CEE3610 Transportation Engineering.

CEE5660 - Transportation Planning

General

College/School
Engineering

Course Title
Transportation Planning

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5660

Credit Hours

Credit Hours Min
3

Course Description
System planning and evaluation. Characteristics, impacts and costs. User patterns. Alternative analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CEE3610 Transportation Engineering.

CEE5700 - Masonry Design

General

College/School
Engineering

Course Title
Masonry Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5700

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Masonry materials and construction. Design of masonry beams, walls, and columns. Seismic design of masonry structures. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CEE 3030 and CEE4320 Reinforced Concrete Design or consent of instructor.

CEE5730 - Masonry Design

General

College/School
Engineering

Course Title
Masonry Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5730

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Masonry materials and construction. Design of masonry beams, walls, and columns. Seismic design of masonry structures.

Requisites

Simple Requisites

> **Prerequisite:** CEE3030 Civil Engineering Materials and CEE4320 Reinforced Concrete Design.

CEE5810 - Foundation Engineering

General

College/School
Engineering

Course Title
Foundation Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: CEE 4800. Soil mechanics (emphasis on stress and shear strength), bearing capacity, magnitude and time-rate of consolidation, geotechnical design of shallow and deep foundations.

Requisites

Simple Requisites

> **CEE 4800**
> **Type**
> Completion Requirement
>
> > **Complete ALL of the following Courses:**
> > - CEE4800 - Geotechnical Engineering
>
> **Additional Comments:**

CEE5820 - Retaining Walls & Excavations

General

College/School
Engineering

Course Title
Retaining Walls & Excavations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
5820

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: CEE 4800. Soil mechanics (emphasis on stress and shear strength), lateral earth pressure, excavation systems and anchorage, mechanically stabilized earth walls, geotechnical design of retaining walls and excavation support.

CEE5850 - Forensic Engineering

General

College/School
Engineering

Course Title
Forensic Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5850

Credit Hours

Credit Hours Min
3

Course Description
Forensic case studies related to civil engineering.

Requisites

Simple Requisites

> **Prerequisite:** CEE 4800 (CEE 4800 may be taken concurrently) and CEE4310 Structural Steel Design or CEE4320 Reinforced Concrete Design.

CEE5930 - Noise Control

General

College/School
Engineering

Course Title
Noise Control

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
5930

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Identification and description of noise sources and noise radiation, methods of noise measurement and criteria for noise levels, principles and techniques of noise and vibration control. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ME 2120, PHYS 2120, MATH 2120.

CEE5990 - Special Problems

General

College/School
Engineering

Course Title
Special Problems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
5990

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Current topics in civil engineering. May not be repeated to improve a grade.

Requisites

Simple Requisites

> **Prerequisite:** Approval of Departmental Chairperson.

CEE6040 - Intermediate Fluid Mechanics

General

College/School
Engineering

Course Title
Intermediate Fluid Mechanics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6040

Credit Hours

Credit Hours Min
3

Course Description
Formulation of mass and momentum transfer equations; exact solutions of laminar parallel flows; similarity and approximate solutions; potential flow; laminar momentum boundary layers.

Requisites

Simple Requisites

> **Prerequisite:** ME 3720.

CEE6060 - Electrochemical Power Sources

General

College/School
Engineering

Course Title
Electrochemical Power Sources

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6060

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

CEE6100 - Adv Computer App in CEE

General

College/School
Engineering

Course Title
Adv Computer App in CEE

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
Civil Engineering analysis and design applications using advanced programming languages.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CEE6200 - Statistical Inference for Engr

General

College/School
Engineering

Course Title
Statistical Inference for Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description
Decision making with hypothesis testing and confidence intervals. Multiple regression and stepwise regression. Design of one and multifactor experiments. 2k experiments with blocking and fractional factorials. Control charting of time series data.

Requisites

Simple Requisites

> **Prerequisite:** Introductory calculus based statistics course or consent of instructor.

CEE6300 - Multiscale Analysis - Concrete

General

College/School
Engineering

Course Title
Multiscale Analysis - Concrete

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6300

Credit Hours

Credit Hours Min
3

Course Description
Manufacturing, hydration, and microstructural development of Portland cement. Fresh and hardened concrete properties. Special concrete applications, including fiber-reinforced, high performance, and lightweight concretes.

Requisites

Simple Requisites

> **Prerequisite:** CEE 3030.

CEE6310 - Bituminous Materials

General

College/School
Engineering

Course Title
Bituminous Materials

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6310

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Production and properties of bituminous materials. Use of asphalts in pavement construction, maintenance, and recycling. Design and construction of surface treatments and overlays.

Requisites

Simple Requisites

> **Prerequisite:** CEE 3030.

CEE6330 - Advanced Pavement Design

General

College/School
Engineering

Course Title
Advanced Pavement Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6330

Credit Hours

Credit Hours Min
3

Course Description
Design of low volume road, airport, heavy duty, masonry, and composite pavements. Bases and subgrades. Pavement drainage.

Requisites

Simple Requisites

> **Prerequisite:** CEE4610 Pavement Design or consent of instructor.

CEE6350 - Finite Element Analysis

General

College/School
Engineering

Course Title
Finite Element Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6350

Credit Hours

Credit Hours Min
3

Course Description
Introduction to analysis of stresses in a continuum by the finite element method. Computer applications.

Requisites

Simple Requisites

> **Prerequisite:** CEE4130 Matrix & Finite Element Method/CEE5130 Matrix & Finite Element Method or CEE4190 Adv Mechanics of Materials/CEE5190 Adv Mechanics of Materials or ME4180 Finite Elem Meth-Mech Dsgn/ME5180 Finite Elem Meth/ME Dsgn or consent of instructor.

CEE6360 - Intro to Continuum Mechanics

General

College/School
Engineering

Course Title
Intro to Continuum Mechanics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6360

Credit Hours

Credit Hours Min
3

Course Description
Tensors, balance, laws, constitutive equations, thermodynamic restrictions, applications.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CEE6370 - Vibration of Continuous Media

General

College/School
Engineering

Course Title
Vibration of Continuous Media

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6370

Credit Hours

Credit Hours Min
3

Course Description
Governing equations for strings, bars, and membranes; natural frequencies; normal modes; series solutions; wave propagation; transform methods; characteristics.

Requisites

Simple Requisites

> **Prerequisite:** CEE 3110, MATH4510 Adv Math for Engineers, ME 3050.

CEE6400 - Traffic Simulation

General

College/School
Engineering

Course Title
Traffic Simulation

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6400

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Discrete event simulation, Monte Carlo simulation, random number generators, sampling from distributions, synthetic origin-destination matrices, general simulation modelling and advanced traffic simulation modelling.

Requisites

Simple Requisites

> **Pre- or Co-requisite:** CEE5630 Traffic Engineering or consent of the instructor.

CEE6410 - Traffic Control Systems

General

College/School
Engineering

Course Title
Traffic Control Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6410

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Theory and practical applications of traffic regulatory measures and traffic control systems, including adaptive, responsive, preemption, and Intelligent Transportation Systems.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CEE6420 - Fluvial Hydraulics

General

College/School
Engineering

Course Title
Fluvial Hydraulics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6420

Credit Hours

Credit Hours Min
3

Course Description
Advanced topics; fundamental principles, theories and analytical methods applied in open-channel hydraulics, sediment transport mechanics and fluvial morphology.

Requisites

Simple Requisites

Prerequisites: CEE3420 Hydraulics or consent of instructor.

CEE6430 - Probabilistic Meth/Hydrosci

General

College/School
Engineering

Course Title
Probabilistic Meth/Hydrosci

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6430

Credit Hours

Credit Hours Min
3

Course Description
Advanced concepts of probabilistic approaches with emphasis on hydroscience applications, mathematical and statistical background for stochastic analysis.

Requisites

Simple Requisites

Prerequisites: ISE 3200 or consent of instructor.

CEE6440 - Hydrometerology

General

College/School
Engineering

Course Title
Hydrometerology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6440

Credit Hours

Credit Hours Min
3

Course Description
Theory and observations of hydrological processes in land-surface and atmosphere. Exchanges of mass, heat and momentum between soil, vegetation, or water surface and overlying atmosphere. Precipitation processes, radiation and clouds, atmospheric boundary layer dynamics, coupled balance of moisture and energy, soil moisture and climate feedbacks, hydroclimatology, monsoonal flow and thunderstorms. Emphasis on recent research and modern methods for data analysis and modeling.

Requisites

Simple Requisites

Prerequisite: CEE4420 Engineering Hydrology(CEE5420 Engineering Hydrology), Engineering Hydrology, or consent of instructor.

CEE6450 - Geometric Design/Roadways

General

College/School
Engineering

Course Title
Geometric Design/Roadways

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6450

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Advanced concepts of the design of streets and highways. Design criteria, controls and standards for design alignment, cross sections, intersections, and interchanges.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

CEE6460 - Transportation Safety Engr

General

College/School
Engineering

Course Title
Transportation Safety Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6460

Credit Hours

Credit Hours Min
3

Course Description
Basic structure of transportation safety, traffic safety analysis and issues to identify, address, and implement countermeasures in crash areas, community oriented safety programs.

Requisites

Simple Requisites

> **Prerequisite:** CEE 4650 or consent of instructor.

CEE6470 - Transportation Demand Analysis

General

College/School
Engineering

Course Title
Transportation Demand Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6470

Credit Hours

Credit Hours Min
3

Course Description
Theory and development of models of trip generation, trip distribution, mode choice, and traffic-assignment. Transportation supply. Travel survey. Intercity-passenger travel-demand. Demand for air transportation.

Requisites

Simple Requisites

> **Prerequisite:** CEE4660 Transportation Planning, ISE 3200, or consent of instructor.

CEE6520 - Open-Channel Hydraulics

General

College/School
Engineering

Course Title
Open-Channel Hydraulics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6520

Credit Hours

Credit Hours Min
3

Course Description
Advanced topics in open-channel hydraulics, including design of hydraulic structures, gradually varied flow, unsteady flow, and flood routing techniques.

Requisites

Simple Requisites

> **Prerequisite:** CEE3420 Hydraulics or consent of instructor.

CEE6610 - Applied Env Chemistry

General

College/School
Engineering

Course Title
Applied Env Chemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6610

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Theoretical concepts from inorganic, organic, physical, and biological chemistry as applied to the analysis of environmental engineering problems.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CEE6620 - Applied Env Chemistry

General

College/School
Engineering

Course Title
Applied Env Chemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6620

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Theoretical concepts from inorganic, organic, physical, and biological chemistry as applied to the analysis of environmental engineering problems.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CEE6710 - Env Engr Univ Ops & Processes

General

College/School
Engineering

Course Title
Env Engr Univ Ops & Processes

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6710

Credit Hours

Credit Hours Min
3

Course Description
An advanced study of the physical, chemical and biological unit operations processes for water and wastewater treatment.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CEE6720 - Env Engr Unit Ops & Processes

General

College/School
Engineering

Course Title
Env Engr Unit Ops & Processes

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6720

Credit Hours

Credit Hours Min
3

Course Description
An advanced study of the physical, chemical and biological unit operations processes for water and wastewater treatment.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CEE6740 - Industrial Waste treatment

General

College/School
Engineering

Course Title
Industrial Waste treatment

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CEE

Course Number
6740

Credit Hours

Credit Hours Min
2

Course Description
Characteristics of industrial wastes and of processes producing such wastes. Methods of treating industrial wastes.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CEE6750 - Environmental Modeling

General

College/School
Engineering

Course Title
Environmental Modeling

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CEE

Course Number
6750

Credit Hours

Credit Hours Min
3

Course Description
Mathematical modeling of chemical and biological processees occurring in streams, lakes, and estuaries, emphasizing oxygen demand and nutrient processes.

Requisites

Simple Requisites

> **Prerequisite:** CEE 4430 or consent of instructor.

CEE6760 - Environmental Microbiology

General

College/School
Engineering

Course Title
Environmental Microbiology

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CEE

Course Number
6760

Credit Hours

Credit Hours Min
2

Course Description
Mathematical modeling of chemical and biological processees occurring in streams, lakes, and estuaries, emphasizing oxygen demand and nutrient processes.

Requisites

Simple Requisites

> **Prerequisite:** CEE 4430 or consent of instructor.

CEE6770 - Environmental Engr Lab

General

College/School
Engineering

Course Title
Environmental Engr Lab

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6770

Credit Hours

Credit Hours Min
1

Course Description
Environmental engineering laboratory experience related to unit operations and processes and environmental microbiology.

Requisites

Simple Requisites

> **Corequisite:** CEE6710 Env Engr Univ Ops & Processes-CEE6720 Env Engr Unit Ops & Processes.

CEE6780 - Environmental Engr Lab

General

College/School
Engineering

Course Title
Environmental Engr Lab

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6780

Credit Hours

Credit Hours Min
1

Course Description
Environmental engineering laboratory experience related to unit operations and processes and environmental microbiology.

Requisites

Simple Requisites

> **Corequisite:** CEE6710 Env Engr Univ Ops & Processes- CEE6720 Env Engr Unit Ops & Processes.

CEE6800 - Advanced Soil Mechanics

General

College/School
Engineering

Course Title
Advanced Soil Mechanics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6800

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: CEE 4800. Soil mechanics principles including geostatic stress and consolidation process; drained and undrained behavior; pore pressure parameters; shear strength testing; peak, fully softened, and residual shear strength of soil.

CEE6810 - Adv Structural Mechanics

General

College/School
Engineering

Course Title
Adv Structural Mechanics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6810

Credit Hours

Credit Hours Min
3

Course Description
Solution of large two- and three-dimensional structural systems by matrix and classical methods, nonprismatic and curved members, introduction to nonlinear problems.

Requisites

Simple Requisites

> **Prerequisite:** CEE4130 Matrix & Finite Element Method.

CEE6820 - Seepage and Slope Stability

General

College/School
Engineering

Course Title
Seepage and Slope Stability

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6820

Credit Hours

Credit Hours Min
3

Course Description

Soil permeability and shear strength fundamentals; graphical, analytical, and numerical methods of seepage evaluation; seapage control and design; limit equilibrium and finite element stability methods.

Requisites

Simple Requisites

> **Prerequisite:** CEE4800 Geotechnical Engineering.

CEE6840 - Envrnmntl Apps-Remote Sensing

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Envrnmntl Apps-Remote Sensing	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
CEE	6840

Credit Hours

Credit Hours Min
3

Course Description

Theory and techniques of remote sensing and their application to environmental analysis. Microwave, infrared, passive and active techniques on orbiting and geostationary platforms. Multi-sensor analysis, current and planned satellite missions, radar altimetry, estimation of precipitation, soil moisture, discharge, land use and land cover. Scale and uncertainty issues.

Requisites

Simple Requisites

> **Prerequisite:** CEE4420 Engineering Hydrology(CEE5420 Engineering Hydrology) (Engineering Hydrology) or consent of instructor.

CEE6900 - Special Problems

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Special Problems	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
CEE	6900

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	6
	Credit Hours Operator
	TO

Course Description

Prerequisite: Consent of instructor. Investigation of a topic which is compatible with students' prerequisites, interests, and abilities.

CEE6910 - Graduate Seminars

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Graduate Seminars	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
CEE	6910

Credit Hours

Credit Hours Min
1

Course Description

Seminar lectures and research presentations by invited speakers and graduate students on all fields of Civil Engineering

CEE6930 - Theory of Elasticity

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Theory of Elasticity	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
CEE	6930

Credit Hours

Credit Hours Min
3

Course Description

Investigation of a topic which is compatible with students' prerequisites, interests, and abilities.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CEE6950 - Graduate Seminar

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Graduate Seminar	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
CEE	6950

Credit Hours

Credit Hours Min
1

Course Description
Lectures, discussions, and reports on current topics in the field of Civil Engineering.

Requisites

Simple Requisites

> **Prerequisite:** Graduate standing.

CEE6960 - Graduate Seminar

General

College/School
Engineering

Course Title
Graduate Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6960

Credit Hours

Credit Hours Min
1

Course Description
Prerequisite: Graduate standing. Lectures, discussions, and reports on current topics in the field of Civil Engineering.

CEE6980 - Directed Study

General

College/School
Engineering

Course Title
Directed Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CEE

Course Number
6980

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

CEE6990 - Research & Thesis

General

College/School
Engineering

Course Title
Research & Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
6990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

CEE7100 - Adv Computational Methods/Engr

General

College/School
Engineering

Course Title
Adv Computational Methods/Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7100

Credit Hours

Credit Hours Min
3

Course Description
Prerequisites: CEE/ME 6930 and an additional graduate level course in engineering mechanics or consent of instructor.

Requisites

Simple Requisites

> **Prerequisites:** CEE6930 Theory of Elasticity/ME6930 Theory of Elasticity and an additional graduate level course in engineering mechanics or consent of instructor.

CEE7200 - Surface Phenom/Env Processes

General

College/School
Engineering

Course Title
Surface Phenom/Env Processes

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7200

Credit Hours

Credit Hours Min
3

Course Description
A study of the environmental significance of the physical and chemical processes which occur at the interface between two phases.

Requisites

Simple Requisites

> Prerequisite: CEE6710 Env Engr Univ Ops & Processes or consent of instructor.

CEE7210 - Water Qual Aspects of Impound

General

College/School
Engineering

Course Title
Water Qual Aspects of Impound

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7210

Credit Hours

Credit Hours Min
3

Course Description
Water quality changes and their causative mechanisms that occur in water stored and released from impoundments. Study of reservoir water quality models.

Requisites

Simple Requisites

> Prerequisite: Consent of instructor.

CEE7220 - Finite Elem Analy/Flow Por Med

General

College/School
Engineering

Course Title
Finite Elem Analy/Flow Por Med

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7220

Credit Hours

Credit Hours Min
3

Course Description
Numerical analysis is discussed using applied finite element concepts. One- and two-dimensional applications are discussed for various aspects of mass diffusion, seepage, consolidation, and groundwater movement.

Requisites

Simple Requisites

> Prerequisite: CEE6720 Env Engr Unit Ops & Processes or consent of instructor.

CEE7300 - Natural Systems Engineering

General

College/School
Engineering

Course Title
Natural Systems Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7300

Credit Hours

Credit Hours Min
3

Course Description
A study of treatment of wastes through engineered natural systems. Wetlands, lagoons, and land application.

Requisites

Simple Requisites

> Prerequisite: CEE6720 Env Engr Unit Ops & Processes or consent of instructor.

CEE7310 - Haz Waste Remed/Grdwtr & Soil

General

College/School
Engineering

Course Title
Haz Waste Remed/Grdwtr & Soil

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7310

Credit Hours

Credit Hours Min
3

Course Description
A study of processes for the remediation of hazardous waste contamination in groundwater and in soil. Water-soil interactions and transport of pollutants.

Requisites

Simple Requisites

> Prerequisite: CEE6720 Env Engr Unit Ops & Processes or consent of instructor.

CEE7320 - Degradation of Waste Organics

General

College/School
Engineering

Course Title
Degradation of Waste Organics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
CEE	7320

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3
	Credit Hours Operator
	OR

Course Description

A study of physical, chemical, and biologically mediated degradation of waste organics. Emphasis is placed upon the catabolism of naturally-occurring organic substrates in natural and engineered environments.

Requisites

Simple Requisites

> **Prerequisite:** CEE6760 Environmental Microbiology, CEE6620 Applied Env Chemistry, or consent of instructor.

CEE7360 - Adv/Prestressed Concrete Dsgn

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Adv/Prestressed Concrete Dsgn	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
CEE	7360

Credit Hours

Credit Hours Min
3

Course Description

Advanced topics on analytical methods and design approaches of pre-tensioned and post-tensioned concrete members.

Requisites

Simple Requisites

> **Prerequisite:** CEE4360 Adv Top/Struc Concrete Design(5360), CEE6930 Theory of Elasticity, and consent of instructor.

CEE7410 - Adv Travel Demand Modeling

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Adv Travel Demand Modeling	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
CEE	7410

Credit Hours

Credit Hours Min
3

Course Description

Theory of individual choice behavior. Binomial choice models. Multinomial choice models. Aggregate forecasting techniques. Aggregation and sampling of alternatives. Models of multidimensional choice. Transferability and updating of choice models.

Requisites

Simple Requisites

> **Prerequisite:** CEE6470 Transportation Demand Analysis.

CEE7420 - Public Transportation

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Public Transportation	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
CEE	7420

Credit Hours

Credit Hours Min
3

Course Description

Public transportation modes and characteristics, planning of public transportation networks, mathematical modeling of the demand for public transportation, and measurement of system performance.

Requisites

Simple Requisites

> **Prerequisite:** CEE6470 Transportation Demand Analysis or consent of instructor.

CEE7450 - Adv Topics/Concrete Durability

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Adv Topics/Concrete Durability	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
CEE	7450

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3

Credit Hours

Operator

OR

Course Description

Chemical and physical durability of Portland cement-based materials. Alkali-silica reaction, internal and external sulfate attack, permeability, shrinkage, freeze-thaw durability, and corrosion. Multi-scale (nano-, micro-, and macro-scale) investigations, including economical considerations, mitigation strategies, and advanced nano-/micro-structural characterization techniques.

Requisites

Simple Requisites

> **Prerequisite:** CEE6300 Multiscale Analysis - Concrete or consent of instructor.

CEE7510 - Theory of Plates & Shells

General

College/School

Engineering

Course Title	**Academic Level (Course Level)**
Theory of Plates & Shells	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
CEE	7510

Credit Hours

Credit Hours Min

3

Course Description

Bending and buckling of thin plates and shells. Vibration analysis of plates and shells.

Requisites

Simple Requisites

> **Prerequisite:** CEE6930 Theory of Elasticity or consent of instructor.

CEE7520 - Fluvial Hydraulics

General

College/School

Engineering

Course Title	**Academic Level (Course Level)**
Fluvial Hydraulics	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
CEE	7520

Credit Hours

Credit Hours Min

3

Course Description

Prerequisite: CEE 6520 or consent of instructor. Advanced topics; fundamental principles, theories, analytical and field methods applied in sediment transport mechanics, fluvial morphology and natural channel design and assessment.

CEE7610 - Finite Element Analysis I

General

College/School

Engineering

Course Title	**Academic Level (Course Level)**
Finite Element Analysis I	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
CEE	7610

Credit Hours

Credit Hours Min

3

Course Description

Analysis of stresses in a continuum by the finite element method. Computer applications.

Requisites

Simple Requisites

> **Prerequisite:** CEE4130 Matrix & Finite Element Method, CEE6930 Theory of Elasticity, or consent of instructor.

CEE7620 - Adv Finite Element Analysis

General

College/School

Engineering

Course Title	**Academic Level (Course Level)**
Adv Finite Element Analysis	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
CEE	7620

Credit Hours

Credit Hours Min

3

Course Description

Finite element analysis of coupled differential equations. Higher order and isoparametric element formulations. Applications to problems in stress analysis, vibrations, heat transfer and fluid mechanics. Introduction to commercial programs.

Requisites

Simple Requisites

> **Prerequisite:** CEE6350 Finite Element Analysis/ME6350 Finite Element Analysis or consent of instructor.

CEE7640 - Theory/Inelastic Mtrl Behvr

General

College/School
Engineering

Course Title
Theory/Inelastic Mtrl Behvr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7640

Credit Hours

Credit Hours Min
3

Course Description
Constitutive equations for classical viscoelasticity. Exact solutions for simple constitutive laws. Incremental stress-strain relations for plasticity; yield surface and deformation theories. Application to engineering problems.

Requisites

Simple Requisites

> **Prerequisite:** CEE6930 Theory of Elasticity or ME6360 Intro to Continuum Mech.

CEE7650 - Cont Theories of Materials

General

College/School
Engineering

Course Title
Cont Theories of Materials

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7650

Credit Hours

Credit Hours Min
3

Course Description
Continuum thermodynamics; balance laws and constitutive equations; applications for simple fluids, solids, thermoelastic solids, thermodiffusion and electrodynamics.

Requisites

Simple Requisites

> **Prerequisite:** CEE6930 Theory of Elasticity or ME6360 Intro to Continuum Mech or consent of instructor.

CEE7710 - Fracture Mechanics

General

College/School
Engineering

Course Title
Fracture Mechanics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7710

Credit Hours

Credit Hours Min
3

Course Description
Griffith-Irwin Theory; stress intensity factors; crack tip stresses; plasticity; fatigue crack propagation; fracture toughness testing; experimental aspects; design applications; special topics.

Requisites

Simple Requisites

> **Prerequisite:** CEE6930 Theory of Elasticity.

CEE7720 - Fiber-Reinforced Comp Mtrl

General

College/School
Engineering

Course Title
Fiber-Reinforced Comp Mtrl

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7720

Credit Hours

Credit Hours Min
3

Course Description
Properties of orthotropic lamina; micromechanics; classical lamination theory; lamina strength theories; laminate strength theories; failure theories, design criteria, 3-D lamination theory; analysis of laminated plate bending, vibration and buckling; and computational implementation.

Requisites

Simple Requisites

> **Prerequisite:** CEE6930 Theory of Elasticity or ME6930 Theory of Elasticity .

CEE7810 - Structural Dynamics

General

College/School
Engineering

Course Title
Structural Dynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7810

Tennessee Technological University

Credit Hours

Credit Hours Min
3

Course Description
Vibration of single and multi degree-of-freedom systems; dynamic analysis of beams, frames and trusses; systems with distributed properties; discretization of continuous system and practical computer solutions.

Requisites
Simple Requisites

Prerequisite: Consent of instructor.

CEE7820 - Theory of Elastic Stability

General

College/School
Engineering

Course Title
Theory of Elastic Stability

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7820

Credit Hours

Credit Hours Min
3

Course Description
Beams-columns; elastic buckling of bars and frames; torsional buckling of thin-walled structures; lateral buckling of beams; bending and buckling of thin plates and shells.

Requisites
Simple Requisites

Prerequisite: CEE6930 Theory of Elasticity or consent of instructor.

CEE7910 - Study/Curr Lit-Engr Mech-Theor

General

College/School
Engineering

Course Title
Study/Curr Lit-Engr Mech-Theor

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7910

Credit Hours

Credit Hours Min
1

Course Description
Prerequisite: Graduate level standing within the College of Engineering and consent of instructor.

Requisites
Simple Requisites

Prerequisite: Graduate level standing within the College of Engineering and consent of instructor.

CEE7911 - Study/Curr LIt-Engr Mech-Meth

General

College/School
Engineering

Course Title
Study/Curr LIt-Engr Mech-Meth

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7911

Credit Hours

Credit Hours Min
1

Course Description
Prerequisite: Graduate level standing within the College of Engineering and consent of instructor.

Requisites
Simple Requisites

Prerequisite: Graduate level standing within the College of Engineering and consent of instructor.

CEE7912 - Study-Curr Lit-Engr Mech-Appl

General

College/School
Engineering

Course Title
Study-Curr Lit-Engr Mech-Appl

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7912

Credit Hours

Credit Hours Min
1

Course Description
Prerequisite: Graduate level standing within the College of Engineering and consent of instructor.

Requisites
Simple Requisites

Prerequisite: Graduate level standing within the College of Engineering and consent of instructor.

CEE7970 - Selected Topics

General

College/School
Engineering

Course Title
Selected Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7970

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

CEE7980 - Directed Study

General

College/School
Engineering

Course Title
Directed Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7980

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

CEE7990 - Research & Dissertation

General

College/School
Engineering

Course Title
Research & Dissertation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CEE

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

College of Arts and Sciences Department

The College of Arts and Sciences offers the Master of Arts degree in English, the Master of Science degree in biology, chemistry, computer science, and mathematics. Students who have adequate academic qualifications may obtain graduate minors or pursue collateral study in such areas as geology, certain foreign languages, history, journalism, and sociology.

Specializations exist in each of the major areas of study, with course selection made according to a student's undergraduate background and proposed graduate research.

The program of study for a master's degree normally requires the completion of a minimum of 30 semester hours of graduate credit, including the research and writing of a thesis; however, prerequisite courses or collateral study may expand program requirements.

Graduate assistantships are available in each of the departments offering graduate degrees. Specific information concerning assistantships and degree requirements for the master's degrees may be obtained from the respective departments.

Communication Department

The department of Communications offers two concentrations within the Master of Professional Studies program: Corporate Communication and Media and Strategic Communications.

Courses

COMM5030 - Event Management & Promotion

General

College/School
Interdisciplinary Studies

Course Title
Event Management & Promotion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5030

Credit Hours

Credit Hours Min
3

Course Description
This course will provide students with the opportunity to implement skills learned to manage and promote an actual event, either in pairs or small groups. Students enrolled in the 5000-level course will be required to complete additional work s stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: COMM 3030 (JOUR 3030) and COMM 3040 (JOUR 3040) or consent of instructor.

COMM5410 - Organizational Communication

General

College/School
Interdisciplinary Studies

Course Title
Organizational Communication

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5410

Credit Hours

Credit Hours Min
3

Course Description
An exploration of communication principles operant in modern organizations and approaches to the understanding of communicative culture in these organizations.

Requisites

Simple Requisites

> **Prerequisites**: Graduate-level status or by permission of the instructor.

COMM5420 - Adv Organizational Comm

General

College/School
Interdisciplinary Studies

Course Title
Adv Organizational Comm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5420

Credit Hours

Credit Hours Min
3

Course Description
Approaches to the understanding of communicative cultures in modern organizations and their operant principles. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

COMM5430 - Interpersonal Communication

General

College/School
Interdisciplinary Studies

Course Title
Interpersonal Communication

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5430

Credit Hours

Credit Hours Min
3

Course Description
Communication theory applied to informal and face-to-face situations. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: COMM2090 Interpersonal Communication or consent of instructor.

COMM5601 - Spec Top: Speech Communication

General

College/School
Interdisciplinary Studies

Course Title
Spec Top: Speech Communication

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5601

Credit Hours

Credit Hours Min
1

Course Description
Prerequisites: Graduate-level status. May be repeated to a maximum of 9 hours with change in course content. Presentation of directed, individual research in selected topics in speech communication beyond regular course offerings. Subjects will vary and will be specified at time of offering.

COMM5602 - Spec Top:Speech Communication

General

College/School
Interdisciplinary Studies

Course Title
Spec Top:Speech Communication

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5602

Credit Hours

Credit Hours Min
2

Course Description
Prerequisites: Graduate-level status. May be repeated to a maximum of 9 hours with change in course content. Presentation of directed, individual research in selected topics in speech communication beyond regular course offerings. Subjects will vary and will be specified at time of offering.

COMM5603 - Spec Top:Speech Communication

General

College/School
Interdisciplinary Studies

Course Title
Spec Top:Speech Communication

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5603

Credit Hours

Credit Hours Min
3

Course Description
Prerequisites: Graduate-level status. May be repeated to a maximum of 9 hours with change in course content. Presentation of directed, individual research in selected topics in speech communication beyond regular course offerings. Subjects will vary and will be specified at time of offering.

COMM5610 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5610

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Seminar or lecture course on a selected topic, issue, or interest area in Communication Studies not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

COMM5620 - Advanced Public Speaking

General

College/School
Interdisciplinary Studies

Course Title
Advanced Public Speaking

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5620

Credit Hours

Credit Hours Min
3

Course Description
Advanced oral communications as practiced from the platform, with emphasis on special types of speaking. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** COMM2025 Fundamentals of Communication.

COMM5630 - Persuasion

General

College/School
Interdisciplinary Studies

Course Title
Persuasion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
5630

Credit Hours

Credit Hours Min
3

Course Description
Promotes intellectual understanding and critical application of how individuals and groups influence the attitudes, beliefs, and behaviors of others. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** COMM2025 Fundamentals of Communication or consent of instructor.

COMM6200 - Communication Strategies for Virtual Teams

General

College/School
Interdisciplinary Studies

Course Title
Com Strat for Virtual Teams

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COMM

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to explain the theoretical concepts of computer-mediated communication and team work for virtual teams. Students will learn to interact and lead virtual teams. Special focus will be on utilizing mediated channels (virtual meeting software, web, etc.) for remote employees and leaders.

COMM6610 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COMM

Course Number
6610

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Seminar or lecture course on a selected topic, issue, or interest area in Communication Studies not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

COMM6700 - Conflict Mgmt & Negotiation

General

College/School
Interdisciplinary Studies

Course Title
Conflict Mgmt & Negotiation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COMM

Course Number
6700

Credit Hours

Credit Hours Min
3

Course Description
Negotiation and Conflict Management presents negotiation theory—strategies and styles—within an employment context. A different topic will be presented each week. Students practice negotiating and learn how to negotiate in difficult situations.

COMM6998 - Professional Project

General

College/School
Interdisciplinary Studies

Course Title
Professional Project

Academic Level (Course Level)
Graduate

Course Subject Code
COMM

Course Number
6998

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

JOUR5030 - Field Exp/Event Mgmt/Promotion

General

College/School
Interdisciplinary Studies

Course Title
Field Exp/Event Mgmt/Promotion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5030

Credit Hours

Credit Hours Min
3

Course Description
This course will provide students with the opportunity to implement skills learned to manage and promote an actual event, either in pairs or small groups.

Requisites

Simple Requisites

> **Prerequisite:** Consent of Instructor. COMM3030 Principles of Event Planning(JOUR3030 Principles of Event Planning) and COMM3040 Event Planning/Risk Management(JOUR3040 Event Planning/Risk Management).

JOUR5230 - Free Lance Writing

General

College/School
Interdisciplinary Studies

Course Title
Free Lance Writing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5230

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: JOUR 2200 is a prerequisite for all other journalism courses. Writing and marketing of feature stories, commentaries, and articles.

JOUR5360 - Magazine Prod & Design

General

College/School
Interdisciplinary Studies

Course Title
Magazine Prod & Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5360

Credit Hours

Credit Hours Min
3

Course Description
Current trends in magazine production and design. (Same as PC 4360 (5360)). Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

JOUR5460 - Pub Relations-Cases/Pract

General

College/School
Interdisciplinary Studies

Course Title
Pub Relations-Cases/Pract

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5460

Credit Hours

Credit Hours Min
3

Course Description
Practical aspects of public relations emphasized. Case studies considered. Builds on knowledge and expertise acquired in JOUR 3460. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** JOUR 3460 and either JOUR3350 Newspaper Production/Dsgn or JOUR4360 Magazine Production/Dsgn(JOUR5360 Magazine Prod & Design)

JOUR5500 - Adv Multimedia Storytelling

General

College/School
Interdisciplinary Studies

Course Title
Adv Multimedia Storytelling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5500

Credit Hours

Credit Hours Min
3

Course Description
Class hashtag: #TTUjournalism Teaching Methods and Instructional Materials: Lecture, hands-on media production, group projects,iLearnSpecial Instructional Platform/Materials: Smartphone with video camera capability and a portable harddrive (500 GB or larger) or flash drive (16 GB or larger) to transport your files to and from labs. An SDcard (16 GB or larger) is also recommended for photography and video assignments.

Requisites

Simple Requisites

> **Prerequisite:** JOUR2200 Mass Comm/Changing Society, JOUR2220 News Reporting & Copy Editing, and a "C" or higher in JOUR3500 Multimedia Storytelling (or consent of instructor)

JOUR5710 - Literary Journalism

General

College/School
Interdisciplinary Studies

Course Title
Literary Journalism

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5710

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: JOUR 2200 and JOUR 2220. Instruction in the form of the literary essay- both short and book length - through both reading and writing literary essays. Course may be repeated for credit provided content is different.

JOUR5820 - Advanced Reporting

General

College/School
Interdisciplinary Studies

Course Title
Advanced Reporting

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5820

Credit Hours

Credit Hours Min
3

Course Description
Writing and reporting for the commercial media. Students will serve as reporters for the campus newspaper. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** JOUR 3220. JOUR2220 News Reporting & Copy Editing.

JOUR5830 - Feature Writing

General

College/School
Interdisciplinary Studies

Course Title
Feature Writing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5830

Credit Hours

Credit Hours Min
3

Course Description
Writing and marketing of feature stories, commentaries, and articles. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** JOUR2220 News Reporting & Copy Editing. Recommended: JOUR4820 Advanced Reporting (JOUR5820 Advanced Reporting).

JOUR5840 - Spec Prob in Journalism

General

College/School
Interdisciplinary Studies

Course Title
Spec Prob in Journalism

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5840

Credit Hours

Credit Hours Min
3

Course Description
Independent work in mass media research and report writing, or internship programs in print or electronic media, public relations, and other areas. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Senior standing or consent of instructor.

JOUR5843 - Special Problems

General

College/School
Interdisciplinary Studies

Course Title
Special Problems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
5843

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Senior standing or consent of instructor. JOUR 2200 is a prerequisite for all other journalism courses. Independent work in mass media research and/or writing related to student academic and career goals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

JOUR5846 - Special Problems

General

College/School
Interdisciplinary Studies

Course Title
Special Problems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
5846

Credit Hours

Credit Hours Min
6

Course Description
Prerequisite: Senior standing or consent of instructor. JOUR 2200 is a prerequisite for all other journalism courses. Independent work in mass media research and/or writing related to student academic and career goals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

JOUR5849 - Special Problems

General

College/School
Interdisciplinary Studies

Course Title
Special Problems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
5849

Credit Hours

Credit Hours Min
9

Course Description
Prerequisite: Senior standing or consent of instructor. JOUR 2200 is a prerequisite for all other journalism courses. Independent work in mass media research and/or writing related to student academic and career goals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

JOUR5853 - Internship

General

College/School
Interdisciplinary Studies

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
5853

Credit Hours

Credit Hours Min
3

Course Description
Part-time or full-time employment in a business, industrial, or institutional communications setting related to student academic and career goals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** JOUR2200 Mass Comm/Changing Society is a prerequisite for all other journalism courses.

JOUR5856 - Internship

General

College/School
Interdisciplinary Studies

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
5856

Credit Hours

Credit Hours Min
6

Course Description
Part-time or full-time employment in a business, industrial, or institutional communications setting related to student academic and career goals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** JOUR2200 Mass Comm/Changing Society is a prerequisite for all other journalism courses.

JOUR5859 - Internship

General

College/School
Interdisciplinary Studies

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
5859

Credit Hours

Credit Hours Min
9

Course Description
Part-time or full-time employment in a business, industrial, or institutional communications setting related to student academic and career goals. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** JOUR2200 Mass Comm/Changing Society is a prerequisite for all other journalism courses.

JOUR5860 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5860

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

> **Prerequisites:** None

JOUR5861 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5861

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR5862 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5862

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR5863 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5863

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR5864 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5864

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR5865 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5865

Credit Hours

Credit Hours Min

3

Course Description

Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR5866 - Special Topics

General

College/School

Interdisciplinary Studies

Course Title

Special Topics

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

JOUR

Course Number

5866

Credit Hours

Credit Hours Min

3

Course Description

Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR5867 - Special Topics

General

College/School

Interdisciplinary Studies

Course Title

Special Topics

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

JOUR

Course Number

5867

Credit Hours

Credit Hours Min

3

Course Description

Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR5868 - Special Topics

General

College/School

Interdisciplinary Studies

Course Title

Special Topics

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

JOUR

Course Number

5868

Credit Hours

Credit Hours Min

3

Course Description

Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR5869 - Special Topics

General

College/School

Interdisciplinary Studies

Course Title

Special Topics

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

JOUR

Course Number

5869

Credit Hours

Credit Hours Min

3

Course Description

Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Tennessee Technological University

Requisites

Simple Requisites

Prerequisites: None

JOUR5870 - Independent Study

General

College/School
Interdisciplinary Studies

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
JOUR

Course Number
5870

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
Independent study of an approved topic (area) within mass media research and/or writing related to student academic and career goals under the supervision of a member of the journalism faculty. Up to nine credit hours may be earned by independent study.

Requisites

Simple Requisites

Prerequisite: Senior standing or consent of instructor and JOUR2200 Mass Comm/Changing Society.

JOUR5871 - Independent Study

General

College/School
Interdisciplinary Studies

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5871

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
Independent study of an approved topic (area) within mass media research and/or writing related to student academic and career goals under the supervision of a member of the journalism faculty. Up to nine credit hours may be earned by independent study.

Requisites

Simple Requisites

Prerequisite: Senior standing or consent of instructor and JOUR2200 Mass Comm/Changing Society.

JOUR5872 - Independent Study

General

College/School
Interdisciplinary Studies

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5872

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
Independent study of an approved topic (area) within mass media research and/or writing related to student academic and career goals under the supervision of a member of the journalism faculty. Up to nine credit hours may be earned by independent study.

Requisites

Simple Requisites

Prerequisite: Senior standing or consent of instructor and JOUR2200 Mass Comm/Changing Society.

JOUR5930 - Advanced Copy Editing

General

College/School
Interdisciplinary Studies

Course Title
Advanced Copy Editing

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5930

Credit Hours

Credit Hours Min
3

Course Description
Additional training in editing copy. Laboratory work may be required on the university student newspaper. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: JOUR2220 News Reporting & Copy Editing

JOUR5940 - Technical Editing

General

College/School
Arts and Sciences

Course Title
Technical Editing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
5940

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: JOUR 4930 (5930) , ENGL 3250 , and ENGL 4970 (5970) . JOUR 2200 is a prerequisite for all other journalism courses. Principles and practices of technical editing. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

JOUR6450 - PR Management

General

College/School
Interdisciplinary Studies

Course Title
PR Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
6450

Credit Hours

Credit Hours Min
3

Course Description
This program is meant to introduce many of the key aspects of public relations management through the readings of and understanding of public relations principles and case studies.

JOUR6770 - Media Law and Ethics

General

College/School
Interdisciplinary Studies

Course Title
Media Law and Ethics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
6770

Credit Hours

Credit Hours Min
3

Course Description
This course explores the legal and ethical considerations for leadership and decision-making in communication and media settings.

Requisites

Simple Requisites

> **Prerequisites:** None

JOUR6860 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6860

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

> **Prerequisites:** None

JOUR6861 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
JOUR

Course Number
6861

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

> **Prerequisites:** None

JOUR6862 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6862

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

> **Prerequisites:** None

JOUR6863 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6863

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

> **Prerequisites:** None

JOUR6864 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6864

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

> **Prerequisites:** None

JOUR6865 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6865

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

> **Prerequisites:** None

JOUR6866 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6866

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR6867 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6867

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR6868 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6868

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR6869 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6869

Credit Hours

Credit Hours Min
3

Course Description
Seminar or lecture course n a selected topic. issue, or interest area in journalism not covered in existing courses. Course may be repeated for credit under a different subtitle, up to nine hours of credit.

Requisites

Simple Requisites

Prerequisites: None

JOUR6870 - Social Media Campaigns

General

College/School
Interdisciplinary Studies

Course Title
Social Media Campaigns

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
JOUR

Course Number
6870

Credit Hours

Credit Hours Min
3

Course Description
This course is dedicated to exploring the new emerging technologies and media influencing business, marketing, public relations, and advertising practices and research. This course will acquaint you with practical knowledge and analytical

skills necessary to create, evaluate, and execute social media and mobile campaigns. This course will also provide lectures, iconic and current case studies using social media and mobile, group and individual assignments, and engaged activities that will help you in developing a strong social media skill set.

JOUR6998 - Professional Project

General

College/School
Interdisciplinary Studies

Course Title
Professional Project

Academic Level (Course Level)
Graduate

Course Subject Code
JOUR

Course Number
6998

Credit Hours

Credit Hours Min
3

Course Description
The Professional Project is the last requirement for the MPS Degree, serving as the integrative culmination of the program of study. It should be a substantial piece of independent research or a significant professional project that is logically consistent with the theme and content of the program of study. Student's work should demonstrate familiarity with and understanding of a body of professional literature related to a specific topic. The Project should grow out of the program of study and should demonstrate the student's ability to use the knowledge gained from this program of study.

SPCH5000 - Intro/Communcation Disorders

General

College/School
Arts and Sciences

Course Title
Intro/Communcation Disorders

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPCH

Course Number
5000

Credit Hours

Credit Hours Min
3

Course Description
Principles of and therapeutic approaches to speech, language, and hearing disorders. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

SPCH5150 - Spch & Lang Acquisition-Dev

General

College/School
Arts and Sciences

Course Title
Spch & Lang Acquisition-Dev

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPCH

Course Number
5150

Credit Hours

Credit Hours Min
3

Course Description
Normal speech/language development, anatomy of speech structures, distinctive features and implications of process and analysis systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

SPCH5430 - Interpersonal Communication

General

College/School
Arts and Sciences

Course Title
Interpersonal Communication

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPCH

Course Number
5430

Credit Hours

Credit Hours Min
3

Course Description
Communication theory applied to informal and face-to-face situations. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

SPCH5620 - Advanced Public Speaking

General

College/School
Arts and Sciences

Course Title
Advanced Public Speaking

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPCH

Course Number
5620

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: SPCH 2410. Advanced oral communications as practiced from the platform, with emphasis on special types of speaking. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

SPCH5630 - Persuasion

General

College/School
Arts and Sciences

Course Title
Persuasion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number	
SPCH	5630	

Course Description
Prerequisite: SPCH 2410 or consent of instructor. Promotes intellectual understanding and critical application of how individuals and groups influence the attitudes, beliefs, and behaviors of others. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Credit Hours

Credit Hours Min
3

Computer Science Department

The Department offers a Master of Science in Computer Science (MSCS) and a specialization in Computer Science within the PhD program in the College of Engineering.

The MSCS is available to students in the form of three options: *thesis, project, and coursework-only*. All students take a 1-hour graduate seminar. Those who select the thesis option take 6 credit hours of research in addition to 24 hours of approved graduate coursework. Students taking the project option take 3 credit hours of project work in addition to 30 hours of approved graduate coursework, and students in the coursework-only option take 3 credit hours of independent study in addition to a minimum of 30 hours of approved graduate coursework.

Students can pursue a PhD with specialization in Computer Science, through the College of Engineering PhD Program. The purpose of the PhD Program is to provide students with an opportunity for advanced studies and research in the field of engineering. As a research-based degree, the focus is on developing the independent learning skills of students in preparation for advanced- level, research-focused employment in industry or academia.

The faculty are active in a wide variety of research areas, and interested students should refer to the departmental web-site for specific details. The mission of the CS department, consistent with the mission of the University and the College of Engineering, is

To be widely recognized for enabling students to have global impact though innovative, quality programs and research that emphasizes collaborative partnerships and the success of a diverse student, faculty, and alumni community.

Programs

CSC-MS - Computer Science - M.S.

Program Overview

Program Long Title
Computer Science - M.S.

College/School
Engineering

Department(s)
Computer Science

Catalog Full Description
The Department offers a Master of Science in Computer Science (MSCS) and a specialization in Computer Science within the PhD program in the College of Engineering.

The MSCS is available to students in the form of three options: thesis, project, and coursework-only. All students take a 1-hour graduate seminar. Those who select the thesis option take 6 credit hours of research in addition to 24 hours of approved graduate coursework. Students taking the project option take 3 credit hours of project work in addition to 30 hours of approved graduate coursework, and students in the coursework-only option take 3 credit hours of independent study in addition to a minimum of 30 hours of approved graduate coursework.

The faculty are active in a wide variety of research areas, and interested students should refer to the departmental website for specific details. The mission of the CS department, consistent with the mission of the University and the College of Engineering, is:

To be widely recognized for enabling students to have global impact though innovative, quality programs and research that emphasizes collaborative partnerships and the success of a diverse student, faculty, and alumni community.

Degree Requirements

Thesis Option

- **Core Required Course:** 1 hour
- **Advisor Approved Electives*:** 24 hours
- **Research Requirement:** 6 hours
- **Total Degree Requirements:** 31 hours

Project Option

- **Core Required Course:** 1 hour
- **Advisor Approved Electives*:** 27 hours
- **Non-Thesis Project Requirement:** 6 hours

- **Total Degree Requirements:** 34 hours

Courses Only Option

- **Core Required Course:** 1 hour
- **Advisor Approved Electives*:** 30 hours
- **Courses Only Requirement:** 3 hours
- **Total Degree Requirements:** 34 hours

Admission Requirements

Admission Requirements
An applicant for admission to the College of Engineering is expected to have earned a BS degree from an approved program, or its equivalent.

Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department: *undergraduate GPA of at least 3.0 on a 4.0 scale,

*GRE® General Test (GRE) scores with Quantitative greater than or equal to 50%; Verbal greater than or equal to 33%; Analytical Writing greater than or equal to 33%. Students with BS degrees in related fields from TTU are not required to take the GRE.

*Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

*Availability of appropriate faculty to serve as research advisor(s).

*Participation in undergraduate research.

*Post-BS degree professional experience relevant to planned degree of study.

*Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission.

Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Note: The program is designed for graduates of approved undergraduate programs. Thus, a baccalaureate degree in computer science is required for full standing. Applicants that have an undergraduate degree in a closely related field will be evaluated on a case-by-case basis and may be admitted to full standing upon completion of identified background courses.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Departmental Degree Requirements

To receive a Master of Science (MS) degree in Computer Science (CS) the student should complete all the MS requirements specified by the University and the College of Engineering. Additionally, certain specific departmental requirements are listed on the corresponding departmental website. A student has the option of a Thesis or Non-Thesis degree program.

Thesis Option

The Thesis option requires 31 semester credit hours of graduate work, including 24 hours of coursework, one hour of graduate seminar (CSC6910 Computer Science Seminar) and 6 hours of graduate thesis (CSC6990 Research & Thesis). The thesis requirement includes research, the findings of which must be submitted in writing subject to the policies and satisfaction of the Graduate School and the advisory committee. In addition, each student must pass a defense of his/her research work before the advisory committee. The advisory committee shall consist of at least three members, two of which must be from the CS department, including being chaired or co-chaired by a CS faculty member.

Degree Requirements

- **Core Required Course:** 1 hour
- **Advisor Approved Electives*:** 24 hours
- **Research Requirement:** 6 hours
- **Total Degree Requirements:** 31 hours

* Advisor Approved Electives may be selected from CSC 5000, 6000, 7000 level courses, with a maximum of 9 hours at the 5000 level.

Project Option

The Project Option requires 34 semester credit hours of graduate work, including 27 hours of coursework, one hour of graduate seminar (CSC6910 Computer Science Seminar)and 6 hours graduate project (CSC6980 Masters Project) For the Project Option, each student must pass a defense of her/his project work before the advisory committee. The advisory committee shall consist of at least three members, two of which must be from the CS department, including being chaired or co-chaired by a CS faculty member.

Degree Requirement

- **Core Required Course:** 1 hour
- **Advisor Approved Electives*:** 27 hours
- **Non-Thesis Project Requirement :** 6 hours
- **Total Degree Requirements:** 34 hours

* Advisor Approved Electives maybe selected from CSC 5000, 6000, 7000 level courses with a maximum of 9 hours at the 5000 level.

Courses Only Option

The Courses Only Option requires 34 semester credit hours of graduate work, including 30 hours of coursework, one hour of graduate seminar CSC6910 Computer Science Seminar) and 3 hours of directed independent study (CSC6803 Directed Independent Study or CSC7980 Directed Study). For the Courses Only Option, each student must pass a comprehensive exam administered by the advisory committee. The advisory committee shall consist of at least three members, two of which must be from the CS department, including being chaired or co-chaired by a CS faculty member.

Degree Requirement

- **Core Required Course:** 1 hour
- **Advisor Approved Electives*:** 30 hours
- **Courses Only Requirement:** 3 hours
- **Total Degree Requirements:** 34 hours

* Advisor Approved Electives maybe selected from CSC 5000, 6000, 7000 level courses with a maximum of 9 hours at the 5000 level.

Thesis Option (31 hours)
Type
Completion Requirement

Core Required Course (1 hour)

Complete ALL of the following Courses:
- CSC6910 - Computer Science Seminar

Advisor Approved Electives (24 hours)

Selection of appropriate courses (CSC 5000, 6000, 7000 level, DS 5260, DS 5125, MATH 6170, MATH 6360, or MATH 6700) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Research Requirement (6 hours)

Complete ALL of the following Courses:
- CSC6990 - Research & Thesis

Additional Comments:

Project Option (34 hours)
Type
Completion Requirement

Core Required Course (1 hour)

Complete ALL of the following Courses:
- CSC6910 - Computer Science Seminar

Advisor Approved Electives (27 hours)

Selection of appropriate courses (CSC 5000, 6000, 7000 level, DS 5260, DS 5125, MATH 6170, MATH 6360, or MATH 6700) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Project Requirement (6 hours)

Complete ALL of the following Courses:
- CSC6980 - Masters Project

Additional Comments:

Courses Only Option (34 hours)
Type
Completion Requirement

Core Required Course (1 hour)

Complete ALL of the following Courses:
- CSC6910 - Computer Science Seminar

Advisor Approved Electives (30 hours)

Selection of appropriate courses (CSC 5000, 6000, 7000 level, DS 5260, DS 5125, MATH 6170, MATH 6360, or MATH 6700) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Courses Only Requirement (3 hours)

Complete ALL of the following Courses:
- CSC6803 - Directed Independent Study
  OR CSC7980 - Directed Study

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU undergraduates to accumulate up to seven (7) credit hours of graduate coursework while still pursuing their undergraduate degree and to transition to the Computer Science graduate program smoothly, with accelerated completion.

Up to six (6) hours of graduate coursework, exclusive of directed study, can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University and must be approved as appropriate substitutions in the undergraduate curriculum.

The minimum requirements for acceptance to the Fast Track program are:

• Enrolled as TTU Undergraduate with junior or senior standing.

• Completed CSC 2400.

• Overall GPA of at least 3.25 and a GPA for CSC courses of at least 3.5. Fulfilling the above minimum requirements does not guarantee acceptance into the Computer Science Fast Track program. Students who meet the above minimum requirements must consult with the Computer Science department for eligibility and acceptance.

Once accepted in the Fast Track program, students should be aware of the following:

• Program participants should consult with their future M.S. advisor regarding appropriate graduate courses to take during their junior/senior year.

• The student must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.S. program of study.

• All requirements for full admission to Graduate School must be met upon graduation.

• Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

ENGR-DCSC - Engineering, Computer Science Concentration, Ph.D.

Program Overview

Program Long Title
Engineering, Computer Science Concentration, Ph.D.

College/School   **Department(s)**
Engineering   Computer Science

Catalog Full Description
Students can pursue a PhD with specialization in Computer Science, through the College of Engineering PhD Program. The purpose of the PhD Program is to provide students with an opportunity for advanced studies and research in the field of engineering. As a research-based degree, the focus is on developing the independent learning skills of students in preparation for advanced- level, research-focused employment in industry or academia.

The faculty are active in a wide variety of research areas, and interested students should refer to the departmental web-site for specific details. The mission of the CS department, consistent with the mission of the University and the College of Engineering, is

To be widely recognized for enabling students to have global impact though innovative, quality programs and research that emphasizes collaborative partnerships and the success of a diverse student, faculty, and alumni community.

Admission Requirements

Admission Requirements
The basic admission standards for the Ph.D. program are the same as for the Master of Science in Engineering (see requirement list below), in addition, an applicant is expected to have completed an MS degree in an academic area appropriate to the proposed area of study and to have earned an MS GPA of at least 3.5 on a 4.0 scale. A GRE score is not required for applicants to the PhD in Engineering with a Computer Science concentration if an applicant's undergraduate degree or Master's degree is from a U.S.-based institution.

Though the general requirement for admission to the Ph.D. program is a master's degree in an appropriate discipline, students with a bachelor's degree may be admitted to the Ph.D. program directly on exceptional basis, provided the applicant has a record of excellent academic performance in an appropriate engineering program undergraduate program. The applicant's test scores, personal recommendations, and relevant work experience must indicate a high potential for success in doctoral studies and research. In addition, factors such as appropriateness of the applicant's research objectives to the research interests of the program faculty, availability of faculty to supervise the applicant's research, and prior research accomplishments of the applicant will also influence the admission decision.

Fulfilling the minimum requirement does not guarantee admission; an applicant who does not meet the above minimum, but appears to have reasonable potential for success as a Ph.D. student, may be admitted to provisional standing. His/her status may be changed to full standing after satisfying requirements specified by the Associate Dean of Engineering for Graduate Studies and Research, in consultation with the appropriate departmental chairperson, at the time of admission.

If admitted in provisional standing at either the MS or Ph.D. level, the student must remove all deficiencies and apply for reclassification to full standing prior to the completion of 15 graduate hours.

Sometimes a master's-level student takes more graduate-level courses than are required for the degree because the student is expecting to continue on to the Ph.D. program and hopes to use the extra courses to satisfy the Ph.D. coursework requirement. When this is the case, the student can request when registering for the course(s) that the course(s) be "banked" for the Ph.D. program. If the student lacks no more than 12 semester hours on the master's degree, he/she may accumulate a maximum of nine (9) semester hours which may be applied toward the Ph.D. When this is the case, the student's advisory committee must initiate

approval via memo with consensus of the departmental chairperson, dean of the college, and the Associate Dean of Graduate Studies. Banked courses then show up on the student's transcript as courses taken for the Ph.D. rather than being shown as a part of his/her M.S. program. Banking course does not guarantee admission to the Ph.D. program, or, if admitted, that the student's Ph.D. advisory committee will approve the course as part of the student's Ph.D. program of study.

MS Engineering Program Admission Requirements

An applicant for admission to any of the MS programs offered by the departments of the College of Engineering is expected to have earned a BS degree from an approved program, or its equivalent. Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department:

- undergraduate GPA of at least 3.0 on a 4.0 scale,

- GRE® General Test (GRE) scores with Quantitative greater than or equal to 150 (50%); Verbal greater than or equal to 147 (33%); Analytical Writing greater than or equal to 3.5 (33%). Students with BS degrees in related fields from Tennessee Tech are not required to take the GRE.

- Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

- Availability of appropriate faculty to serve as research advisor(s).

- Participation in undergraduate research.

- Post-BS degree professional experience relevant to planned degree of study.

- Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

- International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission. Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Doctor of Philosophy Degree Requirements

The Ph.D. is a research degree. The minimum requirements for a Ph.D. degree in the College of Engineering stated below are the same for all departments. Each department may include additional degree requirements for students pursuing specialization in that department.

Students Admitted with a Master's Degree

1. A minimum of 48 credits of course work and doctoral research and dissertation as follows:

A. A minimum of eighteen (18) credit hours of course work beyond the master's degree, acceptable to the student's advisory committee. Additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department. No 5000-level courses are to be used to meet the minimum requirements of course work.

B. A minimum of twenty four (24) credit hours of doctoral research and dissertation built upon the student's course of study and making a significant contribution to the state of knowledge or to the art of the engineering profession, is required; not more than nine (9) credit hours may be earned in a particular semester.

2. Residence of four (4) semesters beyond the master's degree, with at least two (2) semesters in continuous residence, is required. All requirements, including the dissertation, must be completed within a period of eight (8) consecutive years.

3. Maintenance of a minimum quality point average of 3.0 and adherence to the general regulations of the College of Graduate Studies are expected. All students in the program must follow a plan of study and research developed in conjunction with an advisory committee, satisfactorily complete a comprehensive examination, achieve candidacy, and satisfactorily defend their dissertation.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Degree Program

A student admitted with a bachelor's degree on exceptional basis must successfully complete a qualifying examination based mostly on undergraduate materials before the end of the second semester of enrollment. Students with a Bachelor of Science (B.S.) degree from ABET-accredited programs are exempted from this examination. Other students without such a degree, or M.S. students without an ABET-accredited B.S. degree, switching to direct Ph.D. will have to take a qualifying exam through a formal process established by the department. The process should include at a minimum an examination of the student's fundamental knowledge managed by the Graduate Committee of the department.

Based on the student's performance on the qualifying examination, the student may be (i) permitted to continue in the doctoral program, or (ii) advised to transfer to an M.S. degree program in an appropriate discipline in the college, or (iii) recommended for termination from the graduate program of the college.

If permitted to continue in the doctoral program, the student, as described elsewhere in the catalog, will select a research advisor, form an advisory committee, and submit a program of study satisfying the following requirements.

The program of study should have a minimum total of seventy two (72) credit hours of academic work, consisting of course work and dissertation work, beyond baccalaureate work, subject to the following:

• The program of study should include a minimum of forty two (42) credit hours of appropriate graduate level course work consisting of a maximum of nine (9) credit hours at the 5000-level, acceptable to the student's advisory committee.

• It should also include an additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department.

• A minimum of 24 credit hours of doctoral research and dissertation, built upon the student's course of study and making significant contribution to the state of knowledge and the art of the engineering profession, is required; no more than nine (9) credit hours may be earned in a particular semester.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Program Earning a Non-thesis M.S. en route

All conditions stated above for the students admitted directly into the Ph.D. program apply. In addition: Nine (9) credit hours will count toward the non-thesis M.S. degree and toward the Ph.D. degree. If the departmental non-thesis M.S. requires a three (3) credit hour non-thesis project course, those three (3) credit hours can be counted as three (3) credit hours of dissertation research toward the Ph.D. degree. Six (6) credit hours of M.S. coursework can be counted

toward the Ph.D. coursework. If no project course is required for the non-thesis M.S., then nine (9) credit hours of M.S. coursework can be counted toward the Ph.D.

Limitation on Graduate Assistantships

It is expected that a full-time, post master's Ph.D. Engineering student should be able to achieve candidacy within the first three (3) calendar years after enrollment, and a direct admit Ph.D. Engineering student after four (4) calendar years. If candidacy is not achieved within the aforementioned periods, a student must request and receive approval for an extension of assistantship following the College of Engineering's established procedure. An extension may be granted by the Associate Dean of Engineering for Research and Innovation. This limitation is regardless of student funding or the source of support for the student.

Students Admitted with a Master's Degree

Type
Completion Requirement

Courses are defined by the student's committee

Advisor Approved Coursework: 18 hours
Concentration coursework: 6 hours
Research and Dissertation (7990 courses): 24 hours
Total Degree Requirements: 48 hours

Complete ALL of the following :
These :

No selection provided

Additional Comments:

Direct Admit from BS to PhD
Type
Completion Requirement

Direct Admit from BS to PhD

Advisor Approved Coursework (maximum 9 credit hours at 5000 level): 42 hours
Concentration coursework: 6 hours
Research and Dissertation (7990 course): 24 hours
Total Degree Requirements: 72 hours

Complete ALL of the following :

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

Courses

CSC5010 - Programming Languages

General

College/School
Engineering

Course Title
Programming Languages

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5010

Credit Hours

Credit Hours Min
3

Course Description
Concepts distinguishing modern programming languages with emphasis on language design, implementation, and run-time behavior. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CSC 2710, 3410. C or better in CSC 3410 and CSC 3710.

CSC5020 - Compiler Construction

General

College/School
Engineering

Course Title
Compiler Construction

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5020

Credit Hours

Credit Hours Min
3

Course Description
Programming language translator design with emphasis on design concepts, parsing, code generation, tools, and code improvement; construction of a small compiler. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: CSC 2710, 3410. C or better in CSC 3410 and CSC 3710.

CSC5100 - Operating Systems

General

College/School
Engineering

Course Title
Operating Systems

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5100

Credit Hours

Credit Hours Min
3

Course Description
A historical perspective of operating systems; overview of modern systems; processor, storage, and process management; virtual memory; deadlocks; concurrent processing and programming; protection; and case studies. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** C or better in CSC 1310 or both CSC2110 Data Structures/ Algorithms and CSC2111 Data Structures/Algorithms Lab; and C or better in CSC3410 Comp Org/Assemb Lang Prog or ECE3130 Microcomputer Systems.

CSC5200 - Computer Networks

General

College/School
Engineering

Course Title
Computer Networks

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5200

Credit Hours

Credit Hours Min
3

Course Description
Data communications and computer networks; network models and protocols; local area networks; and data security. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in CSC 2400.

CSC5220 - Data Mining/Machine Learning

General

College/School
Engineering

Course Title
Data Mining/Machine Learning

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5220

Credit Hours

Credit Hours Min
3

Course Description
Basic concepts of reverse engineering and general techniques used for reverse engineering. Reverse engineering applied to basic static and dynamic analysis ofexecutables, and hands-on exercises using software analysis tools and best practices. Additionaltopics may include the study of malware behavior and techniques that malware uses to thwartdetection and analysis.

Requisites

Simple Requisites

> **Prerequisite:** C or better in CSC2400 Design of Algorithms.

CSC5240 - Artificial Intelligence

General

College/School
Engineering

Course Title
Artificial Intelligence

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5240

Credit Hours

Credit Hours Min
3

Course Description
A unified survey of AI methods and applications; search and problem solving; knowledge representation; methods of reasoning, planning, and uncertainty; learning, perception, and communication; rational agents. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in CSC2400 Design of Algorithms.

CSC5260 - Adv Data Sci & Applications

General

College/School
Engineering

Course Title
Adv Data Sci & Applications

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5260

Credit Hours

Credit Hours Min
3

Course Description
Project-oriented course that exposes the students to advanced data science topics and the real-world application of data science. Students will learn MapReduce/Hadoop, advanced visualization techniques, and a variety of data acquisition tools. Students will also explore issues surrounding data management and data privacy. In addition, students will complete a data science capstone project connected by a theme selected by the instructor, immersing students in the data science exploration of topics in areas such as healthcare, sports, cybersecurity. The course requires students to put into practice advanced data science techniques that address the full data science life cycle.

Requisites

Simple Requisites

> **Prerequisites:** CSC3220 Fundamentals of Data Science, CSC3300 Database Mgmt Systems, and MATH2010 Introduction to Linear Algebra.

CSC5300 - Database Management Systems

General

College/School
Engineering

Course Title
Database Management Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description
Organization and management of large data files; data definition; database models; query languages; crash recovery; concurrency control; case studies. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CSC 2400, 2710.

CSC5310 - Computer Synthesis

General

College/School
Arts and Sciences

Course Title
Computer Synthesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5310

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Algorithmic state machines; synthesis of a simple digital computer; practical architectures; input/output; asynchronous sequential logic. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CSC 3310.

CSC5320 - Computer Architecture

General

College/School
Engineering

Course Title
Computer Architecture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5320

Credit Hours

Credit Hours Min
3

Course Description
Computer systems, the CPU, the control unit, microprogramming, parallel organization, RISC architectures. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CSC3410 Comp Org/Assemb Lang Prog or equivalent.

CSC5400 - Analysis of Algorithms

General

College/School
Engineering

Course Title
Analysis of Algorithms

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5400

Credit Hours

Credit Hours Min
3

Course Description
Analysis techniques; search, traversal, string, and graph algorithms; NP-hard and NP-complete problems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in CSC 2400.

CSC5450 - Intro Auto Theory & Comp

General

College/School
Engineering

Course Title
Intro Auto Theory & Comp

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5450

Credit Hours

Credit Hours Min
3

Course Description
Finite automata; regular sets; context-free languages; pushdown automata; Turing machines; recursive languages; computability; computational complexity. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: CSC 2710. CSC 2400 recommended.

CSC5500 - Comp Architect-Microcomputers

General

College/School
Arts and Sciences

Course Title
Comp Architect-Microcomputers

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5500

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Architecture, organization, and machine language programming of microcomputers; microprocessor architecture; interrupts and I/O; real time applications. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CSC 3410.

CSC5560 - Embedded Software Systems

General

College/School
Arts and Sciences

Course Title
Embedded Software Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5560

Credit Hours

Credit Hours Min
3

Course Description
Prerequisites: CSC 3700, CSC 3310, CSC 3410, CSC 3400. This is a project oriented, senior/graduate level course to introduce students to the core design and engineering ideas that cut across hardware and software domains for the design and development of embedded software systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

CSC5570 - IT Security

General

College/School
Engineering

Course Title
IT Security

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5570

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: C or better in CSC 2500, and in either CSC 2560 or CSC 4200 (5200). This course covers the fundamentals of computer security needed for IT professionals. It is an overview of various technical and administrative aspects of Information Security. It introduces students to assets in typical IT infrastructure, potential threats to assets, common associated vulnerabilities, protection of assets, and response to security incidents.

CSC5575 - Cryptography/Network Security

General

College/School
Engineering

Course Title
Cryptography/Network Security

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5575

Credit Hours

Credit Hours Min
3

Course Description
Course introduces students to the fundamentals of information assurance and cryptographic techniques along with their application to the prevention, detection, and mitigation of cyber threats. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Junior standing and C or better in CSC1310 Data Structures and Algorithms.

CSC5580 - Software Reverse Engineering

General

College/School
Engineering

Course Title
Software Reverse Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5580

Credit Hours

Credit Hours Min
3

Course Description
Basic concepts of reverse engineering and general techniques used for reverse engineering. Reverse engineering applied to basic static and dynamic analysis of malware executables. Study of malware behavior, techniques that malware uses to thwart detection and analysis, and hands-on exercises using malware analysis tools and best practices.u2028

Requisites

Simple Requisites

> **Prerequisites:** CSC2400 Design of Algorithms.

CSC5585 - Software and Systems Security

General

College/School
Engineering

Course Title
Software and Systems Security

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5585

Credit Hours

Credit Hours Min
3

Course Description
This Software and Systems Security course will integrate and implement modern secure software engineering practices into the Computer Science (CS) curriculum. The novelty of the proposed course into the existing CS curriculum is the integration of state-of-the-art software engineering best practices with security engineering, such as automated testing and automated vulnerability assessment.

Requisites

Simple Requisites

> **Prerequisites:** None

CSC5700 - Software Engineering

General

College/School
Arts and Sciences

Course Title
Software Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5700

Credit Hours

Credit Hours Min
3

Course Description

Object-oriented system development, the translation process, coding efficiency, software quality assurance, CASE tools and technology, integration and testing tools, advanced software maintenance environments. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: CSC 3700, or consent of instructor.

CSC5710 - Dsgn/Dev-Human/Web Interface

General

College/School
Engineering

Course Title
Dsgn/Dev-Human/Web Interface

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5710

Credit Hours

Credit Hours Min
3

Course Description

A course in human-computer interaction design and user interface development. It will expose students to tools, techniques, and ideas for designing effective human computer interfaces and discuss practical and legal aspects of accessibility. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: C or better in CSC 1310 or both CSC2110 Data Structures/Algorithms and CSC2111 Data Structures/Algorithms Lab; and C or better in CSC3030 Pract/Prof Issues-Comp Sci or CSC3040 Profsnlsm, Comm, Rsrch in Comp.

CSC5750 - Computer Graphics

General

College/School
Engineering

Course Title
Computer Graphics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5750

Credit Hours

Credit Hours Min
3

Course Description

Prerequisite: MATH 2010 and "C" or better in CSC 2400. Interactive graphical techniques including three-dimensional transformations, hidden surface removal, texture mapping, and shading.

CSC5760 - Parallel Programming

General

College/School
Engineering

Course Title
Parallel Programming

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5760

Credit Hours

Credit Hours Min
3

Course Description

Foundations of parallel computing including the parallel computer architectures, principles of parallel algorithm design, programming for shared and distributed-memory systems, along with GPGPU. Students enrolled in the 5000-level course will be required to complete additional work as state din the syllabus.

Requisites

Simple Requisites

Prerequisite: C or better in CSC 2400 and CSC 2500 and CSC 2510.

CSC5770 - Distributed & Cloud Computing

General

College/School
Engineering

Course Title
Distributed & Cloud Computing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5770

Credit Hours

Credit Hours Min
3

Course Description

This course will cover the concepts in distributed systems including distributed computing, networking, operating systems, cloud, and programming languages. Furthermore, it will examine current applied topics in distributed systems.

Requisites

Simple Requisites

Prerequisites: CSC2400 Design of Algorithms or consent of instructor (graduate).

Corequisite: none..

CSC5800 - Directed Readings-CSC

General

College/School
Engineering

Course Title
Directed Readings-CSC

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5800

Credit Hours

Credit Hours Min
3

Course Description
This course provides for individual study under the direction of a faculty member in developing areas of computer science. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CSC5801 - Directed Readings in CSC

General

College/School
Engineering

Course Title
Directed Readings in CSC

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5801

Credit Hours

Credit Hours Min
3

CSC5802 - Directed Studies in CSC

General

College/School
Engineering

Course Title
Directed Studies in CSC

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5802

Credit Hours

Credit Hours Min
3

CSC5803 - Directed Studies in CSC

General

College/School
Engineering

Course Title
Directed Studies in CSC

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5803

Credit Hours

Credit Hours Min
3

CSC5900 - Special Topics

General

College/School
Engineering

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5900

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

CSC5901 - Special Topics

General

College/School
Engineering

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5901

Credit Hours

Credit Hours Min
1

Course Description

Prerequisite: Consent of instructor. Timely topics in computer science. May be taken multiple times, provided the topic is different.

CSC5902 - Special Topics

General

College/School
Engineering

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5902

Credit Hours

Credit Hours Min
2

Course Description

Prerequisite: Consent of instructor. Timely topics in computer science. May be taken multiple times, provided the topic is different.

CSC5903 - Special Topics

General

College/School
Engineering

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
5903

Credit Hours

Credit Hours Min
3

Course Description

Prerequisite: Consent of instructor. Timely topics in computer science. May be taken multiple times, provided the topic is different.

CSC5955 - Info Assur/Security Case Stu

General

College/School
Arts and Sciences

Course Title
Info Assur/Security Case Stu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
5955

Credit Hours

Credit Hours Min
3

Course Description

This class will follow a dilemma-based case study approach to study IAS related issues such as policies, human factors, evidence gathering, etc.

Requisites

Simple Requisites

> **Prerequisites:** Consent of instructor.

CSC6200 - Secure E-Commerce

General

College/School
Arts and Sciences

Course Title
Secure E-Commerce

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description

Prerequisites: CSC 4200 or consent of instructor. Protocols, methodologies and techniques to design and develop applications for web-based information and transaction processing, encryption and decryption issues in web-based data communication protocols.

CSC6220 - Data Mining

General

College/School
Engineering

Course Title
Data Mining

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6220

Credit Hours

Credit Hours Min
3

Course Description

Preparing data for mining using preprocessing, data warehouses, and OLAP; data mining techniques, including association rule mining, classification/prediction and cluster analysis; study of recent techniques and issues.

Requisites

Simple Requisites

> **Prerequisite:** CSC4220 Data Mining/Machine Learning(CSC5220 Data Mining/ Machine Learning) or CSC4240 Artificial Intelligence(CSC5240 Artificial Intelligence).

CSC6230 - Machine Learning

General

College/School
Engineering

Course Title
Machine Learning

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6230

Credit Hours

Credit Hours Min
3

Course Description
Introduction to machine learning techniques, such as decision tree induction, k-nn classifiers, and clustering. Emphasis on supervised learning, including classification techniques, feature selection, and evaluation techniques. Unsupervised and reinforcement learning will also be covered.

Requisites

Simple Requisites

> **Prerequisite:** CSC4220 Data Mining/Machine Learning(CSC5220 Data Mining/Machine Learning) or CSC4240 Artificial Intelligence(CSC5240 Artificial Intelligence).

CSC6240 - Math/Theory-Machine Lrning

General

College/School
Engineering

Course Title
Math/Theory-Machine Lrning

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6240

Credit Hours

Credit Hours Min
3

Course Description
The purpose of this course is to gain a deeper understanding of the foundational mathematics and theory of machine learning. We will cover a number of mathematical topics that underpin the thinking behind and implementation of machine learning, including topics from linear algebra, probability & statistics, multivariate calculus, information theory, algorithmic analysis, and algorithmic complexity. This includes mathematical frameworks for learning, algorithms for learning concept classes, with an emphasis on proving bounds on the resources (time, space, sample complexity) required by these algorithms, and methods for proving the intractability of certain learning tasks.

Requisites

Simple Requisites

> **Prerequisites:** CSC4400 Analysis of Algorithms (CSC5400 Analysis of Algorithmsor consent of instructor.

CSC6250 - Knowledge-Based/Expert Systems

General

College/School
Engineering

Course Title
Knowledge-Based/Expert Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6250

Credit Hours

Credit Hours Min
3

Course Description
Knowledge-based systems and logic programming, methods of knowledge representation, and inference. Applications to expert systems and intelligent data bases.

Requisites

Simple Requisites

> **Prerequisite:** CSC 5240 or consent of instructor.

CSC6260 - Advanced Topics in A.I.

General

College/School
Engineering

Course Title
Advanced Topics in A.I.

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6260

Credit Hours

Credit Hours Min
3

Course Description
This course will cover a variety of selected topics from the field of artificial intelligence, and their application. Possible topics include advanced pattern recognition, neural networks, expert systems, image processing, and natural language processing.

Requisites

Simple Requisites

> **Prerequisites:** CSC4240 Artificial Intelligence or CSC5240 Artificial Intelligence.

CSC6300 - Advanced Database Systems

General

College/School
Engineering

Course Title
Advanced Database Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6300

Credit Hours

Credit Hours Min
3

Course Description
Advanced concepts in designing database applications, techniques for data storage and retrieval in large databases, etc.

Requisites

Simple Requisites

> **Prerequisites:** CSC4300 Database Mgmt Systems or consent of instructor.

CSC6320 - Adv Computer Architecture

General

College/School
Engineering

Course Title
Adv Computer Architecture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6320

Credit Hours

Credit Hours Min
3

Course Description
Analysis and design of large-scale computer systems, such as pipelined and vector architectures, etc.

Requisites

Simple Requisites

> **Prerequisites:** CSC 4100, CSC 4320, or consent of instructor.

CSC6400 - Adv Analysis of Algorithms

General

College/School
Engineering

Course Title
Adv Analysis of Algorithms

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6400

Credit Hours

Credit Hours Min
3

Course Description
Algorithmic analysis techniques and their application to a wide variety of both fundamental and advanced algorithms with an emphasis on formal techniques; complexity classes; and approximation algorithms.

Requisites

Simple Requisites

> **Prerequisite:** CSC2400 Design of Algorithms or consent of Instructor.

CSC6450 - Adv Theory of Computation

General

College/School
Engineering

Course Title
Adv Theory of Computation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6450

Credit Hours

Credit Hours Min
3

Course Description
A rigorous treatment of the theory of computation. Topics such as: computable functions, the Church-Turing thesis, complexity theory, and P vs NP.

Requisites

Simple Requisites

> **Prerequisite:** Consent of the instructor (previous coursework involving proofs and some programming experience are needed).

CSC6460 - Comp Meth/Graphics & Modeling

General

College/School
Engineering

Course Title
Comp Meth/Graphics & Modeling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6460

Credit Hours

Credit Hours Min
3

Course Description
Mathematical methods for graphics and modeling. Topics such as: 3-D transformations, ray tracing, rendering, image processing, and compression.

Requisites

Simple Requisites

> **Prerequisite:** Consent of the instructor (previous coursework involving proofs and some programming experience are needed).

CSC6570 - Cloud Security Fundmntl/Pract

General

College/School
Engineering

Course Title
Cloud Security Fundmntl/Pract

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6570

Credit Hours

Credit Hours Min
3

Course Description
The course will discuss the fundamentals of cloud computing, architecture, and explore the guiding security design and development principles, security patterns, industry standards, applied technologies and addressing regulatory compliance requirements critical to design, implement, deliver and manage secure cloud-based services. The topics may include but are not limited to Cloud Computing and Internet of Things fundamentals, architectures and security challenges, distributed systems security, formal models for computer security, Security mechanisms in state-of-the-art cloud providers including AWS, Google Cloud, Azure, privacy and ethics, virtual objects or device shadows (Digital Twins) critical infrastructure protection, malware analysis using machine learning, Zero Trust, federated architectures, containers, network security protocols.

Requisites

Simple Requisites

> **Prerequisites:** MS or PhD standing in Computer Science or related programs at TTU.

CSC6575 - Internet Security

General

College/School
Engineering

Course Title
Internet Security

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6575

Credit Hours

Credit Hours Min
3

Course Description
This course studies security-related challenges and solutions in the complex environment of the Internet. Students learn about cyber threats against and protection for Internet elements such as various networking, wireless and web-based protocols, and applications.

Requisites

Simple Requisites

> **Prerequisite:** CSC4575 Cryptography/Network Security/CSC5575 Cryptography/Network Security or consent of instructor.

CSC6580 - Advanced Reverse Engineering

General

College/School
Engineering

Course Title
Advanced Reverse Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6580

Credit Hours

Credit Hours Min
3

Course Description
Review of basic concepts of reverse engineering and general techniques used for reverse engineering, and study of advanced techniques of reverse engineering, which may include techniques for detection and analysis of malware and the study of self-modifying malware and obfuscation techniques.

Requisites

Simple Requisites

> **Prerequisite:** Graduate standing.

CSC6585 - Secure Software Development

General

College/School
Engineering

Course Title
Secure Software Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6585

Credit Hours

Credit Hours Min
3

Course Description
The proposed Secure Software Development course will teach students about the design and development of secure software such that insecure coding patterns and security misconfigurations are mitigated early in the software life cycle. Students will learn about different types of insecure configurations, coding patterns, and

vulnerabilities. They will also get hands-on experience on program analysis techniques, such as fuzzing and static analysis. Furthermore, they will learn about requirements analysis and design of secure software. Upon completion of the course, students will be able to develop their own program analysis tools, which will apply software security knowledge of test systems for security vulnerabilities.

Requisites

Simple Requisites

> **Prerequisites:** None

CSC6590 - Application Security

General

College/School
Engineering

Course Title
Application Security

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6590

Credit Hours

Credit Hours Min
3

Course Description
This course covers techniques to find and exploit various vulnerabilities in programming languages, blockchain-based applications, web applications, and database management systems. Mitigation strategies to prevent software vulnerabilities, including static source code analysis, compiler-based and runtime-based memory protection techniques, database encryption, secure data containers, and code obfuscation are covered, as well. This course also introduces the fundamentals of hardware-based data protection, including Intel® SGX and ARM® TrustZone® technologies.

Requisites

Simple Requisites

> **Prerequisites:** Graduate standing OR C or better in CSC4100 Operating Systems and C or better in CSC4575 Cryptography/Network Security.

CSC6710 - Humn-Comp Intractn/Intrfc Dsgn

General

College/School
Arts and Sciences

Course Title
Humn-Comp Intractn/Intrfc Dsgn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6710

Credit Hours

Credit Hours Min
3

Course Description
Current issues and trends in human-computer interaction design, their evaluation, choice of selection devices and interaction styles, etc.

Requisites

Simple Requisites

> **Prerequisites:** CSC 4010, CSC4700 Software Engineering, or CSC 6700, or consent of instructor.

CSC6720 - Internet Protocols

General

College/School
Engineering

Course Title
Internet Protocols

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6720

Credit Hours

Credit Hours Min
3

Course Description
A detailed introduction to languages, methods, and techniques involved in programming web-based applications, including associated paradigms for web-based development environments and applications, including operating systems related issues.

Requisites

Simple Requisites

> **Prerequisites:** CSC 4010, CSC 6700, or consent of instructor.

CSC6730 - Advanced Networking

General

College/School
Engineering

Course Title
Advanced Networking

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6730

Credit Hours

Credit Hours Min
3

Course Description
Computer network protocols that are usually beyond the scope of a standard course in computer networks. Wireless networks and multimedia networks, advanced topics on network protocols, and readings on selected research papers will be discussed.

CSC6740 - Parallel/Distributed Algorithm

General

College/School
Engineering

Course Title
Parallel/Distributed Algorithm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6740

Credit Hours

Credit Hours Min
3

Course Description
Design and analysis of parallel and distributed algorithms for modern parallel and distributed architectures.

Requisites

Simple Requisites

> **Prerequisites:** CSC4760 Parallel Programming or CSC5760 Parallel Programming or consent of the instructor.

CSC6750 - Parallel Programming

General

College/School
Engineering

Course Title
Parallel Programming

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6750

Credit Hours

Credit Hours Min
3

Course Description
Hands-on experience in implementing various parallel programming techniques on available resources. Introduction to parallel computing architectures and programming paradigms, theoretical and practical aspects of parallel programming and problem solving, functional and data decompositions. Design of parallel algorithms and parallel programming techniques, including POSIX threads. Message passing Interface (MPI, PVM).

Requisites

Simple Requisites

> **Prerequisites:** CSC 2100 and CSC 2400.

CSC6760 - Grid Computing

General

College/School
Engineering

Course Title
Grid Computing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6760

Credit Hours

Credit Hours Min
3

Course Description
Evolution of Grid Computing and its relationship to Cluster Computing, Distributed Computing, Internet Computing, and Peer-to-Peer Computing. Technologies and architectures used to develop Grids test-bed projects using the Globus Toolkit and other software packages. Focus on understanding the different Grid technologies and architectures, such as the Open Grid Specification Architecture (OGSA) and developing higher-level tools using these technologies.

Requisites

Simple Requisites

> **Prerequisite:** CSC 4200/5200.

CSC6770 - Service Oriented Computing

General

College/School
Engineering

Course Title
Service Oriented Computing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6770

Credit Hours

Credit Hours Min
3

Course Description
Advanced concepts in service-oriented computing. Current technologies for designing large scale web services, as well as utilizing enterprise services by combining web services, including transaction management, service discovery, communication, coordination of web services, and collaboration between web services.

Requisites

Simple Requisites

> **Prerequisite:** CSC6720 Internet Protocols.

CSC6780 - Distributed Computing

General

College/School
Engineering

Course Title
Distributed Computing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6780

Credit Hours

Credit Hours Min
3

Course Description

Theories, principles, and practices relevant to the design of distributed systems including synchronization, naming, replication and consistency, file system and security.

Requisites

Simple Requisites

> **Prerequisites:** CSC4100 Operating Systems(CSC5100 Operating Systems) and CSC4200 Computer Networks(CSC5200 Computer Networks).

CSC6800 - Advanced Topics

General

College/School
Engineering

Course Title
Advanced Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6800

Credit Hours

Credit Hours Min
3

Course Description

Prerequisites: Consent of instructor. A directed research course on current issues and topics in Internet-based computing. This course may be repeated in different semesters.

CSC6801 - Directed Independent Study

General

College/School
Engineering

Course Title
Directed Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6801

Credit Hours

Credit Hours Min
1

Course Description

Engage student in independent learning on a selected topic under the guidance of an instructor.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CSC6802 - Directed Independent Study

General

College/School
Engineering

Course Title
Directed Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6802

Credit Hours

Credit Hours Min
2

Course Description

Engage student in independent learning on a selected topic under the guidance of an instructor.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CSC6803 - Directed Independent Study

General

College/School
Engineering

Course Title
Directed Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6803

Credit Hours

Credit Hours Min
3

Course Description

Engage student in independent learning on a selected topic under the guidance of an instructor.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

CSC6901 - Advanced Topics

General

College/School
Engineering

Course Title
Advanced Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6901

Credit Hours

Credit Hours Min
1

Course Description
Prerequisite: Consent of instructor. Advanced topics in computer science. May be repeated for credit if the topic is different.

CSC6902 - Advanced Topics

General

College/School
Engineering

Course Title
Advanced Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6902

Credit Hours

Credit Hours Min
2

Course Description
Prerequisite: Consent of instructor. Advanced topics in computer science. May be repeated for credit if the topic is different.

CSC6903 - Advanced Topics

General

College/School
Engineering

Course Title
Advanced Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6903

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Consent of instructor. Advanced topics in computer science. May be repeated for credit if the topic is different.

CSC6910 - Computer Science Seminar

General

College/School
Engineering

Course Title
Computer Science Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
6910

Credit Hours

Credit Hours Min
1

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

CSC6980 - Masters Project

General

College/School
Engineering

Course Title
Masters Project

Academic Level (Course Level)
Graduate

Course Subject Code
CSC

Course Number
6980

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Prerequisites: Consent of instructor. This course is a requirement for graduate students pursuing the project option. The course is directed by the student's graduate advisor(s).

CSC6990 - Research & Thesis

General

College/School
Engineering

Course Title
Research & Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
6990

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours
Operator
TO

CSC7210 - Anomaly/Intrusion Detect Sys

General

College/School
Engineering

Course Title
Anomaly/Intrusion Detect Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
7210

Credit Hours

Credit Hours Min
3

Course Description
Traditional intrusion and anomaly detection systems, as well as current advances in this ever-growing field. The application of anomaly detection to a wide-range of domains, including fraud, insider threats, and time-series data will be investigated in-depth, as well as network attacks and the systems for detecting oddities such as network intrusions and denial of service attacks. This course will not only cover the subjects through readings, but also through hands-on experience.

Requisites

Simple Requisites

> **Prerequisite**: CSC 6220 or CSC6230 Machine Learning

CSC7240 - Intelligent Information Sys

General

College/School
Engineering

Course Title
Intelligent Information Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
7240

Credit Hours

Credit Hours Min
3

Course Description
Combines fundamental research in artificial intelligence with application-oriented research in knowledge discovery, decision-support systems, and adaptive computing.

Requisites

Simple Requisites

> **Prerequisite**: CSC 6220 or CSC6230 Machine Learning

CSC7560 - Adv Ntwrk/Nxt Gen Intrn Protoc

General

College/School
Engineering

Course Title
Adv Ntwrk/Nxt Gen Intrn Protoc

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
7560

Credit Hours

Credit Hours Min
3

Course Description
The proposed Advanced Networking and Next Generation Internet Protocols course will teach students about the Internet and the technologies and protocols that build it. This class will draw on the past to project on the future of the Internet. By studying the seminal works of the Internet pioneer, the students will understand the rationale behind the design of the Internet, how the massive success of the Internet has exposed its architectural shortcomings, and understand the future research directions that address these challenges. They will pick a real-world problem in consultation with the instructor and utilize cutting-edge networking to solve it.

Requisites

Simple Requisites

> **Prerequisite**: None

CSC7570 - AI Assisted Cyber Security

General

College/School
Engineering

Course Title
AI Assisted Cyber Security

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSC

Course Number
7570

Credit Hours

Credit Hours Min
3

Course Description
This course introduces students to the research challenges and opportunities at the intersection of cybersecurity and artificial intelligence (AI). It focuses on a range of topics and research in the areas of malware, access control, federated learning, and adversarial attacks. Students will learn and have some hands-on experience on cutting edge research in these topics, particularly in malware analysis, read paper and analyze them. The main objective is to let students read peer-reviewed papers to understand and practice state-of-the-art AI for cybersecurity solutions, work in groups to analysis and critique scholarly articles, and spark new research ideas for their research work.

Requisites

Simple Requisites

> **Prerequisites**: MS or PhD Standing in Computer Science or related programs, understanding of cybersecurity basics, AI and ML concepts.

CSC7575 - Cyber-Physical System Security

General

College/School
Engineering

Course Title
Cyber-Physical System Security

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
7575

Credit Hours

Credit Hours Min
3

Course Description
Timely topics related to security issues in modern cyber-physical systems such as smart grids, autonomous vehicles, e-health, etc. topics include system architectures, vulnerabilities, threats, attacks, and defense mechanisms.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

CSC7720 - Distributed Operating Systems

General

College/School
Engineering

Course Title
Distributed Operating Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
7720

Credit Hours

Credit Hours Min
3

Course Description
Computer operating systems that run on multiple, independent central processing units but appear to the user as an ordinary centralized operating system. Principles, design and implementation of distributed operating systems, including network technologies, synchronization, distributed resources management, distributed process management, security, and distributed file systems.

Requisites

Simple Requisites

> **Prerequisite**: Graduate standing or consent of instructor.

CSC7730 - Autonomic Computing

General

College/School
Engineering

Course Title
Autonomic Computing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
7730

Credit Hours

Credit Hours Min
3

Course Description
Introduces principles, key concepts, and proposed methodologies underlying the design and engineering of autonomic computing and networking (AC) systems of autonomic computing systems. Investigates the origins, goals, and promises of autonomic computing. Includes complexity of autonomic computing, architecture, algorithms, enabling technology and development tools for autonomic computing.

Requisites

Simple Requisites

> **Prerequisites**: CSC6780 Distributed Computing or CSC6730 Advanced Networking .

CSC7750 - High Performance Computing

General

College/School
Engineering

Course Title
High Performance Computing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
7750

Credit Hours

Credit Hours Min
3

Course Description
Introduces principles, key concepts, and proposed methodologies used in advanced high performance computing. The future of high performance computing is in exploiting the ever-increasing levels of parallelism. This course will investigate the origins, goals, and techniques of these distributed and parallel systems. The course content will include the architecture, algorithms, techniques, and enabling technology and development tools for high performance computing.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

CSC7970 - Selected Topics

General

College/School
Engineering

Course Title
Selected Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
7970

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: None

CSC7980 - Directed Study

General

College/School
Engineering

Course Title
Directed Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
7980

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: None

CSC7990 - Research and Dissertation

General

College/School
Engineering

Course Title
Research and Dissertation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSC

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Cooperative Education Department

Cooperative Education is a voluntary, independent education program available for all undergraduate and graduate students in any academic area. Work experience is gained with an employer who offers learning opportunities related to a student's academic discipline. The program provides careful supervision with timely evaluation of performance, attitude, and ability of the student on the job. The goal is to help students grow and improve their capabilities.

The co-op program allows a student to obtain on-the-job learning experiences that can increase motivational and conceptual understanding in the classroom. It can provide a realistic evaluation of your career choice along with the opportunity to earn a supplemental income to aid with college expenses.

Courses

COOP5010 - Co-op Off-Campus Assignments

General

College/School
Independent Programs

Course Title
Co-op Off-Campus Assignments

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COOP

Course Number
5010

Credit Hours

Credit Hours Min
1

Course Description
Co-op assignment is full-time, degree-related employment. One (1) credit hour will be granted per semester, without academic credit toward graduation, unless curriculum states otherwise. A written report and employer evaluation will be required each semester on assignment. A grade of S (satisfactory) or U (unsatisfactory) will be reported by the Center for Career Development Office to the Records Office

Requisites

Simple Requisites

> **Prerequisite**: The individual must have met the following to be eligible for enrollment in the Cooperative Education Program:
>
> - Must have completed one grading cycle (semester) as a Tennessee Tech student

- Must be in Good Academic Standing at the acceptance of the employer offer through start date

- Attend a Co-op Meetup information session

- Maintain enrollment in the course the entire duration of the assignment, including summer semesters

COOP5020 - Co-op Off-Campus Assignments

General

College/School
Independent Programs

Course Title
Co-op Off-Campus Assignments

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COOP

Course Number
5020

Credit Hours

Credit Hours Min
1

Course Description
Co-op assignment is full-time, degree-related employment. One (1) credit hour will be granted per semester, without academic credit toward graduation, unless curriculum states otherwise. A written report and employer evaluation will be required each semester on assignment. A grade of S (satisfactory) or U (unsatisfactory) will be reported by the Center for Career Development Office to the Records Office.

Requisites

Simple Requisites

Prerequisite: The individual must have met the following to be eligible for enrollment in the Cooperative Education Program:

Co-op Meetup Information Session

·   Attendance of a Co-op Meetup Information Session is required. These sessions are offered in the fall and spring semesters with available dates listed within Handshake Events.

Must be a current Tennessee Tech Student

·   Must have completed one grading cycle (semester) as a Tennessee Tech Student.

·   Maintain enrollment in the course the entire duration of the assignment, including summer semesters.

Academic Good Standing

·   Student must be in Good Standing at the time of the employer offer through the start date.

COOP5030 - Co-op Off-Campus Assignments

General

College/School
Independent Programs

Course Title
Co-op Off-Campus Assignments

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COOP

Course Number
5030

Credit Hours

Credit Hours Min
1

Course Description
Co-op assignment is full-time, degree-related employment. One (1) credit hour will be granted per semester, without academic credit toward graduation, unless curriculum states otherwise. A written report and employer evaluation will be required each semester on assignment. A grade of S (satisfactory) or U (unsatisfactory) will be reported by the Center for Career Development Office to the Records Office.

Requisites

Simple Requisites

Prerequisite: The individual must have met the following to be eligible for enrollment in the Cooperative Education Program:

Co-op Meetup Information Session

·   Attendance of a Co-op Meetup Information Session is required. These sessions are offered in the fall and spring semesters with available dates listed within Handshake Events.

Must be a current Tennessee Tech Student

·   Must have completed one grading cycle (semester) as a Tennessee Tech Student.

·   Maintain enrollment in the course the entire duration of the assignment, including summer semesters.

Academic Good Standing

·   Student must be in Good Standing at the time of the employer offer through the start date.

COOP5040 - Co-op Off-Campus Assignments

General

College/School
Independent Programs

Course Title
Co-op Off-Campus Assignments

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COOP

Course Number
5040

Credit Hours

Credit Hours Min
1

Course Description
Co-op assignment is full-time, degree-related employment. One (1) credit hour will be granted per semester, without academic credit toward graduation, unless curriculum states otherwise. A written report and employer evaluation will be required each semester on assignment. A grade of S (satisfactory) or U (unsatisfactory) will be reported by the Center for Career Development Office to the Records Office.

Requisites

Simple Requisites

Academic Good Standing

· Student must be in Good Standing at the time of the employer offer through the start date.

Prerequisite: The individual must have met the following to be eligible for enrollment in the Cooperative Education Program:

Co-op Meetup Information Session

· Attendance of a Co-op Meetup Information Session is required. These sessions are offered in the fall and spring semesters with available dates listed within Handshake Events.

Must be a current Tennessee Tech Student

· Must have completed one grading cycle (semester) as a Tennessee Tech Student.

· Maintain enrollment in the course the entire duration of the assignment, including summer semesters.

Academic Good Standing

· Student must be in Good Standing at the time of the employer offer through the start date.

COOP5060 - Co-op Off-Campus Assignments

General

College/School
Independent Programs

Course Title
Co-op Off-Campus Assignments

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COOP

Course Number
5060

Credit Hours

Credit Hours Min
1

Course Description
Co-op assignment is full-time, degree-related employment. One (1) credit hour will be granted per semester, without academic credit toward graduation, unless curriculum states otherwise. A written report and employer evaluation will be required each semester on assignment. A grade of S (satisfactory) or U (unsatisfactory) will be reported by the Center for Career Development Office to the Records Office.

COOP5050 - Co-op Off-Campus Assignments

General

College/School
Independent Programs

Course Title
Co-op Off-Campus Assignments

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COOP

Course Number
5050

Credit Hours

Credit Hours Min
1

Course Description
Co-op assignment is full-time, degree-related employment. One (1) credit hour will be granted per semester, without academic credit toward graduation, unless curriculum states otherwise. A written report and employer evaluation will be required each semester on assignment. A grade of S (satisfactory) or U (unsatisfactory) will be reported by the Center for Career Development Office to the Records Office.

Requisites

Simple Requisites

Prerequisite: The individual must have met the following to be eligible for enrollment in the Cooperative Education Program:

Co-op Meetup Information Session

· Attendance of a Co-op Meetup Information Session is required. These sessions are offered in the fall and spring semesters with available dates listed within Handshake Events.

Must be a current Tennessee Tech Student

· Must have completed one grading cycle (semester) as a Tennessee Tech Student.

· Maintain enrollment in the course the entire duration of the assignment, including summer semesters.

Requisites

Simple Requisites

Prerequisite: The individual must have met the following to be eligible for enrollment in the Cooperative Education Program:

Co-op Meetup Information Session

· Attendance of a Co-op Meetup Information Session is required. These sessions are offered in the fall and spring semesters with available dates listed within Handshake Events.

Must be a current Tennessee Tech Student

· Must have completed one grading cycle (semester) as a Tennessee Tech Student.

· Maintain enrollment in the course the entire duration of the assignment, including summer semesters.

Academic Good Standing

· Student must be in Good Standing at the time of the employer offer through the start date.

COOP5070 - Co-op Off-Campus Assignments

General

College/School
Independent Programs

Course Title
Co-op Off-Campus Assignments

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COOP

Course Number
5070

Credit Hours

Credit Hours Min

1

Course Description

Co-op assignment is full-time, degree-related employment. One (1) credit hour will be granted per semester, without academic credit toward graduation, unless curriculum states otherwise. A written report and employer evaluation will be required each semester on assignment. A grade of S (satisfactory) or U (unsatisfactory) will be reported by the Center for Career Development Office to the Records Office.

Requisites

Simple Requisites

Prerequisite: The individual must have met the following to be eligible for enrollment in the Cooperative Education Program:

Co-op Meetup Information Session

· Attendance of a Co-op Meetup Information Session is required. These sessions are offered in the fall and spring semesters with available dates listed within Handshake Events.

Must be a current Tennessee Tech Student

· Must have completed one grading cycle (semester) as a Tennessee Tech Student.

· Maintain enrollment in the course the entire duration of the assignment, including summer semesters.

Academic Good Standing

· Student must be in Good Standing at the time of the employer offer through the start date.

COOP5080 - Co-op Off-Campus Assignments

General

College/School
Independent Programs

Course Title
Co-op Off-Campus Assignments

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COOP

Course Number
5080

Credit Hours

Credit Hours Min

1

Course Description

Co-op assignment is full-time, degree-related employment. One (1) credit hour will be granted per semester, without academic credit toward graduation, unless curriculum states otherwise. A written report and employer evaluation will be required each semester on assignment. A grade of S (satisfactory) or U (unsatisfactory) will be reported by the Center for Career Development Office to the Records Office.

Requisites

Simple Requisites

Prerequisite: The individual must have met the following to be eligible for enrollment in the Cooperative Education Program:

Co-op Meetup Information Session

· Attendance of a Co-op Meetup Information Session is required. These sessions are offered in the fall and spring semesters with available dates listed within Handshake Events.

Must be a current Tennessee Tech Student

· Must have completed one grading cycle (semester) as a Tennessee Tech Student.

· Maintain enrollment in the course the entire duration of the assignment, including summer semesters.

Academic Good Standing

· Student must be in Good Standing at the time of the employer offer through the start date.

Counseling and Psychology Department

A primary purpose of the department is to offer strong academic programs in the preparation for a career in counseling and psychology. Graduate programs are offered at the Master of Arts, Specialist in Education, and Ph.D. levels. The MA and EdS in Counseling and Psychology offer a number of concentrations available in each of these programs. The degree programs in Counseling and Psychology each consist of a counseling concentration, appropriate cognate area, and a research component. Concentrations are available in:

- Psychology
- Clinical Mental Health Counseling (Master's level only)
- School Counseling
- School Psychology

The department also offers a Ph.D. in Counseling and Supervision.

Fast Track Program

The Fast Track program is designed to enable Tennessee Tech undergraduates to accumulate up to six (6) credit hours of graduate coursework in Counseling and Psychology while still pursuing their undergraduate degree and to transition to the Counseling and Psychology graduate program smoothly, with accelerated completion. Up to six (6) hours of graduate coursework can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University. The minimum admission requirements for participating in the C&P Fast Track Program are:

• Enrolled as a Tennessee Tech undergraduate Psychology major with senior standing.

• Overall GPA of at least 3.0 or better.

• Approval from the student's undergraduate advisor and two other upper division psychology faculty at TTU who have been the student's instructor for at least one course at TTU.

• Course approval from C&P graduate faculty or graduate faculty advisor.

• All requirements for full admission to Graduate School must be met upon graduation. Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course during their senior year (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

Programs

COSU-PHD - Counseling and Supervision, Ph.D.

Program Overview

Program Long Title
Counseling and Supervision, Ph.D.

College/School
Education

Department(s)
Counseling and Psychology

Catalog Full Description

About The Program

The Ph.D. in Counseling and Supervision is a terminal degree. The department offers admission to applicants who appear to have the highest potential for success and the appropriate disposition for counseling and supervision in the Ph.D. program.

The Ph.D. in Counseling and Supervision is a 48-credit hour doctoral degree program. The program consists of three-degree components: Counseling and Supervision Core Coursework; Research Coursework; and Dissertation Research.

- **Counseling and Supervision Core Coursework**: 21 hours
- **Research Core Coursework:** 18 hours
- **Dissertation Research**: 9 hours
- **Total Degree Requirements:** 48 hours

Admission Requirements

Admission Requirements

Admission Requirements

The recommended admission requirements are:

- A 3.5 grade point average (GPA) from an accredited master's level program in a counseling or closely related program. Preference will be given to individuals who graduated from a CACREP-accredited program.

- Official transcripts from an accredited undergraduate and graduate institution, as well as transcripts from any additional institutions of higher education attended.

- Three acceptable letters of recommendation for graduate study from either former faculty members or other persons with adequate knowledge of the applicant's professional qualities and/or potential for success in a Ph.D. program (faculty review committee reserves the right to determine suitability of the letters.)

- While not required, an applicant may submit GRE General Test (GRE) scores for consideration to address their aptitude for graduate-level academic work.

- An English proficiency equivalent of Level 9 in FLS (applicable to those applicants from countries in which the official language is other than English).

- Successful interview with the faculty review committee with a focus on dis-positional congruence, personal intent, and professional aspirations.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

The Ph.D. in Counseling and Supervision is a 48 credit hour doctoral degree program. The program consists of three degree components: Counseling and Supervision Core Coursework; Research Coursework; and Dissertation Research.

- **Counseling and Supervision Core Coursework**: 21 hours
- **Research Core Coursework:** 18 hours
- **Dissertation Research**: 9 hours
- **Total Degree Requirements:** 48 hours

Note: Two prerequisite and/or support courses (PSY6310 Educational Statistics, PSY6930 Interpret/Apply Psy Rsrch) may be required as determined by the advisor.

Ph.D. in Counseling and Supervision
Type
Completion Requirement

Counseling and Supervision Core Coursework (21 hours)

Complete ALL of the following Courses:
- COUN7320 - Adv Grp Cnsl/Addct & Sp Popl
- COUN7370 - Supervision & Prof Issues in Counseling
- COUN7400 - Adv Counseling Theories/Pract
- COUN7500 - Rsrch/Schlrshp/Publication
- COUN7610 - Teaching in Counselor ED
- COUN7700 - Adv Multicltr Cnslg:Ldrsp/Advo
- COUN7840 - Regnl Mntl Hlth/Addct Srvcs

Research Core Coursework (18 hours)

Complete ALL of the following Courses:
- PSY7310 - Adv Educational Statistics
- COUN7510 - Counseling Admn/Progrm Eval
- COUN7730 - Qualitative Rsrch Meth/Counsl
- COUN7740 - Adv Quant Inquiry/Rsrch Design
  OR COUN7750 - Adv Qual Inquiry/Rsrch Design
- COUN7820 - Doctoral Internship

COUN7820 Doctoral Internship: *6 credit hour requirement. Students must take COUN 7820 over two semesters (6 credit hours) rather than one (3 credit hours).

Advisor Guided Electives

Research core requirements include an option of one elective. Electives may be taken in the COUN or PSY areas at the 6000 or 7000 level.

Dissertation Research (9 hours)

Nine (9) credit hour minimum. Ph.D. candidates may take more than the 9 credit hour minimum as necessary to successfully complete their dissertation research.

Complete ALL of the following Courses:
- COUN7990 - Dissertation Research

Prerequisite Courses (6 hours)

The advisor will determine if prerequisite courses are required.

Complete ALL of the following Courses:
- PSY6310 - Educational Statistics
- PSY6930 - Interpret/Apply Psy Rsrch

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available

CP-CMHC - Counseling and Psychology, Clinical Mental Health Counseling Concentration, Ed.S.

Program Overview

Program Long Title
Counseling and Psychology, Clinical Mental Health Counseling Concentration, Ed.S.

College/School	**Department(s)**
Education	Counseling and Psychology

Catalog Full Description

Concentration Requirements

The Ed.S. in Clinical Mental Health Counseling consists of 15 guided electives plus 15 credit hours of concentration course blocks as defined below.

Students who have completed a 60 hour Master's degree in counseling only need to complete one of the 18 hour blocks (listed on the requirement tab) that they have not already completed in their Master's degree.

- **Required Concentration Courses:** 15 hours
- **Advisor Guided Electives:** 15 hours
- **Total Degree Requirement:** 30 hours

Admission Requirements

Admission Requirements

Ed.S. Degree Admission Criteria

Students pursuing graduate study in the Department of Counseling and Psychology can select from among several concentrations that are designed to lead to licensure in the State of Tennessee or that lead to Non licensure degrees.

Admission Criteria

The department offers admission to applicants who appear to have the highest potential for graduate study and who have the disposition to be successful in their concentration.

The minimum admission requirements are:

- A Master's degree from an accredited institution.
- Satisfactory graduate grade point average of 3.5 on a 4.0 scale.
- Enough graduate training in psychology to do advanced graduate work in the chosen concentration.
- Three acceptable letters of recommendation for graduate study from faculty members or other persons who have adequate knowledge of the applicant's professional qualities or potential for success as a graduate student.
- Successful interview with the faculty review committee with a focus on dispositional congruence, personal intent, and professional aspirations.
- While not required, an applicant may submit GRE General Test (GRE) scores for consideration to address their aptitude for graduate level academic work.
- Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of holistic factors, including an interview, letters of recommendation, academic history, and related work experience.
- Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of nine hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the nine semester hours of graduate study in the concentration and be approved by the departmental admissions committee.

Evidence of English Language Proficiency

All applicants from countries in which the official language is not English are required to submit evidence of proficiency in English equivalent to level 9 in FLS.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

A minimum of 30 semester hours beyond the master's degree is required. At least 15 semester hours must be taken in courses numbered at the 7000 level and no courses below the 6000 level shall be counted for credit unless written approval is obtained from the student's advisory committee, the chairperson of the department in which the student is majoring, and the Director of Graduate Studies.

In the Department of Counseling and Psychology, a maximum of three (3) semester hours of departmentally approved 5000-level credit may be included in a Specialist in Education Degree program of study.

Upon approval from the student's advisory committee, up to twelve (12) credit hours from a previously earned 60 hour master's degree program, can be counted toward the Ed.S. degree.

Concentration Requirements

The Ed.S. in Clinical Mental Health Counseling consists of 15 guided electives plus 15 credit hours of concentration course blocks as defined below.

Students who have completed a 60 hour Master's degree in counseling only need to complete one of the 18 hour blocks below that they have not already completed in their Master's degree.

- **Required Concentration Courses:** 15 hours
- **Advisor Guided Electives:** 15 hours
- **Total Degree Requirement:** 30 hours

Concentration Requirements
Type
Completion Requirement

Required Concentration Courses (15 hours)

Complete ALL of the following Courses:
- COUN6370 - Family Counseling
- COUN6460 - Addiction Counseling
- COUN6820 - Intrnshp/Mntl Hlth Counseling
- COUN6821 - Intrnship/Mntl Hlth Counseling
- COUN7600 - Diagnosis and Treatment

Advisor Guided Electives

Students, at the advice of their advisor and/or committee, may take 5000, 6000, or 7000 level courses from the following subject list.

- AGED - Agriculture Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- COUN - Counseling
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness

- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives: 15 hours

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program
Undergraduate Fast Track Program
Not Available.

CP-CMHC - Counseling and Psychology, Clinical Mental Health Concentration, M.A.

Program Overview
Program Long Title
Counseling and Psychology, Clinical Mental Health Concentration, M.A.

College/School
Education

Department(s)
Counseling and Psychology

Catalog Full Description
The Master of Arts degree in Counseling and Psychology is designed to prepare students for exciting and challenging careers. Concentration areas include: Clinical Mental Health Counseling, Psychology, School Counseling, and School Psychology. The program consists of core counseling courses, core non-counseling courses, guided electives and core concentration courses.

The Clinical Mental Health Concentration and the School Counseling Concentration consists of 60 hours. Students may also pursue Dual Licensure by adding an 18-hour Ed.S. degree in Clinical Mental Health Counseling or School Counseling.

Clinical Mental Health Concentration Requirements:
- Counseling Core Required Courses: 30 hours
- Non-Counseling Core Required Courses: 6 hours
- Advisor Guided Electives: 9 hours
- Concentration Core Courses: 15 hours
- Total Degree Requirement: 60 hours

Admission Requirements
Admission Requirements

Master of Arts Degree Admission Criteria
Students pursuing graduate study in the Department of Counseling and Psychology can select from among several concentrations that are designed to lead to licensure in the State of Tennessee or that lead to non-licensure degrees.

Admission Criteria

The Department offers admission to applicants who appear to have the highest potential for graduate study and who have the disposition to be successful in their concentration. The recommended admission requirements are:

1. A bachelor's degree from an accredited institution.

2. Satisfactory undergraduate grade point average, usually a minimum of 3.0 on a 4.0 scale.

3. Enough undergraduate training in psychology or related work experience to do graduate work in the chosen concentration.

4. Three acceptable letters of recommendation for graduate study from faculty members or other persons who have adequate knowledge of the applicant's professional qualities or potential for success as a graduate student.

5. Successful interview with faculty review committee with a focus on dispositional congruence, personal intent, and professional aspirations.

6. While not required, an applicant may submit GRE General Test (GRE) scores for consideration to address their aptitude for graduate-level academic work.

Satisfying recommended standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of holistic factors, including an interview, letters of recommendation, academic history, and related work experience.

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the College of Graduate Studies and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of nine (9) hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the nine (9) semester hours of graduate study in the concentration and be approved by the departmental admissions committee.

Evidence of English Language Proficiency

All applicants from countries in which the official language is not English are required to submit evidence of proficiency in English equivalent to level 9 in FLS.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The Master of Arts degree in Counseling and Psychology is designed to prepare students for exciting and challenging careers. Concentration areas include: Clinical Mental Health Counseling, Psychology, School Counseling, and School Psychology. The program consists of core counseling courses, core non-counseling courses, guided electives and core concentration courses.

The Clinical Mental Health Concentration consists of 60 hours. Students may also pursue Dual Licensure by adding an 18-hour Ed.S. degree in Clinical Mental Health Counseling or School Counseling.

Clinical Mental Health Concentration Requirements:

• Counseling Core Required Courses: 30 hours
• Non-Counseling Core Required Courses: 6 hours
• Advisor Guided Electives: 9 hours
• Concentration Core Courses: 15 hours
• Total Degree Requirement: 60 hours

Program Requirements Type
Completion Requirement

Counseling Core Required Course (30 hours)

Complete ALL of the following Courses:

- COUN6000 - Counseling Across the Lifespan
- COUN6300 - Intro Couns:Fnds,Ethics&Lgl
- COUN6320 - Group Counseling
- COUN6360 - Counseling Skills
- COUN6362 - Counseling Theories
- COUN6380 - Multicultural Counseling
- COUN6410 - Career Counseling/Development
- COUN6670 - Assessment in Counseling
- COUN6680 - Trauma/Grief/Crisis Counseling
- COUN6800 - Practicum

Non-Counseling Core Required Courses (6hours)

Complete ALL of the following Courses:
- PSY6310 - Educational Statistics
- PSY6930 - Interpret/Apply Psy Rsrch

Advisor Guided Electives (9 hours)

Selection of appropriate course (PSY5XXX-PSY7XXX, and COUN 5XXX-COUN7XXX) will be made in consultation with the student's advisory committee and or the graduate coordinator.

Concentration Core Requirements (15 hours)

Complete course(s) and earn 15 or more credit(s) from the following:
- COUN6370 - Family Counseling
- COUN6460 - Addiction Counseling
- COUN6820 - Intrnshp/Mntl Hlth Counseling
- COUN6821 - Intrnship/Mntl Hlth Counseling
- COUN7600 - Diagnosis and Treatment

Additional Comments:
Course Substitutions: Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable Tennessee Tech undergraduates to accumulate up to six (6) credit hours of graduate coursework in Counseling and Psychology while still pursuing their undergraduate degree and to transition to the Counseling and Psychology graduate program smoothly, with accelerated completion. Up to six (6) hours of graduate coursework can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University. The minimum admission requirements for participating in the C&P Fast Track Program are:

• Enrolled as a Tennessee Tech undergraduate Psychology major with senior standing.

• Overall GPA of at least 3.0 or better.

• Approval from the student's undergraduate advisor and two other upper division psychology faculty at TTU who have been the student's instructor for at least one course at TTU.

• Course approval from C&P graduate faculty or graduate faculty advisor.

• All requirements for full admission to Graduate School must be met upon graduation. Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to

their M.A. program of study. Students who do not succeed in their first graduate course during their senior year (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

CP-EDSC - Counseling and Psychology, School Counseling Concentration, M.A.

Program Overview

Program Long Title
Counseling and Psychology, School Counseling Concentration, M.A.

College/School	Department(s)
Education	Counseling and Psychology

Catalog Full Description
The Master of Arts degree in Counseling and Psychology is designed to prepare students for exciting and challenging careers. Concentration areas include: Clinical Mental Health Counseling, Psychology, School Counseling, and School Psychology. The program consists for core counseling courses, core Non counseling courses, guided electives and core concentration courses. Clinical Mental Health Concentration and the School Counseling Concentration consists of 60 hours. Students may also pursue Dual Licensure by adding an 18-hour Ed.S. degree in Clinical Mental Health Counseling or School Counseling.

School Counseling Concentration Requirements:

- **Counseling Core Required Courses:** 30 hours
- **Non-Counseling Core Required Courses:** 6 hours
- **Advisor Guided Electives:** 9 hours
- **Concentration Core Courses:** 15 hours
- **Total Degree Requirement:** 60 hours

Admission Requirements

Admission Requirements
The Department offers admission to applicants who appear to have the highest potential for graduate study and who have the disposition to be successful in their concentration. The recommended admission requirements are:

1. A bachelor's degree from an accredited institution.

2. Satisfactory undergraduate grade point average, usually a minimum of 3.0 on a 4.0 scale.

3. Enough undergraduate training in psychology or related work experience to do graduate work in the chosen concentration.

4. Three acceptable letters of recommendation for graduate study from faculty members or other persons who have adequate knowledge of the applicant's professional qualities or potential for success as a graduate student.

5. Successful interview with faculty review committee with a focus on dispositional congruence, personal intent, and professional aspirations.

6. While not required, an applicant may submit GRE General Test (GRE) scores for consideration to address their aptitude for graduate-level academic work.

Satisfying recommended standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of holistic factors, including an interview, letters of recommendation, academic history, and related work experience. Students may be admitted with provisional

status if they do not meet all of the criteria above but do meet the minimum requirements of the College of Graduate Studies and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of nine (9) hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the nine (9) semester hours of graduate study in the concentration and be approved by the departmental admissions committee.

Evidence of English Language Proficiency All applicants from countries in which the official language is not English are required to submit evidence of proficiency in English equivalent to level 9 in FLS

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The Master of Arts degree in Counseling and Psychology is designed to prepare students for exciting and challenging careers. Concentration areas include: Clinical Mental Health Counseling, Psychology, School Counseling, and School Psychology. The program consists for core counseling courses, core non-counseling courses, guided electives and core concentration courses.

Clinical Mental Health Concentration and the School Counseling Concentration consists of 60 hours. Students may also pursue Dual Licensure by adding an 18-hour Ed.S. degree in Clinical Mental Health Counseling or School Counseling.

School Counseling Concentration consists of 33-36 hours.

- **Counseling Core Required Courses:** 30 hours
- **Non-Counseling Core Required Courses:** 6 hours
- **Advisor Guided Electives:** 9 hours
- **Concentration Core Courses:** 15 hours
- **Total Degree Requirement:** 60 hours

Degree Requirements
Type
Completion Requirement

Counseling Core Required Courses (30 hours)

Complete ALL of the following Courses:
- COUN6000 - Counseling Across the Lifespan
- COUN6300 - Intro Couns:Fnds,Ethics&Lgl
- COUN6320 - Group Counseling
- COUN6360 - Counseling Skills
- COUN6362 - Counseling Theories
- COUN6380 - Multicultural Counseling
- COUN6410 - Career Counseling/Development
- COUN6670 - Assessment in Counseling
- COUN6680 - Trauma/Grief/Crisis Counseling
- COUN6800 - Practicum

Non-Counseling Core Required Courses (6 hours)

Complete ALL of the following Courses:
- PSY6310 - Educational Statistics
- PSY6930 - Interpret/Apply Psy Rsrch

Advisor Guided Electives (9 hours)

Selection of appropriate courses (PSY 5XXX-PSY 7XXX, and COUN 5XXX-COUN 7XXX) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Concentration Core Courses (15 hours)

School Counseling follows the same Counseling Core Course Requirements, Non-Counseling Core Requirements, and Advisor Guided Electives as listed for Clinical Mental Health Counseling. The two programs differ by concentration courses.

Complete ALL of the following Courses:

- COUN6330 - Org/Admin-School Couns Prog
- COUN6335 - Prof Issues in Ed Settings
- COUN6385 - Counseling Children/Adolescent
- COUN7830 - Internship/School Counseling
- COUN7830 - Internship/School Counseling

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast Track program is designed to enable Tennessee Tech undergraduates to accumulate up to six (6) credit hours of graduate coursework in Counseling and Psychology while still pursuing their undergraduate degree and to transition to the Counseling and Psychology graduate program smoothly, with accelerated completion. Up to six (6) hours of graduate coursework can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University. The minimum admission requirements for participating in the C&P Fast Track Program are:

• Enrolled as a Tennessee Tech undergraduate Psychology major with senior standing.

• Overall GPA of at least 3.0 or better.

• Approval from the student's undergraduate advisor and two other upper division psychology faculty at TTU who have been the student's instructor for at least one course at TTU.

• Course approval from C&P graduate faculty or graduate faculty advisor.

• All requirements for full admission to Graduate School must be met upon graduation. Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course during their senior year (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

CP-ESSC - Counseling and Psychology, School Counseling Concentration, Ed.S.

Program Overview

Program Long Title
Counseling and Psychology, School Counseling Concentration, Ed.S.

College/School
Education

Department(s)
Counseling and Psychology

Catalog Full Description

Concentration Requirements

The Ed.S. program in School Counseling consists of 15 guided electives plus 15 credit hours in the required concentration courses. Students who have completed a 60 hour Master's program in counseling only need to complete the 18 credit hours below that they have not already completed in their Master's degree.

- **Required Concentration Courses:** 15 hours
- **Advisor Guided Electives:** 15 hours
- **Total Requirements:** 30 hours

Admission Requirements

Admission Requirements
Students pursuing graduate study in the Department of Counseling and Psychology can select from among several concentrations that are designed to lead to licensure in the State of Tennessee or that lead to Non licensure degrees.

Admission Criteria

The department offers admission to applicants who appear to have the highest potential for graduate study and who have the disposition to be successful in their concentration.

The minimum admission requirements are:

- A Master's degree from an accredited institution.
- Satisfactory graduate grade point average of 3.5 on a 4.0 scale.
- Enough graduate training in psychology to do advanced graduate work in the chosen concentration.
- Three acceptable letters of recommendation for graduate study from faculty members or other persons who have adequate knowledge of the applicant's professional qualities or potential for success as a graduate student.
- Successful interview with the faculty review committee with a focus on dispositional congruence, personal intent, and professional aspirations.
- While not required, an applicant may submit GRE General Test (GRE) scores for consideration to address their aptitude for graduate level academic work.

    Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of holistic factors, including an interview, letters of recommendation, academic history, and related work experience.

    Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of nine hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0

GPA on the nine semester hours of graduate study in the concentration and be approved by the departmental admissions committee.

Evidence of English Language Proficiency

All applicants from countries in which the official language is not English are required to submit evidence of proficiency in English equivalent to level 9 in FLS.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

A minimum of 30 semester hours beyond the master's degree is required. At least 15 semester hours must be taken in courses numbered at the 7000 level and no courses below the 6000 level shall be counted for credit unless written approval is obtained from the student's advisory committee, the chairperson of the department in which the student is majoring, and the Director of Graduate Studies.

In the Department of Counseling and Psychology, a maximum of three (3) semester hours of departmentally approved 5000-level credit may be included in a Specialist in Education Degree program of study.

Upon approval from the student's advisory committee, up to twelve (12) credit hours from a previously earned 60 hour master's degree program, can be counted toward the Ed.S. degree.

Concentration Requirements

The Ed.S. program in School Counseling consists of 15 guided electives plus 15 credit hours in the required concentration courses. Students who have completed a 60 hour Master's program in counseling only need to complete the 18 credit hours below that they have not already completed in their Master's degree.

- **Required Concentration Courses:** 15 hours
- **Advisor Guided Electives:** 15 hours
- **Total Requirements:** 30 hours

Concentration Requirements Type
Completion Requirement

Required Concentration Courses (15 hours)

Complete ALL of the following Courses:
- COUN6385 - Counseling Children/Adolescent
- COUN6330 - Org/Admin-School Couns Prog
- COUN6335 - Prof Issues in Ed Settings
- COUN6830 - Internship/School Counseling
- COUN7830 - Internship/School Counseling

Advisor Guided Electives

Students, at the advice of their advisor and/or committee, may take 5000, 6000, or 7000 level courses from the following subject list.

- AGED - Agriculture Education
- CTE - Career Technical Education
- CFS - Child and Family Studies

- CUED - Curriculum Education
- COUN - Counseling
- PSY - Psychology
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives: 15 hours

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CP-PSYC - Counseling and Psychology, Psychology Concentration, M.A.

Program Overview

Program Long Title
Counseling and Psychology, Psychology Concentration, M.A.

College/School	**Department(s)**
Education	Counseling and Psychology

Catalog Full Description
A primary purpose of the department is to offer strong academic programs in the preparation for a career in counseling and psychology. Graduate programs are offered at the Master of Arts, Specialist in Education, and Ph.D. levels. The MA and Ed.S. in Counseling and Psychology offer a number of concentrations available in each of these programs.

The degree programs in Counseling and Psychology each consist of a counseling concentration, appropriate cognate area, and a research component. Concentrations are available in: • Psychology • Clinical Mental Health Counseling (Master's level only) • School Counseling • School Psychology

The department also offers a Ph.D. in Counseling and Supervision. • Counseling and Supervision, Ph.D. Counseling and Psychology

The M.A. in Counseling and Psychology includes a concentration in Psychology. Students will choose between Plan I or Plan II. This program consists of 30 hours.

Plan I

- **PSY 5000 level Advisor Guided Electives:** 0-9 hours
- **PSY 6000/7000 level Advisor Guided Electives:** 6-21 hours
- **Plan I Course Requirements (listed below):** 9 hours
- **Total Degree Requirements:** 30 hours

Plan II - Thesis

- **PSY 5000 level Advisor Guided Electives:** 0-9 hours
- **PSY or COUN 6000/7000 level Advisor Guided Electives:** 6-21 hours
- **Plan II Course Requirements (listed below):** 6 hours
- **Research and Thesis** PSY6990 Research and Thesis: 6-9 hours
- **Total Degree Requirement:** 30 hours

Admission Requirements

Admission Requirements
The Department offers admission to applicants who appear to have the highest potential for graduate study and who have the disposition to be successful in their concentration. The recommended admission requirements are:

1. A bachelor's degree from an accredited institution.

2. Satisfactory undergraduate grade point average, usually a minimum of 3.0 on a 4.0 scale.

3. Enough undergraduate training in psychology or related work experience to do graduate work in the chosen concentration.

4. Three acceptable letters of recommendation for graduate study from faculty members or other persons who have adequate knowledge of the applicant's professional qualities or potential for success as a graduate student.

5. Successful interview with faculty review committee with a focus on dispositional congruence, personal intent, and professional aspirations.

6. While not required, an applicant may submit GRE General Test (GRE) scores for consideration to address their aptitude for graduate-level academic work.

Satisfying recommended standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of holistic factors, including an interview, letters of recommendation, academic history, and related work experience. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the College of Graduate Studies and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of nine (9) hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the nine (9) semester hours of graduate study in the concentration and be approved by the departmental admissions committee.

Evidence of English Language Proficiency All applicants from countries in which the official language is not English are required to submit evidence of proficiency in English equivalent to level 9 in FLS.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The M.A. in Counseling and Psychology includes a concentration in Psychology. Students will choose between Plan I or Plan II. This program consists of 30 hours.

Plan I

- **PSY 5000 level Advisor Guided Electives:** 0-9 hours
- **PSY 6000/7000 level Advisor Guided Electives:** 6-21 hours
- **Plan I Course Requirements (listed below):** 9 hours
- **Total Degree Requirements:** 30 hours

Plan II - Thesis

- **PSY 5000 level Advisor Guided Electives:** 0-9 hours
- **PSY or COUN 6000/7000 level Advisor Guided Electives:** 6-21 hours
- **Plan II Course Requirements (listed below):** 6 hours
- **Research and Thesis** PSY6990 Research and Thesis: 6-9 hours
- **Total Degree Requirement:** 30 hours

Degree Requirements
Type
Completion Requirement

Advisor Guided Electives (9 hours)

Selection of appropriate courses (PSY 5XXX-PSY 7XXX, and COUN 5XXX-COUN 7XXX) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Plan I Course Requirements

Fulfill ALL of the following requirements:

Course Requirements

Complete ALL of the following Courses:
- PSY6310 - Educational Statistics
  OR PSY7310 - Adv Educational Statistics
- PSY6930 - Interpret/Apply Psy Rsrch

—————— **AND** ——————

> ### Advisor Guided Electives
> **Plus 3 hours of Advisor Guided Electives Cr. 3.**

> Plan II Course Requirements
>
> **Complete ALL of the following Courses:**
> - PSY6310 - Educational Statistics
>   **OR** PSY7310 - Adv Educational Statistics
> - FOED6920 - Educational Research
>   **OR** PSY7900 - Ind Study/Edu Psychology

> **Additional Comments:**
>
> # Course Substitutions
>
> Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast Track program is designed to enable Tennessee Tech undergraduates to accumulate up to six (6) credit hours of graduate coursework in Counseling and Psychology while still pursuing their undergraduate degree and to transition to the Counseling and Psychology graduate program smoothly, with accelerated completion. Up to six (6) hours of graduate coursework can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University. The minimum admission requirements for participating in the C&P Fast Track Program are:

• Enrolled as a Tennessee Tech undergraduate Psychology major with senior standing.

• Overall GPA of at least 3.0 or better.

• Approval from the student's undergraduate advisor and two other upper division psychology faculty at TTU who have been the student's instructor for at least one course at TTU.

• Course approval from C&P graduate faculty or graduate faculty advisor.

• All requirements for full admission to Graduate School must be met upon graduation. Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course during their senior year (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

CP-SPY - Counseling and Psychology, School Psychology Concentration, M.A.

Program Overview

Program Long Title
Counseling and Psychology, School Psychology Concentration, M.A.

College/School
Education

Department(s)
Counseling and Psychology

Catalog Full Description

A primary purpose of the department is to offer strong academic programs in the preparation for a career in counseling and psychology. Graduate programs are offered at the Master of Arts, Specialist in Education, and Ph.D. levels. The MA and Ed.S. in Counseling and Psychology offer a number of concentrations available in each of these programs.

The degree programs in Counseling and Psychology each consist of a counseling concentration, appropriate cognate area, and a research component. Concentrations are available in: • Psychology • Clinical Mental Health Counseling (Master's level only) • School Counseling • School Psychology

The department also offers a Ph.D. in Counseling and Supervision. • Counseling and Supervision, Ph.D. Counseling and Psychology

The MA in Counseling and Psychology with a concentration is School Psychology is a 33-36 hour non-licensure option. Degree requirements include:

Plan I

- **Required Core Courses:** 24 hours
- **Plan I Required Courses:** 12 hours
- **Total Degree Requirement Plan I:** 36 hours

Plan II

- **Required Core Courses:** 24 hours
- **Plan II Required Courses:** 9 hours
- **Total Degree Requirement Plan II:** 33 hours

Note: The School Psychology Concentration may require 15 hours of background courses. See your advisor to discuss the addition of background courses to your program hours.

Admission Requirements

Admission Requirements

The Department offers admission to applicants who appear to have the highest potential for graduate study and who have the disposition to be successful in their concentration. The recommended admission requirements are:

1. A bachelor's degree from an accredited institution.

2. Satisfactory undergraduate grade point average, usually a minimum of 3.0 on a 4.0 scale.

3. Enough undergraduate training in psychology or related work experience to do graduate work in the chosen concentration.

4. Three acceptable letters of recommendation for graduate study from faculty members or other persons who have adequate knowledge of the applicant's professional qualities or potential for success as a graduate student.

5. Successful interview with faculty review committee with a focus on dispositional congruence, personal intent, and professional aspirations.

6. While not required, an applicant may submit GRE General Test (GRE) scores for consideration to address their aptitude for graduate-level academic work.

Satisfying recommended standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of holistic factors, including an interview, letters of recommendation, academic history, and related work experience. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the College of Graduate Studies and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of nine (9) hours before the departmental admissions committee makes a recommendation for full admission. To advance from

provisional to full admission a student must earn a 3.0 GPA on the nine (9) semester hours of graduate study in the concentration and be approved by the departmental admissions committee.

Evidence of English Language Proficiency All applicants from countries in which the official language is not English are required to submit evidence of proficiency in English equivalent to level 9 in FLS.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The MA in Counseling and Psychology with a concentration is School Psychology is a 33-36 hour non-licensure option. Degree requirements include:

Plan I

- **Required Core Courses:** 24 hours
- **Plan I Required Courses:** 12 hours
- **Total Degree Requirement Plan I:** 36 hours

Plan II

- **Required Core Courses:** 24 hours
- **Plan II Required Courses:** 9 hours
- **Total Degree Requirement Plan II:** 33 hours

Note: The School Psychology Concentration may require 15 hours of background courses. See your advisor to discuss the addition of background courses to your program hours.

Degree Requirements Type

Completion Requirement

Required Core Courses (24 hours)

Complete ALL of the following Courses:
- PSY5160 - Abnormal Psychology
- PSY7730 - Individual Testing
- PSY7200 - Adv Educational Psychology
- COUN6300 - Intro Couns:Fnds,Ethics&Lgl
- COUN6320 - Group Counseling
- COUN6360 - Counseling Skills
- COUN6362 - Counseling Theories
- COUN6800 - Practicum

Required Courses: Plan I (12 hours)

The following courses are required for a student selecting Plan I of the School Psychology concentration.

Complete ALL of the following Courses:
- PSY6310 - Educational Statistics
  OR PSY7310 - Adv Educational Statistics
- FOED6920 - Educational Research
  OR PSY7900 - Ind Study/Edu Psychology
- PSY6990 - Research and Thesis

Required Courses: Plan II (9 hours)

Students enrolling in Plan II of the School Psychology concentration must take the following courses (6 hours) and also select one additional advisor recommended elective (3 hours).

Complete ALL of the following Courses:
- PSY6310 - Educational Statistics

  OR PSY7310 - Adv Educational Statistics
- PSY6930 - Interpret/Apply Psy Rsrch

Advisor Approved Elective (3 hours)

School Psychology Concentration Background Courses

Your advisor will determine what background courses you may need for the degree program. Typically the following background courses are required.

Complete ALL of the following Courses:
- PSY5050 - Learning & Cognition
- PSY5100 - Child Psychology
- PSY5150 - Psy Of Personality
- PSY5200 - Adolescent Psychology
- PSY5250 - Intro To Psy Testing

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast Track program is designed to enable Tennessee Tech undergraduates to accumulate up to six (6) credit hours of graduate coursework in Counseling and Psychology while still pursuing their undergraduate degree and to transition to the Counseling and Psychology graduate program smoothly, with accelerated completion. Up to six (6) hours of graduate coursework can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University. The minimum admission requirements for participating in the C&P Fast Track Program are:

• Enrolled as a Tennessee Tech undergraduate Psychology major with senior standing.

• Overall GPA of at least 3.0 or better.

• Approval from the student's undergraduate advisor and two other upper division psychology faculty at TTU who have been the student's instructor for at least one course at TTU.

• Course approval from C&P graduate faculty or graduate faculty advisor.

• All requirements for full admission to Graduate School must be met upon graduation. Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course during their senior year (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

CP-SSPY - Counseling and Psychology, School Psychology Concentration, Ed.S.

Program Overview

Program Long Title
Counseling and Psychology, School Psychology Concentration, Ed.S.

College/School	Department(s)
Education	Counseling and Psychology

Catalog Full Description

The Ed.S. concentration in School Psychology is a 30 hour program and consists of 9 required courses as defined below. However, additional courses may be required for the School Psychologist Endorsement.

- **Required Concentration Courses:** 30 hours

Admission Requirements

Admission Requirements

Students pursuing graduate study in the Department of Counseling and Psychology can select from among several concentrations that are designed to lead to licensure in the State of Tennessee or that lead to Non licensure degrees.

Admission Criteria

The department offers admission to applicants who appear to have the highest potential for graduate study and who have the disposition to be successful in their concentration.

The minimum admission requirements are:

- A Master's degree from an accredited institution.
- Satisfactory graduate grade point average of 3.5 on a 4.0 scale.
- Enough graduate training in psychology to do advanced graduate work in the chosen concentration.
- Three acceptable letters of recommendation for graduate study from faculty members or other persons who have adequate knowledge of the applicant's professional qualities or potential for success as a graduate student.
- Successful interview with the faculty review committee with a focus on dispositional congruence, personal intent, and professional aspirations.
- While not required, an applicant may submit GRE General Test (GRE) scores for consideration to address their aptitude for graduate level academic work.
- Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of holistic factors, including an interview, letters of recommendation, academic history, and related work experience.
- Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of nine hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the nine semester hours of graduate study in the concentration and be approved by the departmental admissions committee.

Evidence of English Language Proficiency

All applicants from countries in which the official language is not English are required to submit evidence of proficiency in English equivalent to level 9 in FLS.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

A minimum of 30 semester hours beyond the master's degree is required. At least 15 semester hours must be taken in courses numbered at the 7000 level and no courses below the 6000 level shall be counted for credit unless written approval is obtained from the student's advisory committee, the chairperson of the department in which the student is majoring, and the Director of Graduate Studies.

In the Department of Counseling and Psychology, a maximum of three (3) semester hours of departmentally approved 5000-level credit may be included in a Specialist in Education Degree program of study.

Upon approval from the student's advisory committee, up to twelve (12) credit hours from a previously earned 60 hour master's degree program, can be counted toward the Ed.S. degree.

The Ed.S. concentration in School Psychology is a 30 hour program and consists of 9 required courses as defined below. However, additional courses may be required for the School Psychologist Endorsement.

- **Required Concentration Courses:** 30 hours

Concentration Requirements (30 hours)
Type
Completion Requirement

Required Concentration Courses (30 hours)

Complete ALL of the following Courses:
- CUED6010 - Curr Development & Eval
- FOED7020 - Philosophy & Public Policy
- PSY7170 - Consultation/Edu Setting
- PSY7310 - Adv Educational Statistics
- PSY7610 - Intro/Personality Assessment
- PSY7900 - Ind Study/Edu Psychology
- PSY7910 - Assessment and Intervention
- PSY7920 - Assessment and Intervention
- PSY7950 - Internship/School Psychology

PSY 7950 - Internship in School Psychology Cr. 3. *

* Two courses of three semester hours each, taken over two semesters, for a total of 1200 clock hours.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

Courses

COUN6000 - Counseling Across the Lifespan

General

College/School
Education

Course Title
Counseling Across the Lifespan

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6000

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on central issues and counseling strategies related to human development that arise across the lifespan. Course will evaluate the continuity and change occurring within the developing individual in cognitive, social, emotional and physical domains from birth to death. Course will satisfy both national accreditation and state licensing requirements.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN6300 - Intro Couns:Fnds,Ethics&Lgl

General

College/School
Education

Course Title
Intro Couns:Fnds,Ethics&Lgl

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6300

Credit Hours

Credit Hours Min
3

Course Description
Introductory course in counseling. Overview of philosophy, basic elements, ethics, and principles of counseling. Knowledge of ethical standards of practice and legal issues in counseling.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN6320 - Group Counseling

General

College/School
Education

Course Title
Group Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6320

Credit Hours

Credit Hours Min
3

Course Description
Course Description: Introductory course in group counseling; objectives, principles, and techniques of group counseling.

Requisites

Simple Requisites

> **Prerequisite:** COUN 6300, COUN 6360, and COUN 6362.

COUN6330 - Org/Admin-School Couns Prog

General

College/School
Education

Course Title
Org/Admin-School Couns Prog

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
6330

Credit Hours

Credit Hours Min
3

Course Description
Major principles of sound administrative practice and organization of student personnel services; leadership and consultation.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN6335 - Prof Issues in Ed Settings

General

College/School
Education

Course Title
Prof Issues in Ed Settings

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6335

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on the development of skills and strategies to address professional issues in the PreK-12 school setting. Personal teaching philosophies, strategies for conceptualization, curriculum development, evaluation and didactic skills will be learned and demonstrated by students planning to combine teaching and counseling in the school setting.

Requisites

Simple Requisites

Prerequisites: None

COUN6360 - Counseling Skills

General

College/School
Education

Course Title
Counseling Skills

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6360

Credit Hours

Credit Hours Min
3

Course Description
Study and application of basic counseling skills, the major Psychoanalytic and Existential/Humanistic theories of counseling and practical applications.

Requisites

Simple Requisites

Prerequisites: None

COUN6362 - Counseling Theories

General

College/School
Education

Course Title
Counseling Theories

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6362

Credit Hours

Credit Hours Min
3

Course Description
Study and application of basic counseling skills, the major Cognitive/Behavioral and Postmodern theories of counseling and practical applications.

Requisites

Simple Requisites

Prerequisites: None

COUN6370 - Family Counseling

General

College/School
Education

Course Title
Family Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6370

Credit Hours

Credit Hours Min
3

Course Description
Introduction to family systems and techniques of family counseling.

Requisites

Simple Requisites

Prerequisites: None

COUN6380 - Multicultural Counseling

General

College/School
Education

Course Title
Multicultural Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6380

Credit Hours

Credit Hours Min
3

Course Description
Study of a broad range of counseling behavior and psychological principles in the therapeutic relationship as they relate to individuals from different ethnic and cultural backgrounds.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN6385 - Counseling Children/Adolescent

General

College/School
Education

Course Title
Counseling Children/Adolescent

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6385

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on specific counseling strategies related to children and adolescents. Cognitive, social, emotional and physical domains of this population will be examined with assessment, preliminary diagnosis and treatment options for individuals as primary issues. Course will satisfy both national accreditation and state licensing requirements.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN6410 - Career Counseling/Development

General

College/School
Education

Course Title
Career Counseling/Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6410

Credit Hours

Credit Hours Min
3

Course Description
Types of information for counseling; community resources; principles and techniques of career planning.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN6430 - Neuroscience for Counselors

General

College/School
Education

Course Title
Neuroscience for Counselors

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6430

Credit Hours

Credit Hours Min
3

Course Description
The purpose of this course is to provide students with an overview of the structure and function of the human brain, including how the human brain influences and is influenced by biology, environment, and experiences. Using this information, students will be better equipped to a) evaluate popular publications related to brain wellness and psychological disorders, and b) intervene in strategic and appropriate ways.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN6460 - Addiction Counseling

General

College/School
Education

Course Title
Addiction Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6460

Credit Hours

Credit Hours Min
3

Course Description
Focus on the abuser, the abuser's environment, and strategies for rehabilitation.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN6500 - Play Therapy

General

College/School
Education

Course Title
Play Therapy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
6500

Credit Hours

Credit Hours Min
3

Course Description
Theories and techniques of play therapy.

Requisites

Simple Requisites

Prerequisites: None

COUN6550 - Spirituality in Counseling

General

College/School
Education

Course Title
Spirituality in Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
6550

Credit Hours

Credit Hours Min
3

Course Description
Developing competencies for addressing spiritual and religious issues in counseling.

Requisites

Simple Requisites

Prerequisites: None

COUN6630 - Theories of Personality

General

College/School
Education

Course Title
Theories of Personality

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6630

Credit Hours

Credit Hours Min
3

Course Description
Major theoretical treatments of personality development and structure with emphasis upon generated psychological research.

Requisites

Simple Requisites

Prerequisites: None

COUN6670 - Assessment in Counseling

General

College/School
Education

Course Title
Assessment in Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6670

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on the variety of assessment instruments utilized by counseling and psychology professionals and their role in making appropriate recommendations and planning for treatment.

Requisites

Simple Requisites

Prerequisites: None

COUN6680 - Trauma/Grief/Crisis Counseling

General

College/School
Education

Course Title
Trauma/Grief/Crisis Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6680

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on risk assessment, safety planning, preliminary intervetion and follow up planning relevant to crises occurring in the helping professions. Course will satisfy both national accreditation and state licensing requirements.

Requisites

Simple Requisites

> **Prerequisite:** COUN6670 Assessment in Counseling.

COUN6800 - Practicum

General

College/School
Education

Course Title
Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6800

Credit Hours

Credit Hours Min
3

Course Description

Supervised practice in counseling; application of theories, principles, and practices; development of counseling techniques.

Requisites

Simple Requisites

> **Prerequisites:** COUN6300 Intro Couns:Fnds,Ethics&Lgl, COUN6362 Counseling Theories, COUN6360 Counseling Skills, COUN6320 Group Counseling, COUN7600 Diagnosis and Treatment.

COUN6820 - Intrnshp/Mntl Hlth Counseling

General

College/School
Education

Course Title
Intrnshp/Mntl Hlth Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6820

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description

Supervised experience in an appropriate community mental health placement. Students must complete 300 hours of supervised mental health counseling work experience. Students must take COUN 6821 after completing COUN 6820.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN6821 - Intrnship/Mntl Hlth Counseling

General

College/School
Education

Course Title
Intrnship/Mntl Hlth Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6821

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description

Supervised experience in an appropriate community mental health placement. Students must complete 300 hours of supervised mental health counseling work experience.

Requisites

Simple Requisites

> **Prerequisite:** COUN6820 Intrnshp/Mntl Hlth Counseling.

COUN6830 - Internship/School Counseling

General

College/School
Education

Course Title
Internship/School Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
6830

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description

Supervised experience in an appropriate school placement.

Requisites

Simple Requisites

> **Prerequisite:** COUN6360 Counseling Skills, COUN6362 Counseling Theories,and COUN6320 Group Counseling.

COUN7300 - Seminar in Counseling

General

College/School
Education

Course Title
Seminar in Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
7300

Credit Hours

Credit Hours Min
3

Course Description
Course Description: A critical study of current issues in counseling.

Requisites

Simple Requisites

> **Prerequisite:** Advanced graduate standing and permission of instructor.

COUN7320 - Adv Grp Cnsl/Addct & Sp Popl

General

College/School
Education

Course Title
Adv Grp Cnsl/Addct & Sp Popl

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7320

Credit Hours

Credit Hours Min
3

Course Description
Clinical skills needed in working with addiction treatment modalities and other treatment modalities associated with specialized populations.

Requisites

Simple Requisites

> **Prerequisite:** Permission of director of doctoral studies.

COUN7360 - Couples Counseling

General

College/School
Education

Course Title
Couples Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7360

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on evidenced-based therapeutic interventions and techniques specifically used in treating couples.

Requisites

Simple Requisites

> **Prerequisite:** Admission to a licensure track program in Counseling and Psychology Graduate Programs.

COUN7370 - Supervision & Prof Issues in Counseling

General

College/School
Education

Course Title
Counseling Supervision

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7370

Credit Hours

Credit Hours Min
3

Course Description
Explores the purposes, theoretical frameworks, models, and skills related to counseling supervision. Also addresses legal, ethical, and culturally relevant issues. The course includes practice learning and opportunities to develop a personal style of supervision.

Requisites

Simple Requisites

> **Prerequisite:** Permission of instructor.

COUN7400 - Adv Counseling Theories/Pract

General

College/School
Education

Course Title
Adv Counseling Theories/Pract

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7400

Credit Hours

Credit Hours Min
3

Course Description
An advanced counseling experience in a therapeutic field placement which is relevant to the students' professional goals. The setting, goals, site supervisor, and plan for the practicum experience must be approved by the faculty instructor. Students receive weekly supervision from their site supervisor and group supervision from a counselor education faculty member.

Requisites

Simple Requisites

> **Prerequisite:** Permission of the instructor.

COUN7500 - Rsrch/Schlrshp/Publication

General

College/School
Education

Course Title
Rsrch/Schlrshp/Publication

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7500

Credit Hours

Credit Hours Min
3

Course Description
Exploration of emergent research practices and processes, professional writing and conference proposal preparation, and ethical and culturally relevant strategies for conducting research.

Requisites

Simple Requisites

> **Prerequisite:** permission of director of doctoral studies.

COUN7510 - Counseling Admn/Progrm Eval

General

College/School
Education

Course Title
Counseling Admn/Progrm Eval

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7510

Credit Hours

Credit Hours Min
3

Course Description
An exploration of theories and practice of program evaluation and knowledge of accreditation standards and processes in counseling.

Requisites

Simple Requisites

> **Prerequisite:** permission of director of doctoral studies.

COUN7600 - Diagnosis and Treatment

General

College/School
Education

Course Title
Diagnosis and Treatment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
7600

Credit Hours

Credit Hours Min
3

Course Description
Focus on diagnosis, etiology, treatment options and the assessment of mental disorders.

Requisites

Simple Requisites

> **Prerequisites:** None

COUN7610 - Teaching in Counselor ED

General

College/School
Education

Course Title
Teaching in Counselor ED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7610

Credit Hours

Credit Hours Min
3

Course Description
An introduction to the major roles, responsibilities, and activities of counselor educators. Includes instructional theory and methods, and addresses the ethical, legal, and culturally relevant issues associated with counselor preparation training.

Requisites

Simple Requisites

> **Prerequisite:** Permission of instructor.

COUN7700 - Adv Multicltr Cnslg:Ldrsp/Advo

General

College/School
Education

Course Title
Adv Multicltr Cnslg:Ldrsp/Advo

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7700

Credit Hours

Credit Hours Min
3

Course Description
Theories and skills of leadership, advocacy models, and culturally relevant issues. Exploration of current topical and political issues in counseling and how these issues affect the counseling profession. The course also includes practice in development leadership and advocacy skills.

Requisites

Simple Requisites

> **Prerequisite:** permission of director of doctoral studies.

COUN7730 - Qualitative Rsrch Meth/Counsl

General

College/School
Education

Course Title
Qualitative Rsrch Meth/Counsl

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7730

Credit Hours

Credit Hours Min
3

Course Description
Development of skills necessary to understand, interpret, and conduct qualitative research in counseling.

Requisites

Simple Requisites

> **Prerequisite:** Permission of director of doctoral studies.

COUN7740 - Adv Quant Inquiry/Rsrch Design

General

College/School
Education

Course Title
Adv Quant Inquiry/Rsrch Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7740

Credit Hours

Credit Hours Min
3

Course Description
Advanced skills used to conduct quantitative research in counseling.

Requisites

Simple Requisites

> **Prerequisite:** Permission of director of doctoral studies.

COUN7750 - Adv Qual Inquiry/Rsrch Design

General

College/School
Education

Course Title
Adv Qual Inquiry/Rsrch Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7750

Credit Hours

Credit Hours Min
3

Course Description
An in-depth analysis of the various forms of qualitative research.

Requisites

Simple Requisites

> **Prerequisite:** Permission of director of doctoral studies.

COUN7820 - Doctoral Internship

General

College/School
Education

Course Title
Doctoral Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7820

Credit Hours

Credit Hours Min
3

Course Description
Supervised experiences in counseling and supervision (e.g., clinical practice, supervision, research and scholarship, teaching, and/or leadership and advocacy). Prerequisite: Permission of director of doctoral studies. May be repeated for credit.

COUN7830 - Internship/School Counseling

General

College/School
Education

Course Title
Internship/School Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
7830

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Supervised experience in an appropriate school placement.

Requisites

Simple Requisites

Prerequisite: COUN6360 Counseling Skills, COUN6362 Counseling Theories, and COUN6320 Group Counseling.

COUN7840 - Regnl Mntl Hlth/Addct Srvcs

General

College/School
Education

Course Title
Regnl Mntl Hlth/Addct Srvcs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7840

Credit Hours

Credit Hours Min
3

Course Description
Exploration of challenges specific to rural, special, and under-served populations with mental health and substance abuse treatment services.

Requisites

Simple Requisites

Prerequisites: Permission of director of doctoral studies.

COUN7940 - Professional Accountability

General

College/School
Education

Course Title
Professional Accountability

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
COUN

Course Number
7940

Credit Hours

Credit Hours Min
3

Course Description
Offers the emerging professional an opportunity to become familiar with the various uses of data and how to collect, analyze, interpret, report and utilize information. Assist the student in developing effective and legal/ethical critical thinking and problem solving skills, by offering real world situations for examination. Meets an identified state licensing requirement for school and counseling concentrations.

Requisites

Simple Requisites

Prerequisites: None

COUN7970 - Directed Exp in Couns Rsrch

General

College/School
Education

Course Title
Directed Exp in Couns Rsrch

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
COUN

Course Number
7970

Credit Hours

Credit Hours Min
3

Course Description
Research experience under the supervision of a faculty member. Prerequisite: Permission of director of doctoral studies. May be repeated for credit.

COUN7990 - Dissertation Research

General

College/School
Education

Course Title
Dissertation Research

Academic Level (Course Level)
Doctoral, Specialist in Education

Course Subject Code
COUN

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
May be repeated. A minimum of 6 hours over two semesters required. Enrollment restricted to students who have successfully completed comprehensive examinations. Dissertation work under direction of dissertation committee.

EDPY5850 - Orient Exp/School Couns Cands

General

College/School
Education

Course Title
Orient Exp/School Couns Cands

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
5850

Credit Hours

Credit Hours Min
0

Credit Hours Max
1

Credit Hours Operator
OR

Course Description
The course is designed to meet the recently approved Licensing Standards for School Counselor Pre K-12. School counselor candidates without teaching experience are mandated to have a semester-long orientation experience as an early part of the preparation program. This course utilizes in-school activites designed to provide observation of, participation in, and analysis of classroom instruction. The candidate will engage in teaching experiences (counseling) and feedback regarding the candidate's teaching.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY6300 - Orient: Prof/Counsel/Skill Dev

General

College/School
Education

Course Title
Orient: Prof/Counsel/Skill Dev

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6300

Credit Hours

Credit Hours Min
3

Course Description
Introductory course for all counseling majors. Overview of philosophy, basic elements, ethics, and principles of counseling.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY6310 - Educational Statistics

General

College/School
Education

Course Title
Educational Statistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
6310

Credit Hours

Credit Hours Min
3

Course Description
An introductory course in statistical methods applied to the solution of educational problems.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY6320 - Group Counseling

General

College/School
Education

Course Title
Group Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6320

Credit Hours

Credit Hours Min
3

Course Description
Introductory course in group counseling; objectives, principles, and techniques of group counseling.

Requisites

Simple Requisites

> Prerequisites: EDPY6300 Orient: Prof/Counsel/Skill Dev and EDPY 6360.

EDPY6330 - Org/Admin-Counseling Programs

General

College/School
Education

Course Title
Org/Admin-Counseling Programs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6330

Credit Hours

Credit Hours Min
3

Course Description
Major principles of sound administrative practice and organization of student personnel services; leadership and consultation.

Requisites

Simple Requisites

> Prerequisites: None

EDPY6350 - Measurement and Evaluation

General

College/School
Education

Course Title
Measurement and Evaluation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
6350

Credit Hours

Credit Hours Min
3

Course Description
Principles of measurement and evaluation; teacher-made tests; standardized tests.

Requisites

Simple Requisites

> Prerequisites: None

EDPY6360 - Counseling Theories/Techniques

General

College/School
Education

Course Title
Counseling Theories/Techniques

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6360

Credit Hours

Credit Hours Min
3

Course Description
Study of the major theories of counseling and practical applications.

EDPY6362 - Counseling Theories/Techn II

General

College/School
Education

Course Title
Counseling Theories/Techn II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6362

Credit Hours

Credit Hours Min
3

Course Description
Study and application of basic counseling skills, the major Cognitive/Behavioral and Postmodern theories of counseling and practical applications.

EDPY6370 - Family Systems

General

College/School
Education

Course Title
Family Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6370

Credit Hours

Credit Hours Min
3

Course Description
Introduction to family systems and techniqures of family counseling.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY6380 - Intro to Multicultural Couns

General

College/School
Education

Course Title
Intro to Multicultural Couns

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6380

Credit Hours

Credit Hours Min
3

Course Description
Study of a broad range of counseling behavior and psychological principles in the therapeutic relationship as they relate to individuals from different ethnic and cultural backgrounds.

Requisites

Simple Requisites

> **Prerequisite:** EDPY 6360.

EDPY6410 - Career Development

General

College/School
Education

Course Title
Career Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6410

Credit Hours

Credit Hours Min
3

Course Description
Types of information for counseling; community resources; principles and techniques of career planning.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY6450 - Values, Ethics & Legal Issues

General

College/School
Education

Course Title
Values, Ethics & Legal Issues

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6450

Credit Hours

Credit Hours Min
3

Course Description
Awareness of self and societal values. Knowledge of ethic standards of practice and legal issues in counseling.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY6460 - Inter Strat-Drug Abusers

General

College/School
Education

Course Title
Inter Strat-Drug Abusers

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6460

Credit Hours

Credit Hours Min
3

Course Description
Focus on the abuser, the abuser's environment, and strategies for rehabilitation.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY6500 - Stu Pers Serv-Higher Edu

General

College/School
Education

Course Title
Stu Pers Serv-Higher Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
6500

Credit Hours

Credit Hours Min
3

Course Description
Philosophy, organization, administration, and evaluation of student personnel programs.

EDPY6630 - Theories of Personality

General

College/School
Education

Course Title
Theories of Personality

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6630

Credit Hours

Credit Hours Min
3

Course Description
Major theoretical treatments of personality development and structure with emphasis upon generated psychological research.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY6640 - Consult in Case Mgmt Setting

General

College/School
Education

Course Title
Consult in Case Mgmt Setting

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6640

Credit Hours

Credit Hours Min
3

Course Description
Designed to prepare for the facilitation of behavioral change within a collaborative, indirect service delivery model.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY6650 - Org & Admn of Case Mgmt Prgm

General

College/School
Education

Course Title
Org & Admn of Case Mgmt Prgm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6650

Credit Hours

Credit Hours Min
3

EDPY6670 - Assessment in Counseling

General

College/School
Education

Course Title
Assessment in Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
6670

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on the variety of assessment instruments utilized by counseling and psychology professionals and their role in making appropriate recommendations and planning for treatment.

EDPY6800 - Advanced Skill Development

General

College/School
Education

Course Title
Advanced Skill Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6800

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: EDPY 6360 and consent of instructor. Supervised practice in counseling; application of theories, principles, and practices; development of counseling techniques.

EDPY6810 - Internship/Ed Psychology

General

College/School
Education

Course Title
Internship/Ed Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
6810

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Supervised experience in an appropriate setting.

EDPY6820 - Internship/Mntl Hlth Counsling

General

College/School
Education

Course Title
Internship/Mntl Hlth Counsling

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
6820

Credit Hours

Credit Hours Min
3

Course Description
Supervised experience in an appropriate community mental health placement.

EDPY6821 - Internship/Mntl Hlth Counsling

General

College/School
Education

Course Title
Internship/Mntl Hlth Counsling

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
6821

Credit Hours

Credit Hours Min
3

Course Description
Supervised experience in an appropriate community mental health placement.

Requisites

Simple Requisites

Prerequisites: None

EDPY6830 - Internship/School Counseling

General

College/School
Education

Course Title
Internship/School Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
6830

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Supervised experience in an appropriate school placement.

EDPY6840 - Internship/Stu Personnel Serv

General

College/School
Education

Course Title
Internship/Stu Personnel Serv

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
6840

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Supervised experience in an appropriate higher education setting.

EDPY6900 - Special Topics

General

College/School
Education

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
EDPY

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
Concentration on a special topic in educational psychology and/or student personnel services. Course may be repeated if topic is different.

EDPY6930 - Interpr/Applying Psyc Research

General

College/School
Education

Course Title
Interpr/Applying Psyc Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
6930

Credit Hours

Credit Hours Min
3

Course Description
Course will provide flexibility for Educational Psychology and Counselor Education students selecting the non-thesis option to become better consumers of psychological research, and improve their research literacy.

Requisites

Simple Requisites

> **Prerequisite:** EDPY6310 Educational Statistics

EDPY6990 - Research & Thesis

General

College/School
Education

Course Title
Research & Thesis

Academic Level (Course Level)
Graduate

Course Subject Code
EDPY

Course Number
6990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

EDPY7000 - Life Span Development

General

College/School
Education

Course Title
Life Span Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7000

Credit Hours

Credit Hours Min
3

Course Description
Physical, cognitive, and psychological development across the life span.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY7170 - Consultation in the ED Setting

General

College/School
Education

Course Title
Consultation in the ED Setting

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7170

Credit Hours

Credit Hours Min
3

Course Description
Study of a broad range of educational and behavioral consultation techniques; specifically designed as an intervention course for the school counselor and other school services personnel. The course emphasizes the use of indirect service delivery and collaborative consultation models with educators and parents.

Requisites

Simple Requisites

> **Prerequisites:** EDPY 6360, EDPY6370 Family Systems.

EDPY7200 - Advanced Education Psy

General

College/School
Education

Course Title
Advanced Education Psy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
7200

Credit Hours

Credit Hours Min
3

Course Description
Recent research in educational psychology and its application for teaching and for educational services in schools and colleges.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY7300 - Special Topics

General

College/School
Education

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7300

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Advanced graduate standing and permission of instructor. A critical study of current issues in counseling.

EDPY7310 - Adv Education Stat

General

College/School
Education

Course Title
Adv Education Stat

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7310

Credit Hours

Credit Hours Min
3

Course Description
Review of introductory significance tests and correlational methods; common factorial designs; and common multivariate procedures.

Requisites

Simple Requisites

> **Prerequisite:** FOED6920 Educational Research and EDPY6310 Educational Statistics or consent of instructor.

EDPY7370 - Counseling Techniques II

General

College/School
Education

Course Title
Counseling Techniques II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7370

Credit Hours

Credit Hours Min
3

Course Description
Emphasis on counseling procedures and skills not stressed in EDPY 6440.

Requisites

Simple Requisites

> **Prerequisite:** EDPY 6800.

EDPY7400 - Practicum-Counseling II

General

College/School
Education

Course Title
Practicum-Counseling II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7400

Credit Hours

Credit Hours Min
3

Course Description
Supervised practice to expand individual and group counseling skills.

Requisites

Simple Requisites

> **Prerequisite:** EDPY6320 Group Counseling, EDPY7370 Counseling Techniques II.

EDPY7600 - Psychopathology

General

College/School
Education

Course Title
Psychopathology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7600

Credit Hours

Credit Hours Min
3

Course Description
Focus on diagnosis, etiology, treatment milieus, and the assessment of mental disorders.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY7610 - Intro to Personality Assmnt

General

College/School
Education

Course Title
Intro to Personality Assmnt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7610

Credit Hours

Credit Hours Min
3

Course Description
Psychological evaluation; self-report inventories; and introduction to projective techniques.

Requisites

Simple Requisites

> **Prerequisite:** PSY5250 Intro To Psy Testing and advanced graduate standing.

EDPY7730 - Individual Testing

General

College/School
Education

Course Title
Individual Testing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7730

Credit Hours

Credit Hours Min
3

Course Description
Techniques and practice in individual testing; emphasis on intelligence tests.

Requisites

Simple Requisites

> **Prerequisite:** PSY4250 Intro to Psychological Testing (PSY5250 Intro To Psy Testing), six credits in psychological and/or educational measurement, and permission of instructor.

EDPY7810 - Internship/Ed Psychology

General

College/School
Education

Course Title
Internship/Ed Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
7810

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Supervised experience in an appropriate setting.

EDPY7820 - Internship/Agency Counseling

General

College/School
Education

Course Title
Internship/Agency Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7820

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
OR

Course Description
Supervised experience in an appropriate school setting.

Requisites

Simple Requisites

> **Prerequisites:** None

EDPY7830 - Internship/School Counseling

General

College/School
Education

Course Title
Internship/School Counseling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7830

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
OR

Course Description
Supervised experience in an appropriate school setting.

Requisites

Simple Requisites

Prerequisites: None

EDPY7840 - Internshiip/Stu Personnel Serv

General

College/School
Education

Course Title
Internshiip/Stu Personnel Serv

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDPY

Course Number
7840

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
OR

Course Description
Supervised experience in an appropriate higher education setting.

EDPY7900 - Ind Study in Educational Psy

General

College/School
Education

Course Title
Ind Study in Educational Psy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7900

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Advanced graduate standing and consent of instructor. Study on an individual basis in the area of emphasis.

EDPY7910 - Assessment & Intervention

General

College/School
Education

Course Title
Assessment & Intervention

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7910

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: EDPY 7730 and consent of instructor. Review of psychometric theory; role of the school psychologist; individual and group assessment of cognitive, affective, motor, and academic performance; basic interventions; consultations.

EDPY7920 - Assessment & Intervention

General

College/School
Education

Course Title
Assessment & Intervention

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7920

Credit Hours

Credit Hours Min
3

Course Description
Individual assessment of neuropsychological functioning; advanced personality assessment of children and adolescents; advanced interventions; consultations.

Requisites

Simple Requisites

Prerequisite: EDPY 7910.

EDPY7940 - Professional Accountability

General

College/School
Education

Course Title
Professional Accountability

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7940

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> Prerequisites: None

EDPY7950 - Internship in School Psy

General

College/School
Education

Course Title
Internship in School Psy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDPY

Course Number
7950

Credit Hours

Credit Hours Min
3

Course Description
A planned developmental experience in a school setting supervised by a licensed or certified psychologist.

Requisites

Simple Requisites

> Prerequisite: EDPY7920 Assessment & Intervention and consent of instructor.

PSY5050 - Learning & Cognition

General

College/School
Education

Course Title
Learning & Cognition

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5050

Credit Hours

Credit Hours Min
3

Course Description
Theory, research, and applications in human learning, memory and cognitive processes. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisites: PSY 1030 and a grade of C or higher in PSY 3010.

PSY5100 - Child Psychology

General

College/School
Education

Course Title
Child Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5100

Credit Hours

Credit Hours Min
3

Course Description
Hereditary and environmental influence on physical and psychological growth. Cognitive, affective, and language development of infant and child with an emphasis on disorders and problems in development. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisites: PSY2010 General Psychology and PSY3200 Developmental Psychology and PSY 1030 and PSY 2130.

PSY5130 - Brain and Behavior

General

College/School
Education

Course Title
Brain and Behavior

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5130

Credit Hours

Credit Hours Min
3

Course Description
Biological approach to understanding behavior. Students will focus on the anatomy and physiology of the nervous system in reference to behavior, perception, mental disorders, and drug addition. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: PSY2010 General Psychology and 3 additional PSY credits.

PSY5140 - Health Psychology

General

College/School
Education

Course Title
Health Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5140

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Biopsychosocial approach to examining how stress, personality, and lifestyle are related to physical health. Students will experientially explore a variety of coping strategies and relaxation techniques geared toward self-assessment and understanding. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Minimum grade of C in PSY 3110 or consent of instructor.

PSY5150 - Psy Of Personality

General

College/School
Education

Course Title
Psy Of Personality

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5150

Credit Hours

Credit Hours Min
3

Course Description
Application of psychological principles to an understanding of personality, development, and interpersonal adjustments. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: PSY 1030

PSY5160 - Abnormal Psychology

General

College/School
Education

Course Title
Abnormal Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5160

Credit Hours

Credit Hours Min
3

Course Description
Nature of abnormal behavior, etiology, symptomatology and treatment. Students enrolled in the 5000- level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: PSY 1030, PSY2010 General Psychology and 3 additional PSY credits.

PSY5200 - Adolescent Psychology

General

College/School
Education

Course Title
Adolescent Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5200

Credit Hours

Credit Hours Min
3

Course Description
Origin and principles of behavior with emphasis on educational problems in guiding growth and development of adolescents. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: PSY 1030.

Tennessee Technological University

PSY5250 - Intro To Psy Testing

General

College/School
Education

Course Title
Intro To Psy Testing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5250

Credit Hours

Credit Hours Min
3

Course Description
Basic concepts in psychological testing; interpreting test scores; types of standardized tests. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** PSY 1030

PSY5300 - Adult Psychology

General

College/School
Education

Course Title
Adult Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description
Physical, cognitive, and psychological development in young adulthood, middle age, and old age. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** PSY 1030.

PSY5320 - Intro-Therapeutic Techq

General

College/School
Education

Course Title
Intro-Therapeutic Techq

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5320

Credit Hours

Credit Hours Min
3

Course Description
An introduction to various therapeutic techniques including analytic, nondirective, and broadly based behavioral approaches. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** PSY 4150(5150), 4160(5160), or consent of instructor.

PSY5400 - Psychopharmacology

General

College/School
Education

Course Title
Psychopharmacology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5400

Credit Hours

Credit Hours Min
3

Course Description
Drugs: the interaction between psychological and physiological effects on behavior. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Junior standing. PSY1030.

PSY5600 - Data Analytics in Psychology

General

College/School
Education

Course Title
Data Analytics in Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5600

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Advanced topics in data analysis, graphing, and interpretation of psychological measures. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: PSY3010 Stats & Experimental Design and PSY3110 Experimental Psychology with a B or better. Advanced topics in data analysis, graphing, and interpretation of psychological measures. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

PSY5800 - History Of Psychology

General

College/School
Education

Course Title
History Of Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5800

Credit Hours

Credit Hours Min
3

Course Description
Theoretical systems, experiments, and personalities in the development of modern psychology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: PSY 1030.

PSY5810 - Concepts of Gerontology

General

College/School
Education

Course Title
Concepts of Gerontology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Physical and psychosocial aging processes. Issues in the care of the senior adult. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: PSY3200 Developmental Psychology or PSY3300 Intro to Social Psychology or SOC 1010. PSY 2130.

PSY5850 - Orient Exp/School Couns Cands

General

College/School
Education

Course Title
Orient Exp/School Couns Cands

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5850

Credit Hours

Credit Hours Min
0

Credit Hours Max
1

Credit Hours Operator
OR

Course Description
The course is designed to meet the recently approved Licensing Standards for School Counselor Pre K-12. School counselor candidates without teaching experience are mandated to have a semester-long orientation experience as an early part of the preparation program. This course utilizes in-school activities designed to provide observation of, participation in, and analysis of classroom instruction. The candidate will engage in teaching experiences (counseling) and feedback regarding the candidate's teaching.

Requisites

Simple Requisites

Prerequisites: None

PSY5903 - Special Topics

General

College/School
Education

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5903

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Junior standing or consent of instructor. Concentration on a special topic in psychology. Course may be repeated if topic is different. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

PSY5913 - Special Topics

General

College/School
Education

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5913

Credit Hours

Credit Hours Min
3

Course Description
Concentration on a special topic in psychology. Course may be repeated if topic is different. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Junior standing or consent of instructor.

PSY5921 - Special Topics

General

College/School
Education

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5921

Credit Hours

Credit Hours Min
1

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

PSY5922 - Special Topics

General

College/School
Education

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5922

Credit Hours

Credit Hours Min
2

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

PSY5923 - Special Topics

General

College/School
Education

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
5923

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

PSY6310 - Educational Statistics

General

College/School
Education

Course Title
Educational Statistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
6310

Credit Hours

Credit Hours Min
3

Course Description
An introductory course in statistical methods applied to the solution of educational problems.

Requisites

Simple Requisites

> **Prerequisites:** None

PSY6350 - Measurement and Assessment

General

College/School
Education

Course Title
Measurement and Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
6350

Credit Hours

Credit Hours Min
3

Course Description
Principles of measurement and assessment; teacher made tests; standardized tests.

Requisites

Simple Requisites

> **Prerequisites:** None

PSY6450 - Values, Ethics, & Legal Issues

General

College/School
Education

Course Title
Values, Ethics, & Legal Issues

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
6450

Credit Hours

Credit Hours Min
3

Course Description
Awareness of self and societal values. Knowledge of ethic standards of practice and legal issues in the field.

Requisites

Simple Requisites

> **Perquisites:** None

PSY6930 - Interpret/Apply Psy Rsrch

General

College/School
Education

Course Title
Interpret/Apply Psy Rsrch

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
6930

Credit Hours

Credit Hours Min
3

Course Description
Designed for students selecting the non-thesis option in Educational Psychology and Counselor Education. Designed specifically for the research consumer (practitioner) utilizing field-based applications of research and statistical principles for school and nonschool mental health settings.

Requisites

Simple Requisites

> **Prerequisite:** PSY6310 Educational Statistics or comparable course.

PSY6940 - Directed Experience in Psy I

General

College/School
Education

Course Title
Directed Experience in Psy I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
6940

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
Prerequisite: Consent of Department Chairperson. Directed Study in an area of psychology.

PSY6941 - Directed Exp in Psychology II

General

College/School
Education

Course Title
Directed Exp in Psychology II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
6941

Credit Hours

Credit Hours Min
3

Course Description
Directed Study in an area of psychology.

Requisites

Simple Requisites

> **Prerequisite:** Consent of Department Chairperson.

PSY6990 - Research and Thesis

General

College/School
Education

Course Title
Research and Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
6990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

PSY7000 - Life Span Development

General

College/School
Education

Course Title
Life Span Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7000

Credit Hours

Credit Hours Min
3

Course Description
Focus on developmental theories in understanding the physical, cognitive, and psychological development across the life span.

Requisites

Simple Requisites

> **Prerequisites:** None

PSY7170 - Consultation/Edu Setting

General

College/School
Education

Course Title
Consultation/Edu Setting

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7170

Credit Hours

Credit Hours Min
3

Course Description
Study of a broad range of educational and behavioral consultation techniques; specifically designed as an intervention course for the school counselor and other school services personnel. The course emphasizes the use of indirect service delivery and collaborative consultation models with educators and parents.

Requisites

Simple Requisites

> **Prerequisite:** COUN6362 Counseling Theories.

PSY7200 - Adv Educational Psychology

General

College/School
Education

Course Title
Adv Educational Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7200

Credit Hours

Credit Hours Min
3

Course Description
Recent research in educational psychology and its application for teaching and for educational services in schools and colleges.

Requisites

Simple Requisites

> **Prerequisites:** None

PSY7300 - Special Topics

General

College/School
Education

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7300

Credit Hours

Credit Hours Min
3

Course Description
Concentration on a special topic in educational psychology. Course maybe repeated if topic is different.

PSY7310 - Adv Educational Statistics

General

College/School
Education

Course Title
Adv Educational Statistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PSY

Course Number
7310

Credit Hours

Credit Hours Min
3

Course Description
Review of introductory significance tests and correlational methods; common factorial designs; and common multivariate procedures.

Requisites

Simple Requisites

> **Prerequisite:** FOED6920 Educational Research and PSY6310 Educational Statistics or consent of instructor.

PSY7610 - Intro/Personality Assessment

General

College/School
Education

Course Title
Intro/Personality Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7610

Credit Hours

Credit Hours Min
3

Course Description
Psychological evaluation; self-report inventories; and introduction to projective techniques.

Requisites

Simple Requisites

> **Prerequisite:** PSY4250 Intro to Psychological Testing(PSY5250 Intro To Psy Testing) and advanced graduate standing.

PSY7730 - Individual Testing

General

College/School
Education

Course Title
Individual Testing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7730

Credit Hours

Credit Hours Min
3

Course Description
Techniques and practice in individual testing; emphasis on intelligence tests.

Requisites

Simple Requisites

> **Prerequisite:** PSY4250 Intro to Psychological Testing(PSY5250 Intro To Psy Testing), six credits in psychological and/or educational measurement, and permission of instructor.

PSY7900 - Ind Study/Edu Psychology

General

College/School
Education

Course Title
Ind Study/Edu Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7900

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Advanced graduate standing and consent of instructor. Study on an individual basis in the area of emphasis.

PSY7910 - Assessment and Intervention

General

College/School
Education

Course Title
Assessment and Intervention

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7910

Credit Hours

Credit Hours Min
3

Course Description
Review of psychometric theory; role of the school psychologist; individual and group assessment of cognitive, affective, motor, and academic performance; basic interventions; consultations.

Requisites

Simple Requisites

> Prerequisite: PSY7730 Individual Testing and consent of instructor.

PSY7920 - Assessment and Intervention

General

College/School
Education

Course Title
Assessment and Intervention

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7920

Credit Hours

Credit Hours Min
3

Course Description
Individual assessment of neuropsychological functioning; advanced personality assessment of children and adolescents; advanced interventions; consultations.

Requisites

Simple Requisites

> Prerequisite: PSY7610 Intro/Personality Assessment.

PSY7950 - Internship/School Psychology

General

College/School
Education

Course Title
Internship/School Psychology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PSY

Course Number
7950

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: PSY 7920 and consent of instructor. A planned developmental experience in a school setting supervised by a licensed or certified psychologist. May be repeated for credit.

Craft Center Department

The Appalachian Center for Craft is a campus of the nationally accredited School of Art, Craft & Design within the College of Fine Arts and is located in Smithville, Tennessee.

Curriculum and Instruction Department

The department of Curriculum and Instruction offers graduate degrees at the master, specialist, and doctoral level. Each degree program offers a variety of concentration areas and licensure opportunities. In addition to the three degree programs managed by the department of Curriculum and Instruction, the department directs the Instructional Leadership degree program that houses the master and specialist in Instructional Leadership.

Curriculum and Instruction BS/MA Fast Track Program

The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Special Computer Science Education Transfer Credit

Participants in the Computer Science Endorsement Pathway (CSEP) from the TN Department of Education and Tennessee STEM Innovation Network (TSIN) may, upon approval from the Department of Curriculum & Instruction, substitute six hours of Computer Science Education (CSED) course credit towards a graduate degree in Curriculum and Instruction or a Certificate within the department.

See General Degree Requirements section in the catalog for general transfer credit information.

Programs

CI-ABAN - Curriculum and Instruction, Applied Behavior Analysis Concentration, M.A.

Program Overview

Program Long Title
Curriculum and Instruction, Applied Behavior Analysis Concentration, M.A.

College/School	Department(s)
Education	Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs

https://www.tntech.edu/education/ci/graduate.php

Admission Requirements

Admission Requirements
Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3)types of programs leading to the Master of Arts degree:1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 24 hours

- **Research Coursework**: 6 hours

- **Advisor Guided Electives:** 3 hours

- **Total Degree Requirements:** 33 hours

Degree Requirements
Type
Completion Requirement

Core Concentration Coursework (24 hours)

Complete ALL of the following Courses:
- EDUB6001 - Prin of Behavior Analysis
- EDUB6002 - Behavior Assessment
- EDUB6003 - Behavior Intervention
- EDUB6004 - Theory & Phil in Bhav Analysis
- EDUB6005 - Organizational Behavior Mngmt
- EDUB6006 - Ethics in ABA
- EDUB6007 - Resch Methods in Bhav Analysis
- EDUB6008 - Topics/Applied Behavior Analys

Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research
- CUED6305 - Quantitative Prob/Curriculum

Advisor Guided Electives (3 hours)

Students, at the advice of their advisor and/or committee, may take 5000-, 6000-, or 7000-level courses from the following subject list.

- AGED - Agricultural Education

- CTE - Career Technical Education

- CFS - Child and Family Studies

- CUED - Curriculum Education

- ECED - Early Childhood Education

- ECSP - Early Childhood Special Education

- ELED - Elementary Education

- ESLP - English as a Second Language Pedagogy

- FOED - Foundations of Education

- INSL - Instructional Leadership

- LSCI - Library Science

- READ - Reading

- SEED - Secondary Education

- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Total Degree Requirements: 33 hours

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

CI-ABAS - Curriculum and Instruction, Applied Behavior Analysis Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, Applied Behavior Analysis Concentration, Ed.S.

College/School	**Department(s)**
Education	Curriculum and Instruction

Catalog Full Description
https://www.tntech.edu/education/ci/ graduate.php

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

- **Core Concentration Area Coursework:** 21
- **Advisor Guided Electives:** 3
- **Research Coursework:** 6
- **Total Degree Requirements:** 30 hours

*All licensure components involve recommendations from the Office of Teacher Education.

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Masters degree program from an accredited institution.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lover than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

A minimum of 30 semester hours beyond the masters degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 21 hours
- **Research Coursework**: 6 hours
- **Advisor Guided Electives:** 3 hours
- **Total Degree Requirements:** 30 hours

Degree Requirements Type
Completion Requirement

Core Concentration Coursework (21 hours)

Complete ALL of the following Courses:
- EDUB7001 - Prin of Behavior Analysis
- EDUB7002 - Behavior Assessment
- EDUB7003 - Behavior Intervention
- EDUB7004 - Theory & Phil in Bhav Analysis
- EDUB7005 - Organizational Behavior Mngmt
- EDUB7006 - Ethics in ABA
- EDUB7008 - Topics/Applied Behavior Analys

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:
- EDUB7007 - Resch Methods in Bhav Analysis
- CUED7910 - Adv Research Project in ED

Advisor Guided Electives (3 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 30 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-EDCU - Curriculum and Instruction, Curriculum Concentration, M.A.

Program Overview

Program Long Title
Curriculum and Instruction, Curriculum Concentration, M.A.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs

https://www.tntech.edu/education/ci/graduate.php

Degree Requirements

- **Core Concentration Coursework: 9 hours**

- **Advisor Guided Electives: 18 hours**

- **Research Coursework: 6 hours**

- **Total Degree Requirements: 33 hours**

Admission Requirements

Admission Requirements
Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3)types of programs leading to the Master of Arts degree:1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework: 9 hours**

- **Advisor Guided Electives: 18 hours**

- **Research Coursework: 6 hours**

- **Total Degree Requirements: 33 hours**

Degree Requirements
Type
Completion Requirement

Core Concentration Coursework (9 hours)

Complete ALL of the following Courses:
- CUED6010 - Curr Development & Eval
- FOED6020 - Perspectives-American Edu
- FOED6820 - Applied Educational Assessment

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research
  OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum
  OR CUED6315 - Qualitative Prob/Curriculum

Advisor Guided Electives (18 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education

- CTE - Career Technical Education

- CFS - Child and Family Studies

- CUED - Curriculum Education

- ECED - Early Childhood Education

- ECSP - Early Childhood Special Education

- ELED - Elementary Education

- ESLP - English as a Second Language Pedagogy

- FOED - Foundations of Education

- INSL - Instructional Leadership

- LSCI - Library Science

- READ - Reading

- SEED - Secondary Education

- SPED - Special Education

- ABAP - Applied Behavioral Analysis

- EDU - Education

- EDUB - Behavior

- EDUC - Young Children

- EDUL - Literacy

- EDUP - Program Planning & Evaluation

- EDUS - STEM Education

- CSED - Computer Science Education

- ESOL - English as a Second or Other Language

- SVCL - Service Learning

- EXPW - Exercise, Physical Education and Wellness

- HEC - Human Ecology

- MUS - Music

- MUED - Music Education

- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 33 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

CI-EDEC - Curriculum and Instruction, Early Childhood Education Concentration, M.A.

Program Overview

Program Long Title
Curriculum and Instruction, Early Childhood Education Concentration, M.A.

College/School   **Department(s)**
Education   Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs

https://www.tntech.edu/education/ci/graduate.php

Degree Requirements

- **Core Concentration Coursework:** 15 hours

- **Research Coursework:** 6 hours

- **Advisor Guided Electives:** 12 hours

- **Total Degree Requirements:** 33 hours

Admission Requirements

Admission Requirements
Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3)types of programs leading to the Master of Arts degree:1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 15 hours
- **Research Coursework:** 6 hours
- **Advisor Guided Electives:** 12 hours
- **Total Degree Requirements:** 33 hours

Degree Requirements Type
Completion Requirement

Core Concentration Coursework (15 hours)

Complete ALL of the following Courses:
- ECED7210 - Early Childhood Curr
- ECED7220 - Early Chld Instr/Materials
- FOED6820 - Applied Educational Assessment
- SPED6010 - Surv-Disab Char,Proc,Meth/SPED
- SPED7200 - Tchg Indiv/Autism Spec Disorde

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research
  OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum
  OR CUED6315 - Qualitative Prob/Curriculum

Advisor Guided Electives (12 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation

- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 33 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

CI-EDEL - Curriculum and Instruction, Elementary Education Concentration, M.A.

Program Overview

Program Long Title
Curriculum and Instruction, Elementary Education Concentration, M.A.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs

https://www.tntech.edu/education/ci/graduate.php

Degree Requirements

- **Core Concentration Coursework:** 18 hours
- **Research Coursework**: 6 hours
- **Advisor Guided Electives:** 9 hours
- **Total Degree Requirements:** 33 hours

Admission Requirements

Admission Requirements
Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3)types of programs leading to the Master of Arts degree:1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 18 hours
- **Research Coursework**: 6 hours
- **Advisor Guided Electives:** 9 hours
- **Total Degree Requirements:** 33 hours

**Degree Requirements
Type**
Completion Requirement

Core Concentration Coursework (18 hours)

Complete ALL of the following Courses:
- CUED6150 - Middle School Curriculum
- FOED6820 - Applied Educational Assessment
- ELED6400 - Adv Studies/Elem Sci Edu
- ELED6500 - Diag & Rem Tech Elem Math
- ELED6600 - Organizing Theme-Soc Stu
- ELED7400 - The Literacy Lang Arts Program

Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research
  OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum
  OR CUED6315 - Qualitative Prob/Curriculum

Advisor Guided Electives (9 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy

- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 33 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

CI-EDSE - Curriculum and Instruction, Secondary Education Concentration, M.A.

Program Overview

Program Long Title
Curriculum and Instruction, Secondary Education Concentration, M.A.

College/School	**Department(s)**
Education	Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs

https://www.tntech.edu/education/ci/graduate.php

Degree Requirements

- **Core Concentration Coursework:** 12 hours
- **Research Coursework:** 6 hours
- **Advisor Guided Electives:** 15 hours
- **Total Degree Requirements:** 33 hours

Admission Requirements

Admission Requirements
Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3) types of programs leading to the Master of Arts degree: 1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 12 hours
- **Research Coursework:** 6 hours
- **Advisor Guided Electives:** 15 hours
- **Total Degree Requirements:** 33 hours

**Degree Requirements
Type**
Completion Requirement

Core Concentration Coursework (12 hours)

Complete ALL of the following Courses:
- CUED6150 - Middle School Curriculum
- FOED6020 - Perspectives-American Edu
  OR FOED7020 - Philosophy & Public Policy
- FOED6320 - Educational App of Technology
- FOED6820 - Applied Educational Assessment

Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research
  OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum
  OR CUED6315 - Qualitative Prob/Curriculum

Advisor Guided Electives (15 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation

- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

**Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 33 HOURS**

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

CI-ESCI - Curriculum and Instruction, Exercise Science Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, Exercise Science Concentration, Ed.S.

College/School   **Department(s)**
Education   Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 18 hours
- **Practicum and Research Coursework**: 6 hours *
- **Advisor Guided Electives:** 6 hours
- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Masters degree program from an accredited institution.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> # Degree Requirements
>
> - **Core Concentration Coursework:** 18 hours
> - **Practicum and Research Coursework**: 6 hours *
> - **Advisor Guided Electives:** 6 hours
> - **Total Degree Requirements:** 30 hours
>
> * Student must take EXPW6510 Research Methods before CUED7910 Adv Research Project in ED if no Research Methods or equivalent in Exercise Science on transcript (in place of one 3 hour elective course)
>
> > **Degree Requirements**
> > **Type**
> > Completion Requirement
> >
> > > Core Concentration Coursework (18 hours)
> > >
> > > **Complete ALL of the following Courses:**
> > > - CUED7010 - Learning Theories
> > > - FOED7020 - Philosophy & Public Policy
> > > - EXPW6600 - Special Topics
> > > - EXPW6440 - Physiology of Exercise
> > > - EXPW7000 - Current Issues in EXPW/EDUH
> > > - EXPW7010 - Pedagogical Theory of Phys Ed
> > >
> > > Practicum and Research Coursework (6 hours)
> > >
> > > **Complete ALL of the following Courses:**
> > > - CUED7801 - Lab/Field Exp in Edu/Tech
> > >   **OR** CUED7802 - Lab/Fld Exp in Edu/Grant Writ
> > >   **OR** CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
> > > - CUED7910 - Adv Research Project in ED
> > >
> > > Advisor Guided Electives (6 hours)
> > >
> > > Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.
> > >
> > > - AGED - Agricultural Education
> > > - CTE - Career Technical Education
> > > - CFS - Child and Family Studies
> > > - CUED - Curriculum Education
> > > - ECED - Early Childhood Education
> > > - ECSP - Early Childhood Special Education
> > > - ELED - Elementary Education
> > > - ESLP - English as a Second Language Pedagogy
> > > - FOED - Foundations of Education

- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 30 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-ESCU - Curriculum and Instruction, Curriculum Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, Curriculum Concentration, Ed.S.

College/School   **Department(s)**
Education   Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 3-6 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives:** 18-21 hours
- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Master's degree program from an accredited institution.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 3-6 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives:** 18-21 hours
- **Total Degree Requirements:** 30 hours

Degree Requirements Type
Completion Requirement

Core Concentration Coursework (3-6 hours)

Complete ALL of the following Courses:
- CUED6010 - Curr Development & Eval
- FOED7020 - Philosophy & Public Policy

CUED 6010 - Curriculum Development and Evaluation Cr. 3. *

*If taken at the MA level, student will select another Advisor Guided Elective.

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED7801 - Lab/Field Exp in Edu/Tech
  OR CUED7802 - Lab/Fld Exp in Edu/Grant Writ
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
- CUED7910 - Adv Research Project in ED

Advisor Guided Electives (18-21 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy

- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives (18-21 hours)
Total Degree Hours: 30 hours

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-ESEC - Curriculum and Instruction, Early Childhood Education Concentration, Ed.S.

Program Overview
Program Long Title
Curriculum and Instruction, Early Childhood Education Concentration, Ed.S.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 12-15 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives:** 9-12 hours
- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Master's degree program from an accredited institution.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> ## Degree Requirements
>
> - **Core Concentration Coursework:** 12-15 hours
> - **Practicum and Research Coursework**: 6 hours
> - **Advisor Guided Electives:** 9-12 hours
> - **Total Degree Requirements:** 30 hours
>
> | Degree Requirements Type |
> | --- |
> | Completion Requirement |

Core Concentration Coursework (12-15 hours)

Complete ALL of the following Courses:
- ABAP7120 - Behavior Support/Families
- SPED6050 - Intro/Applied Behavior Analysi
- READ7020 - Family Literacy
- CUED6010 - Curr Development & Eval
- FOED7020 - Philosophy & Public Policy

CUED 6010 - Curriculum Development and Evaluation Cr. 3. *

*If taken at the MA level, student will select another Advisor Guided Elective.

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:
- ECED7800 - Lab & Field Experience in ED
- ECED7910 - Ind Study in Education

Advisor Guided Electives (9-12 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music

- MUED - Music Education

- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 30 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-ESEL - Curriculum and Instruction, Elementary Education Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, Elementary Education Concentration, Ed.S.

College/School	**Department(s)**
Education	Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 6-9 hours

- **Practicum and Research Coursework**: 6 hours

- **Advisor Guided Electives:** 15-18 hours

- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Master's degree program from an accredited institution.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> # Degree Requirements
>
> - **Core Concentration Coursework:** 6-9 hours
>
> - **Practicum and Research Coursework**: 6 hours
>
> - **Advisor Guided Electives:** 15-18 hours
>
> - **Total Degree Requirements:** 30 hours
>
> **Degree Requirements**
> **Type**
> Completion Requirement
>
> Core Concentration Coursework (6-9 hours)
>
> **Complete ALL of the following Courses:**
> - CUED6010 - Curr Development & Eval
> - CUED7010 - Learning Theories
> - FOED7020 - Philosophy & Public Policy
>
> CUED 6010 - Curriculum Development and Evaluation Cr. 3. *
>
> *If taken at the MA level, student will select another Advisor Guided Elective.
>
> Practicum and Research Coursework (6 hours)
>
> **Complete ALL of the following Courses:**
> - CUED7801 - Lab/Field Exp in Edu/Tech
>   **OR** CUED7802 - Lab/Fld Exp in Edu/Grant Writ
>   **OR** CUED7803 - Lab/Fld Exp in Edu/Autoethnogr

- CUED7910 - Adv Research Project in ED

Advisor Guided Electives (15-18 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 30 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-ESSE - Curriculum and Instruction, Secondary Education Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, Secondary Education Concentration, Ed.S.

College/School	**Department(s)**
Education	Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 6-9 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives:** 15-18 hours
- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Master's degree program from an accredited institution.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 6-9 hours

- **Practicum and Research Coursework**: 6 hours

- **Advisor Guided Electives:** 15-18 hours

- **Total Degree Requirements:** 30 hours

Degree Requirements Type
Completion Requirement

Core Concentration Coursework (6-9 hours)

Complete ALL of the following Courses:
- CUED6010 - Curr Development & Eval
- PSY7200 - Adv Educational Psychology
- FOED7020 - Philosophy & Public Policy

CUED 6010 - Curriculum Development and Evaluation Cr. 3. *

*If taken at the MA level, student will select another Advisor Guided Elective.

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED7801 - Lab/Field Exp in Edu/Tech
  OR CUED7802 - Lab/Fld Exp in Edu/Grant Writ
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
- CUED7910 - Adv Research Project in ED

Advisor Guided Electives (15-18 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education

- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 30 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-ESTE - Curriculum and Instruction, Educational Technology Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, Educational Technology Concentration, Ed.S.

College/School	Department(s)
Education	Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 12-15 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives:** 9-12 hours
- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Master's degree program from an accredited institution.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 12-15 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives:** 9-12 hours
- **Total Degree Requirements:** 30 hours

Degree Requirements

Type

Completion Requirement

Core Concentration Coursework (12-15 hours)

Complete ALL of the following Courses:
- CUED6010 - Curr Development & Eval
- CUED6440 - Emerging Technologies/Edu
- CUED6460 - Cnstrctvst Strgies-Clsrm Inst
- CUED7430 - Spec App/Tech to Education
- CUED7530 - Design Intgrtd Tech Environs

CUED 6010 - Curriculum Development and Evaluation Cr. 3. *

*If taken at the MA level, student will select another Advisor Guided Elective.

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED7801 - Lab/Field Exp in Edu/Tech
- CUED7910 - Adv Research Project in ED

Advisor Guided Electives (9-12 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education

- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 30 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-FCS - Curriculum and Instruction, Family and Consumer Sciences Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, Family and Consumer Sciences Concentration, Ed.S.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 18 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives:** 6 hours
- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Master's degree program from an accredited institution.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 18 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives:** 6 hours
- **Total Degree Requirements:** 30 hours

Degree Requirements
Type
Completion Requirement

Core Concentration Coursework (18 hours)

Complete ALL of the following Courses:
- CUED7010 - Learning Theories
- FOED7020 - Philosophy & Public Policy
- HEC6610 - Crisis Mgmt/Interv-Families
- HEC6630 - Strategies & Advocacy-Families
- HEC6811 - Learn/Instrct Strat-FCS Edu
- PSY7200 - Adv Educational Psychology

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED7801 - Lab/Field Exp in Edu/Tech
  OR CUED7802 - Lab/Fld Exp in Edu/Grant Writ
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
- CUED7910 - Adv Research Project in ED

Advisor Guided Electives (6 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness

- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 30 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-LIT-EDS - Curriculum and Instruction, Literacy Concentration, Ed.S.

Program Overview
Program Long Title
Curriculum and Instruction, Literacy Concentration, Ed.S.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 27 hours
- **Research Coursework**: 3 hours

- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Master's degree program from an accredited institution.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 27 hours

- **Research Coursework**: 3 hours

- **Total Degree Requirements:** 30 hours

Degree Requirements
Type
Completion Requirement

Core Concentration Coursework (27 hours)

Complete ALL of the following Courses:
- READ6100 - Uses of Tech in Literacy Edu
- READ6340 - Literacy in Elementary School
- READ6350 - Literacy in Secondary School
- READ6700 - Diversity/Equity in Literacy
- READ6310 - Asmnt/Intervention-Literacy
- ELED7400 - The Literacy Lang Arts Program
- READ7370 - Ling:Theory-App for Educators
- READ7500 - Leadership in Literacy Edu
- READ7800 - Practicum Experiences/Literacy

Research Coursework (3 hours)

Complete ALL of the following Courses:

- CUED7910 - Adv Research Project in ED

TOTAL DEGREE REQUIREMENTS: 30 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-LIT-MA - Curriculum and Instruction, Literacy Concentration, M.A.

Program Overview
Program Long Title
Curriculum and Instruction, Literacy Concentration, M.A.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs
https://www.tntech.edu/education/ci/graduate.php

Degree Requirements

- **Core Concentration Coursework:** 27 hours

- **Research Coursework:** 6 hours

- **Total Degree Requirements:** 33 hours

Admission Requirements

Admission Requirements
Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3)types of programs leading to the Master of Arts degree:1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 27 hours
- **Research Coursework:** 6 hours
- **Total Degree Requirements:** 33 hours

Degree Requirements Type
Completion Requirement

Core Concentration Coursework (27 hours)

Complete ALL of the following Courses:
- READ6100 - Uses of Tech in Literacy Edu
- READ6340 - Literacy in Elementary School
- READ6350 - Literacy in Secondary School
- READ6700 - Diversity/Equity in Literacy
- READ6310 - Asmnt/Intervention-Literacy
- ELED7400 - The Literacy Lang Arts Program
- READ7370 - Ling:Theory-App for Educators
- READ7500 - Leadership in Literacy Edu
- READ6800 - Practicum Exp in Literacy

Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research
  OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum
  OR CUED6315 - Qualitative Prob/Curriculum

TOTAL DEGREE REQUIREMENTS: 33 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

- Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
- Overall GPA of at least 3.25 or better
- Recommendation from the student's undergraduate advisor
- Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

CI-LSC - Curriculum and Instruction, Library Science Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, Library Science Concentration, Ed.S.

College/School	Department(s)
Education	Curriculum and Instruction

Catalog Full Description

Specialist in Education Degree

https://www.tntech.edu/education/ci/graduate.php

- **Core Concentration Coursework:** 15 credit hours
- **Advisor Guided Electives:** 9 credit hours
- **Research Coursework:** 6 credit hours
- **Total Degree Requirements:** 30 credit hours
- **Total Degree Requirements and Licensure*:** VARIES

*All licensure components involve recommendations from the Office of Teacher Education.

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Masters degree program from an accredited institution.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the masters degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

*All licensure components involve recommendations from the Office of Teacher Education.

- **Core Concentration Coursework:** 15 hours

- **Practicum and Research Courses:** 6 hours

- **Advisor Guided Electives:** 9 hours

- **Total Degree Requirements:** 30 hours

Degree Requirements

Type

Completion Requirement

Core Concentration Coursework (15 hours)

Complete ALL of the following Courses:

- LSCI6010 - Class & Catalog Of Med & Mtrl
- LSCI6550 - Contemporary Children's Lit
  OR LSCI6600 - Lit Across the Curriculum
- LSCI7000 - Info Literacy Tools/Services
- LSCI7030 - Admin of the School Library
- LSCI7570 - Contemporary Young Adult Lit

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:

- LSCI7800 - Library Practicum
- CUED7910 - Adv Research Project in ED

Advisor Guided Electives (9 hours)

Complete at least 9 of the following courses:

- CSED6000 - Digital Literacy & Computing
  OR CSED6010 - Prgmg Fundmtls & Cmpt Thinking for Educ
  OR CSED6020 - Computer Science Concepts for Teachers
  OR CSED6030 - Computer Science Instructional Methods
  OR CUED6430 - Dsgn Stu: Prod of Inst Mtrls
  OR CUED6440 - Emerging Technologies/Edu
  OR CUED7510 - Instrctl Design Foundations

TOTAL DEGREE REQUIREMENTS: 30 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

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No Requirement Level

CI-LSCI - Curriculum and Instruction, Library Science Concentration, M.A.

Program Overview

Program Long Title

Curriculum and Instruction, Library Science Concentration, M.A.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs

https://www.tntech.edu/education/ci/graduate.php

- **Core Concentration Coursework:** 18 hours

- **Research Coursework:** 6 hours

- **Advisor Guided Electives:** 9 hours

- **Total Degree Requirements:** 33 hours

Admission Requirements

Admission Requirements

Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3) types of programs leading to the Master of Arts degree: 1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

- **Core Concentration Coursework:** 18 hours
- **Research Coursework:** 6 hours
- **Advisor Guided Electives:** 9 hours
- **Total Degree Requirements:** 33 hours

Degree Requirements Type
Completion Requirement

Core Concentration Coursework (18 hours)

Complete ALL of the following Courses:
- LSCI7570 - Contemporary Young Adult Lit
  OR LSCI5570 - Young Adult Literature
- LSCI6010 - Class & Catalog Of Med & Mtrl
- LSCI6550 - Contemporary Children's Lit
  OR LSCI6600 - Lit Across the Curriculum
- LSCI7000 - Info Literacy Tools/Services
- LSCI7030 - Admin of the School Library
- LSCI6800 - Library Practicum

Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research

OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum
  OR CUED6315 - Qualitative Prob/Curriculum

TOTAL DEGREE REQUIREMENTS: 33 HOURS

Advisor Guided Electives (9 hours)

Earn at least 9 credits from the following:
- CSED6000 - Digital Literacy & Computing
  OR CSED6010 - Prgmg Fundmtls & Cmpt Thinking for Educ
  OR CSED6020 - Computer Science Concepts for Teachers
  OR CSED6030 - Computer Science Instructional Methods
  OR CUED6430 - Dsgn Stu: Prod of Inst Mtrls
  OR CUED6440 - Emerging Technologies/Edu
  OR CUED7510 - Instrctl Design Foundations

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Additional Information

Information And Additional Notes
Catalog had an error of LSCI 4570 instead of 5570 so I also fixed that information for this PoS.

CI-MUSI - Curriculum and Instruction, Music Concentration, M.A.

Program Overview

Program Long Title
Curriculum and Instruction, Music Concentration, M.A.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs
https://www.tntech.edu/education/ci/graduate.php

Degree Requirements

- **Core Concentration Coursework:** 9 hours
- **Research Coursework:** 6 hours
- **Advisor Guided Electives:** 18 hours
- **Total Degree Requirements:** 33 hours

Admission Requirements

Admission Requirements

Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3)types of programs leading to the Master of Arts degree:1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 9 hours
- **Research Coursework:** 6 hours
- **Advisor Guided Electives:** 18 hours
- **Total Degree Requirements:** 33 hours

Degree Requirements Type
Completion Requirement

Core Concentration Coursework (9 hours)

Complete ALL of the following Courses:
- FOED6020 - Perspectives-American Edu
- CUED6010 - Curr Development & Eval
- FOED6820 - Applied Educational Assessment

Practicum and Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research
  OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum
  OR CUED6315 - Qualitative Prob/Curriculum

Advisor Guided Electives (18 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
TOTAL DEGREE REQUIREMENTS: 33 HOURS

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

CI-SPED - Curriculum and Instruction, Special Education Concentration, M.A.

Program Overview

Program Long Title
Curriculum and Instruction, Special Education Concentration, M.A.

College/School	Department(s)
Education	Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs

https://www.tntech.edu/education/ci/graduate.php

Degree Requirements

- **Core Concentration Coursework:** 12 hours
- **Research Coursework:** 6 hours
- **Advisor Guided Electives:** 15 hours
- **Total Degree Requirements:** 33 hours

Admission Requirements

Admission Requirements
Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3)types of programs leading to the Master of Arts degree:1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 12 hours
- **Research Coursework:** 6 hours
- **Advisor Guided Electives:** 15 hours
- **Total Degree Requirements:** 33 hours

Degree Requirements
Type
Completion Requirement

Core Concentration Coursework (12 hours)

Complete ALL of the following Courses:
- SPED6010 - Surv-Disab Char,Proc,Meth/SPED
- SPED6040 - Classrm Applications using ABA
- SPED6070 - Indiv. Educational Planning
- FOED6820 - Applied Educational Assessment

Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research
  OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum
  OR CUED6315 - Qualitative Prob/Curriculum

Advisor Guided Electives (15 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
Total Degree Requirements: 33 hours

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

CI-SPES - Curriculum and Instruction, Special Education Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, Special Education Concentration, Ed.S.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these

expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 9 hours
- **Research Coursework**: 6 hours
- **Advisor Guided Electives:** 15 hours
- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Master's degree program from an accredited institution.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 9 hours
- **Research Coursework**: 6 hours
- **Advisor Guided Electives:** 15 hours
- **Total Degree Requirements:** 30 hours

Degree Requirements Type

Completion Requirement

Core Concentration Coursework (9 hours)

Complete ALL of the following Courses:

- CUED6010 - Curr Development & Eval
- FOED7020 - Philosophy & Public Policy
- SPED6070 - Indiv. Educational Planning

CUED 6010 - Curriculum Development and Evaluation Cr. 3. *

*If taken at the MA level, student will select another Advisor Guided Elective.

Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED7801 - Lab/Field Exp in Edu/Tech
  OR CUED7802 - Lab/Fld Exp in Edu/Grant Writ
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
- CUED7910 - Adv Research Project in ED

Advisor Guided Electives (15 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education

- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
- **Total Degree Requirements:** 30 hours

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

CI-STE - Curriculum and Instruction, STEM Education Concentration, Ed.S.

Program Overview

Program Long Title
Curriculum and Instruction, STEM Education Concentration, Ed.S.

College/School	Department(s)
Education	Curriculum and Instruction

Catalog Full Description

Specialist in Education

Curriculum and Instruction - Graduate Programs (tntech.edu)

Specialist in Education Degree Requirements

A minimum of 30 semester hours beyond the master's degree, in approved upper-level courses, will be required in the Ed. S. program. At least 15 semester hours must be taken in courses numbered at the 7000 level; no course below the 6000 level shall be counted for credit unless written approval is obtained from the students advisory committee, the chairperson of the department in which the student is majoring, and the Associate Dean of the College of Graduate Studies.

The program of study leading to the Specialist in Education degree (Ed.S.) will be designed for each student so as to achieve proper balance between the experiences required for training as a specialist and those required for development as a professional working with other. The program will therefore be tailored to serve the needs and objectives of the individual student.

Although a thesis is not required in the specialist program, the student is expected to become well acquainted with research in the field of specialization and to demonstrate competence in research methodology. In order to satisfy these expectations, the student must earn at least three (3) semester hours in courses of a laboratory and/or field experience nature and three (3) semester hours in an independent study project.

Degree Requirements

- **Core Concentration Coursework:** 6-9 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives in STEM courses** (EDUS7500 STEM Education Foundations-EDUS7580 STEM Education Field Study)**:** 6 hours

- **Advisor Guided Electives in STEM Education & Technology Courses:** 9-12 hours
- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 3.0or above earned in a Master's degree program from an accredited institution.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the graduate GPA is lower than 3.0. Teacher licensure standards may require a separate minimum GPA for licensure.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 6-9 hours
- **Practicum and Research Coursework**: 6 hours
- **Advisor Guided Electives in STEM courses** (EDUS7500 STEM Education Foundations-EDUS7580 STEM Education Field Study)**:** 6 hours
- **Advisor Guided Electives in STEM Education & Technology Courses:** 9-12 hours
- **Total Degree Requirements:** 30 hours

Degree Requirements
Type
Completion Requirement

Core Concentration Coursework (6-9 hours)

Complete ALL of the following Courses:
- CUED6010 - Curr Development & Eval
- EDUS7500 - STEM Education Foundations
  OR EDUS7570 - STEM Edu Policy & Leadership
- CUED7510 - Instrctl Design Foundations

OR CUED7520 - Teaching and Learning Online
OR CUED7530 - Design Intgrtd Tech Environs

CUED 6010 - Curriculum Development and Evaluation Cr. 3. *

*If taken at the MA level, student will select another Advisor Guided Elective.

Practicum and Research Coursework (6 hours)
Complete ALL of the following Courses:
- CUED7801 - Lab/Field Exp in Edu/Tech
- CUED7910 - Adv Research Project in ED

Advisor Guided Electives in STEM Education & Technology Courses (9-12 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives in STEM Education & Technology Courses: 9-12

hours

Advisor Guided Electives in STEM Courses (EDUS7500-EDUS7580) (6 hours)

Students will select 6 credit hours of coursework from the following STEM Courses:

EDUS7500-EDUS7580

Advisor Guided Electives in STEM Courses (EDUS7500-EDUS7580) (6 hours)
Total Degree Requirements: 30 hours

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

No Requirement Level

Undergraduate Fast Track Program
Undergraduate Fast Track Program
Not Available.

CI-STEM - Curriculum and Instruction, STEM Education Concentration, M.A.

Program Overview
Program Long Title
Curriculum and Instruction, STEM Education Concentration, M.A.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description

Master of Arts in Curriculum and Instruction

Degree Programs
https://www.tntech.edu/education/ci/graduate.php

Degree Requirements

- **Core Concentration Coursework:** 15 hours
- **Advisor Guided Electives:** 12 hours
- **Research Coursework:** 6 hours
- **Total Degree Requirements:** 33 hours

Admission Requirements
Admission Requirements
Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3) types of programs leading to the Master of Arts degree:1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Core Concentration Coursework:** 15 hours

- **Advisor Guided Electives:** 12 hours

- **Research Coursework:** 6 hours

- **Total Degree Requirements:** 33 hours

Degree Requirements
Type
Completion Requirement

Core Concentration Coursework (15 hours)

Complete ALL of the following Courses:
- CUED6010 - Curr Development & Eval
- FOED6820 - Applied Educational Assessment
- EDUS7500 - STEM Education Foundations
  OR EDUS7570 - STEM Edu Policy & Leadership
- CUED6440 - Emerging Technologies/Edu
  OR CUED6450 - Immersive Tchn for /Tch-Lrn
- ELED6400 - Adv Studies/Elem Sci Edu
  OR ELED6500 - Diag & Rem Tech Elem Math
  OR SEED4122 - Mtrls/Meth-Tch Math
  OR SEED4123 - Mtrls/Meth-Tch the Sciences

Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED6300 - Quantitative Edu Research
  OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum

OR CUED6315 - Qualitative Prob/Curriculum

Advisor Guided Electives (12 hours)

Students, at the advice of their advisor and/or committee, may take 6000, or 7000 level courses from the following subject list.

- AGED - Agricultural Education
- CTE - Career Technical Education
- CFS - Child and Family Studies
- CUED - Curriculum Education
- ECED - Early Childhood Education
- ECSP - Early Childhood Special Education
- ELED - Elementary Education
- ESLP - English as a Second Language Pedagogy
- FOED - Foundations of Education
- INSL - Instructional Leadership
- LSCI - Library Science
- READ - Reading
- SEED - Secondary Education
- SPED - Special Education
- ABAP - Applied Behavioral Analysis
- EDU - Education
- EDUB - Behavior
- EDUC - Young Children
- EDUL - Literacy
- EDUP - Program Planning & Evaluation
- EDUS - STEM Education
- CSED - Computer Science Education
- ESOL - English as a Second or Other Language
- SVCL - Service Learning
- EXPW - Exercise, Physical Education and Wellness
- HEC - Human Ecology
- MUS - Music
- MUED - Music Education
- EDUH - Health Behavior/Wellness Education

Advisor Guided Electives
Total Degree Requirements: 33 hours

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college

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No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

CSED-CER - Computer Science Education Certificate, Curriculum and Instruction

Program Overview

Program Long Title
Computer Science Education Certificate, Curriculum and Instruction

College/School	Department(s)
Education	Curriculum and Instruction

Catalog Full Description
The Certificate in Computer Science Education is the first computer science education licensure option in the State of Tennessee. This program allows the preservice and in-service teacher to receive license endorsements, while promoting and integrating computer science education in the K-12 environment. The curriculum is a combination of courses designed around state and national standards for computer science education. The certificate is 12 credit hours and includes courses in Curriculum and Instruction.

The certificate is open to all graduate students admitted to Tennessee Tech University. Students outside of the Curriculum and Instruction major will coordinate academic advising with the student's major advisor and an advisor in Curriculum and Instruction.

Certificate requires 12 credit hours.

Admission Requirements

Admission Requirements
Applicants for the Computer Science Education Certificate follow the admissions requirements defined for the Master of Arts in Curriculum Instruction as listed below:

Requirements for Admission in Full Standing:

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing:

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students:

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Certificate in Computer Science Education is the first computer science education licensure option in the State of Tennessee. This program allows the preservice and in-service teacher to receive license endorsements, while promoting and integrating computer science education in the K-12 environment. The curriculum is a combination of courses designed around state and national standards for computer science education. The certificate is 12 credit hours and includes courses in Curriculum and Instruction.

The certificate is open to all graduate students admitted to Tennessee Tech University. Students outside of the Curriculum and Instruction major will coordinate academic advising with the student's major advisor and an advisor in Curriculum and Instruction.

Certificate Requirements
Type
Completion Requirement

Required Coursework (12 Hours)

Complete ALL of the following Courses:
- CSED6000 - Digital Literacy & Computing
- CSED6010 - Prgmg Fundmtls & Cmpt Thinking for Educ
- CSED6020 - Computer Science Concepts for Teachers
- CSED6030 - Computer Science Instructional Methods

Additional Comments:

Total hours required: 12

No Requirement Level

EDIL-MA - Instructional Leadership, M.A.

Program Overview

Program Long Title
Instructional Leadership, M.A.

College/School	Department(s)
Education	Curriculum and Instruction

Catalog Full Description

The Instructional Leadership (INSL) online program prepares graduate candidates seeking licensure for positions as school administrators in the state of Tennessee.

Degree Requirements

The Master of Arts in Instructional Leadership is a 33 hour degree program. This program prepares educational professionals for administrative career advancement.

• Core Coursework: 27 hours

• Research Coursework: 6 hours

• Total Degree Requirements: 33 hours

Graduation Requirements

• The candidate must pass the praxis exam, School Leaders Licensure Assessment (SLLA)

• Each candidate will be instructed to register for the School Leaders Licensure Assessment (SLLA) at the appropriate time during their program of study by an INSL advisor.

Admission Requirements

Admission Requirements

Master of Arts Degree Admission Requirements

Students pursuing graduate study in the Department of Curriculum and Instruction have the option of three (3) types of programs leading to the Master of Arts degree:1) licensure; 2) non-licensure; and 3) post-baccalaureate.

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students (Licensure, Non-licensure, and Post-baccalaureate programs):

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Master of Arts in Instructional Leadership Admission Requirements

In addition to the Department of Curriculum and Instruction Master's admission requirements, additional requirements for applicants of the M.A. in Instructional Leadership (INSL) program are:

1. A valid TN teaching license
2. A minimum of two (2) years teaching experience required.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> # Degree Requirements
>
> The Master of Arts in Instructional Leadership is a 33 hour degree program. This program prepares educational professionals for administrative career advancement.
>
> - **Core Coursework:** 27 hours
> - **Research Coursework:** 6 hours
> - **Total Degree Requirements:** 33 hours
>
> ---
>
> **MA in Instructional Leadership (33 hours)**
> **Type**
> Completion Requirement
>
> > Core Coursework (27 hours)
> >
> > **Complete ALL of the following Courses:**
> > - INSL6510 - School Leadership & Law
> > - INSL6560 - Technology for Administrators
> > - INSL6530 - Data Drvn Curic:Dev,Asmt,Eval
> > - INSL7010 - Instructional Leadership
> > - INSL7400 - School Ldrship & Supervision
> >
> > Research Coursework (6 hours)
> >
> > **Complete ALL of the following Courses:**
> > - CUED6300 - Quantitative Edu Research
> >   **OR** CUED6310 - Qualitative Research in Edu
> > - CUED6305 - Quantitative Prob/Curriculum
> >   **OR** CUED6315 - Qualitative Prob/Curriculum
> >
> > **Total Degree Requirements: 33 hours**
>
> **Additional Comments:**
>
> # Course Substitutions
>
> Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

> **No Requirement Level**

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admission requirements for participating in the C&I Fast Track Program are:

• Enrolled as a TTU undergraduate with at least 90 hours of completed courses or Spring semester of Junior year within their program of study.
• Overall GPA of at least 3.25 or better
• Recommendation from the student's undergraduate advisor
• Course approval from C&I graduate faculty or graduate faculty advisor.

Program participants should consult with their undergraduate and/or future graduate advisor regarding appropriate graduate courses to take and must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.A. program of study. Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee admission to the Fast Track program. Students who meet the above minimum admission requirements must apply to the Department for admission to the Fast Track program. The department's graduate committee will review the application and make a decision for approval.

In addition to the requirements for admission to the Fast-track BS/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

EDU-ABA - Exceptional Learning, Applied Behavior Analysis Concentration, Ph.D.

Program Overview

Program Long Title
Exceptional Learning, Applied Behavior Analysis Concentration, Ph.D.

College/School   **Department(s)**
Education   Curriculum and Instruction

Catalog Full Description

Exceptional Learning Overview

The Exceptional Learning Ph.D. (ELPhD) program focuses on the characteristics, strengths, and educational needs of individuals and groups whose learning potential and opportunities for success are frequently unrealized. Exceptional populations include people for whom social, economic, and physical characteristics may serve as a barrier to development and learning.

The ELPhD program offers robust academic preparation of professionals who serve their communities, public school systems, institutions of higher education, and nontraditional educational environments. Our graduates are leaders who work across local, regional, national, and international platforms to effect positive change in diverse populations of exceptional learners and educational contexts, addressing barriers to learning, primarily through research and service activities.

The ELPhD curriculum is organized around three areas of knowledge development-core, concentration, and research. Core knowledge includes an orientation to the program, theory, foundations for understanding exceptional populations, program planning and evaluation, and technology. Concentration knowledge helps students to deepen and hone their specific interests. The innovative research sequence grounds students in quantitative and qualitative research methodologies.

Applied Behavior Analysis prepares professionals who can develop and deliver behavioral interventions and supports for individuals within educational and habilitative settings.

There are two ABA tracks:

School-Aged Children and Adult Populations prepares professionals who will implement and provide empirical support for behavioral interventions for a range of populations and pursue board certification as a behavior analyst. The ABAS course sequence is approved by the national Behavior Analyst Certification Board (BACB).(Track leader – Dr. Krystal Kennedy)

Young Children and Families prepares professionals to provide support and interventions to young, at-risk children and families with emphasis on building relationships and advocating for children and families. (Track Leader – Dr. Jane Baker)

Curriculum

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Concentration Knowledge, and Research Knowledge. Credit hours are classified as follows:

- Core Coursework 13 credit hours
- Core Concentration Coursework 23-24 credit hours
- Advisor Guided Electives 6 credit hours
- Research Coursework 21 credit hours
- Dissertation 15 credit hours
- Total Degree Requirements 78-79 credit hours

En-route M.A. or Ed.S Degree in Curriculum and Instruction

A student pursuing an Exceptional Learning Ph.D. may elect to earn an en-route degree as they progress through the ELPhD program. Those students entering the program with no prior graduate degree may earn an M.A. in Curriculum & Instruction (C&I) with a Curriculum concentration, as the student successfully advances toward completion of the Ph.D. Those who enter the program with a graduate degree may elect to earn either the M.A. or an Ed.S. in Curriculum & Instruction with a Curriculum concentration.

If a student elects to forego the en-route degree, the full 79 credit hours of the program must be completed. The Ph.D. is not reduced to 46–49 hours, even if a student enters with one or more graduate degrees.

En-route M.A. in Curriculum & Instruction with Curriculum concentration

The en-route M.A. degree may be awarded when the student successfully completes 33 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The M.A. will not be awarded without completion of these 9 research credit hours.

Enroute-MA in Curriculum and Instruction

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 . 9 hours

Advisor Guided Electives 24 hours

TOTAL Hours for Enroute MA 33 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the M.A. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route M.A. portion of the program, unless special exception has been secured. Courses applied to the en-route M.A. must be completed within six years of enrollment.

The en-route M.A. degree may be awarded at any point during the program, given that the student:

• meets both the C&I M.A. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies.

Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route M.A. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 45–46 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000– and 7000–level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

En-route Ed.S. in Curriculum & Instruction (with Curriculum concentration)

The en-route Ed.S. degree may be awarded when the student successfully completes 30 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The Ed.S. will not be awarded without completion of these 9 research credit hours.

Enroute-Ed.S. in Curriculum and Instruction Course Requirements Credit Hours:

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 9 hours

Advisor Guided Electives 21 hours

TOTAL Hours for Enroute 30 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the en-route Ed.S. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route Ed.S. portion of the program, unless special exception has been secured. Courses applied to the en-route Ed.S. must be completed within six years of enrollment.

The en-route Ed.S. degree may be awarded at any point during the program, given that the student:

• meets both the C&I Ed.S. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies. Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route Ed.S. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 48–49 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000– and 7000–level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

Note: Only students admitted to the ELPhD program are permitted to enroll in these courses.

Admission Requirements

Admission Requirements
A multifaceted approach is taken in the application and admissions decisions process. The applicant will be evaluated on the criteria listed below in order to determine the applicant's overall potential for success in the ELPhD program. Please note, however, that fulfillment of the minimum requirements does not guarantee admission.

1. **QPA**–Consideration for admission to the program is based on the applicant's grade point average (GPA) in the last graduate degree or the last 60 hours of undergraduate work if no graduate degree has been completed. If a student has successfully completed some graduate hours but not attained a graduate degree, the GPA for these courses may also be considered. An average of 3.0 (on a 4.0

scale) or above from a recognized baccalaureate, graduate, or professional degree from an accredited college or university, or an international equivalent based on a four-year curriculum is required for admission.

2. **GRE**– valid GRE scores (score date within 5 years of application) must be submitted as part of the ELPhD application.

3. **Scholarly Writing**–Students must demonstrate scholarly writing skill and mastery by submitting a reference-based paper, thesis, or other written document. The writing sample should use multiple, credible sources to support a particular point of view, argument, or claim and show the applicant's writing quality, skillful analysis/argument, and proficiency with synthesizing information. The applicant must be the sole author. The scholarly writing sample does not have a specific topic requirement.

4. **Statement of Intent**–One (1) to two (2) pages that address the following: intended enrollment (semester and year), intended concentration, autobiographical statement, educational and professional goals, and area of interest for future research. Applicants to the ABA concentration must indicate the track in which they wish to enroll: School-Aged & Adult Populations (ABAS) or Young Children & Families (YCF).

5. **Three Letters of Recommendation**–Recommendation letters should be from individuals, preferably professors, who are able to comment on the student's qualifications and scholarly aptitude for doctoral study. The letter should also address characteristics that will contribute to the student's success as a doctoral student should you be accepted in the ELPhD program. Consideration will be made based upon the content of these letters. Please make certain the recommenders know they must submit a letter as well as evaluate the applicant on a series of qualities (done when submitting the letter). Applications without three letters may not receive full consideration.

6. **Professional Curriculum Vitae (CV)/Resume**

7. **Interviews** - Applicants who pass the initial evaluation will be required to have an interview with the ELPhD program faculty and director of graduate programs.

8. **International Students** must also meet the English Language Requirement by providing TOEFL test scores: a minimum of 80 on the TOEFL iBT is required. If you have taken another TOEFL version and the results are still valid (no more than 5 years old), the score requirements are: 213 on TOEFL CBT or 550 on TOEFL PBT.

Applicants who have citizenship in a country where English is a primary language or have been awarded a degree from a university in one of the following countries are exempt from the English Language requirement: Australia, Belize, the British Caribbean and British West Indies, Canada (except Quebec), England, Guyana, Ireland, Liberia, New Zealand, Scotland, the United States, and Wales.

If a candidate does not have access to a TOEFL testing site, it may be possible to accept another language proficiency test score. Candidates should inquire before submitting a test score other than the TOEFL.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Research Knowledge, and Concentration Knowledge. Credit hours are classified as follows:

- **Core Coursework:** 13 hours
- **Research Coursework:** 21 hours
- **Dissertation:** 15 hours
- **Core Concentration Coursework:** 23-24 hours
- **Advisor Guided Electives:** 6 hours

- **Total Degree Requirements:** 78-79 hours

School-aged Children and Adult Populations (ABAS) 79 credit hours
Type
Completion Requirement

Core Coursework 13 credit hours

Complete ALL of the following Courses:
- EDU7000 - Trans-Concentration Seminar
- EDU7010 - Theoretical Foundtns/Research
- EDU7020 - At-Risk Population:Rsrch, Serv
- EDU7040 - Program Planning/Evaluation
- CUED7430 - Spec App/Tech to Education
  OR EDU7440 - Tech App:Inst Dissem-Info

Concentration Coursework 24 credit hours

Complete ALL of the following Courses:
- EDUB7001 - Prin of Behavior Analysis
- EDUB7002 - Behavior Assessment
- EDUB7003 - Behavior Intervention
- EDUB7004 - Theory & Phil in Bhav Analysis
- EDUB7005 - Organizational Behavior Mngmt
- EDUB7006 - Ethics in ABA
- EDUB7007 - Resch Methods in Bhav Analysis
- EDUB7008 - Topics/Applied Behavior Analys

Guided Electives 6 credit hours

Complete at least 2 of the following courses:
- CUED6010 - Curr Development & Eval
- CUED7010 - Learning Theories
- CUED7030 - Rural Schools & Communities
- EDU7060 - Issues in Education
- EDU7950 - Doctoral Sem:Sp Top/Education
- EDUL7200 - Equity Literacy
- EDUL7300 - Multiliteracies
- EDUL7400 - Lit-Cultura/Linguistic Div Pop
- EDUL7500 - Linguistic Perceptions
- EDUP7410 - Adv Planning & Eval Meth I
- ENGL4511 - Intro/Descriptive Linguistics
- ENGL4561 - American English
- ENGL6010 - Teaching Composition
- FOED6020 - Perspectives-American Edu
- FOED7020 - Philosophy & Public Policy
- SPED6120 - Erly Chldhd SPED Assessment
- SPED7110 - Family Collaboration in SPED

Research Coursework 21 credit hours

Complete ALL of the following Courses:
- EDU7420 - Quant Inquiry in Edu I
  AND EDU7430 - Quant Inquiry in Edu II
  AND EDU7300 - Research Design
- EDU7330 - Qualitative Inquiry/Research
  AND EDU7340 - Data Analysis/Reprsnt/Qual Inq
- EDU7920 - Research Seminar/Education
- EDU7950 - Doctoral Sem:Sp Top/Education
  OR EDU7350 - Advanced Regression Analysis
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
  OR EDUP7410 - Adv Planning & Eval Meth I

Notes:

EDU 7010, a core required course, is the first course in the Qualitative block and must be completed before EDUB7330.

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* <u>EDU7950 Doctoral Sem:Sp Top/Education</u> only if a research-based topic

Dissertation 15 credit hours

Complete ALL of the following Courses:
- EDU7990 - Research and Dissertation

The 15 hours are generally taken in 9 & 6 hour blocks.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

Young Children and Families (YCF) 78 credit hours
Type
Completion Requirement

Core Coursework 13 credit hours

Complete ALL of the following Courses:
- EDU7000 - Trans-Concentration Seminar
- EDU7010 - Theoretical Foundtns/Research
- EDU7020 - At-Risk Population:Rsrch, Serv
- EDU7040 - Program Planning/Evaluation
- CUED7430 - Spec App/Tech to Education
  OR EDU7440 - Tech App:Inst Dissem-Info

Concentration Coursework 23 credit hours

Complete ALL of the following Courses:
- ABAP7120 - Behavior Support/Families
- ABAP7920 - Top,Iss,Rsrch/Early Child SPED
- ECED7220 - Early Chld Instr/Materials
- EDUC7400 - Prog & Serv Delivery Models
- EDUC7450 - Doctoral Sem:Yng Child & Fam
- HEC6610 - Crisis Mgmt/Interv-Families
- SPED6120 - Erly Chldhd SPED Assessment
- SPED7110 - Family Collaboration in SPED

Guided Electives 6 credit hours

Complete at least 2 of the following courses:
- CUED6010 - Curr Development & Eval
- CUED7010 - Learning Theories
- CUED7030 - Rural Schools & Communities
- CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
- EDU7060 - Issues in Education
- EDU7950 - Doctoral Sem:Sp Top/Education
- EDUL7200 - Equity Literacy
- EDUL7300 - Multiliteracies
- EDUL7400 - Lit-Cultura/Linguistic Div Pop
- EDUL7500 - Linguistic Perceptions
- EDUP7410 - Adv Planning & Eval Meth I
- ENGL4511 - Intro/Descriptive Linguistics
- ENGL4561 - American English
- ENGL6010 - Teaching Composition
- FOED6020 - Perspectives-American Edu
- FOED7020 - Philosophy & Public Policy
- SPED6120 - Erly Chldhd SPED Assessment
- SPED7110 - Family Collaboration in SPED

Research Coursework 21 credit hours

Complete ALL of the following Courses:
- EDU7420 - Quant Inquiry in Edu I
  AND EDU7430 - Quant Inquiry in Edu II
  AND EDU7300 - Research Design
- EDU7330 - Qualitative Inquiry/Research
  AND EDU7340 - Data Analysis/Reprsnt/Qual Inq
- EDU7920 - Research Seminar/Education
- EDU7320 - Rsch Meth/Behavior Analysis
  OR EDU7350 - Advanced Regression Analysis
  OR EDU7950 - Doctoral Sem:Sp Top/Education
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
  OR EDUP7410 - Adv Planning & Eval Meth I

Notes:

EDU 7010, a core required course, is the first course in the Qualitative block and must be completed before EDUB7330.

* <u>EDU7950 Doctoral Sem:Sp Top/Education</u> only if a research-based topic

Dissertation 15 credit hours

Complete ALL of the following Courses:
- EDU7990 - Research and Dissertation

The 15 hours are generally taken in 9 & 6 hour blocks.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information

Information And Additional Notes

Academic Requirements and Expectations

The student must maintain a cumulative point average of 3.25 and, in addition to adhering to the general regulations of the College of Graduate Studies, adhere to the specific regulations for the Ph.D. in Exceptional Learning program. These regulations, standards, and expectations include:

1. A minimum of 78–79 semester hours of successfully completed course work: 13 hours core courses, 21 hours research courses, 23–24 hours concentration courses, 6 hours elective courses, and a minimum of 15 dissertation hours. All hours should be taken at the 6000– and 7000–levels (transfer credit may include other level courses with approval). Note: if an equivalent specialty course is not available at the 6000– or 7000– level, a 5000–level course that is germane to the student's research/areas of research interest may be used to meet the minimum requirements of course work only by permission of the instructor of the course in question, student's advisor or graduate advisory committee, and the Director of Graduate Programs. Written approval must be secured before enrolling; this may be through inclusion on the approved Program of Study or separate documentation, such as a Substitution form.

a. A minimum of 51 semester hours of course work beyond the baccalaureate must be completed after admittance into the doctoral program, including a minimum of 12 semester hours at the 7000- level (excluding dissertation credit).
b. Upon approval from the student's advisory committee and the Director of Graduate Programs, up to nine (9) graduate credit hours with a grade of B or better

can be counted toward the first 33 hours of the ELPhD Program of Study; these may be credits that are independent of or included in a previously earned degree. Requests to transfer more than a total of 18 credit hours must be approved by the Director of Graduate Programs prior to submitting the Program of Study or transfer request. No more than 27 semester hours of credit at the Master's and Educational Specialist levels, excluding theses and problems courses, may be accepted for transfer credit toward the doctorate. All transfer credit must align with Tennessee Tech and SACSCOC guidelines.

2. All requirements, including the dissertation, must be completed within a period of no more than eight (8) consecutive years.

3. As and Bs are required in coursework. A grade of C is considered a failing grade in doctoral programs. The student is allowed to maintain a grade of C in only one (1) course completed toward the Ph.D. degree. A student receiving two (2) Cs will be dismissed from the program. If a second C is received, it may not be substituted or moved out of the student's program of study in order to avoid dismissal.

4. Ds and Fs are not acceptable in the Ph.D. in Exceptional Learning program. If a student receives a grade of D or F in a course, she/he will be dismissed from the program.

5. If an Incomplete is granted, the student has one (1) academic year to complete the requirements. If the requirements have not been met in the allotted time period, the grade is converted to an IF and the student will be dismissed from the program.

6. A maximum of twelve (12) credit hours may be taken in one (1) semester. Written approval from the student's advisor/chair, department chair, and director of graduate programs is required to register and take more than 12 credit hours in one semester.

7. Course repetition is not allowed in the ELPhD program.

8. Course substitutions are allowed upon written approval from the advisor/ graduate advisory committee, department chair, and director of graduate programs.

9. Students should complete their Comprehensive Examinations either a) following completion of all course work, excluding EDU 7920 and EDU 7990, or b) during the last semester during which such course work is to be completed. Comprehensive Examinations should occur no later than the end of the semester in which the student completes EDU 7920.

10. Approval of the dissertation topic, a successful dissertation proposal presentation to the entire graduate advisory committee, and IRB approval (where appropriate) must precede any significant work on the dissertation. IRB approval must be obtained for any human subjects research project initiated by a student (or faculty member); this includes studies using secondary data.

11. Satisfactory completion of the dissertation requires an oral defense.

12. Dissertation hours (15 hours minimum) may not be completed in fewer than 2 semesters.

EDU-HBW - Exceptional Learning, Health Behaviors and Wellness Concentration, Ph.D.

Program Overview

Program Long Title
Exceptional Learning, Health Behaviors and Wellness Concentration, Ph.D.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description
The Exceptional Learning Ph.D. (ELPhD) program focuses on the characteristics, strengths, and educational needs of individuals and groups whose learning potential and opportunities for success are frequently unrealized. Exceptional populations include people for whom social, economic, and physical characteristics may serve as a barrier to development and learning.

The ELPhD program offers robust academic preparation of professionals who serve their communities, public school systems, institutions of higher education, and nontraditional educational environments. Our graduates are leaders who work across local, regional, national, and international platforms to effect positive change in diverse populations of exceptional learners and educational contexts, addressing barriers to learning, primarily through research and service activities.

The ELPhD curriculum is organized around three areas of knowledge development-core, concentration, and research. Core knowledge includes an orientation to the program, theory, foundations for understanding exceptional populations, program planning and evaluation, and technology. Concentration knowledge helps students to deepen and hone their specific interests. The innovative research sequence grounds students in quantitative and qualitative research methodologies.

Health Behaviors and Wellness Education (HBWE) offers cutting-edge, hands-on experiential courses along with related pedagogical methods and theory. HBWE research courses supply additional opportunities to research and address discipline-specific concerns. This comprehensive and novel design supplies students with the knowledge, skills, and abilities necessary to succeed professionally and lead change in health sciences and wellness disciplines. (Concentration Leader – Dr. Christy Killman)

En-route M.A. or Ed.S Degree in Curriculum and Instruction (C&I)

A student pursuing an Exceptional Learning Ph.D. may elect to earn an en-route degree as they progress through the ELPhD program. Those students entering the program with no prior graduate degree may earn an M.A. in Curriculum & Instruction (C&I) with a Curriculum concentration, as the student successfully advances toward completion of the Ph.D. Those who enter the program with a graduate degree may elect to earn either the M.A. or an Ed.S. in Curriculum & Instruction with a Curriculum concentration.

If a student elects to forego the en-route degree, the full 79 credit hours of the program must be completed. The Ph.D. is not reduced to 46–49 hours, even if a student enters with one or more graduate degrees.

En-route M.A. in Curriculum & Instruction (with Curriculum concentration)

The en-route M.A. degree may be awarded when the student successfully completes 33 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The M.A. will not be awarded without completion of these 9 research credit hours.

Enroute-MA in Curriculum and Instruction

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 . 9 hours

Advisor Guided Electives 24 hours

TOTAL Hours for Enroute MA 33 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the M.A. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route M.A. portion of the program, unless special exception has been secured. Courses applied to the en-route M.A. must be completed within six years of enrollment.

The en-route M.A. degree may be awarded at any point during the program, given that the student:

• meets both the C&I M.A. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies.

Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route M.A. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 45–46 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000– and 7000–level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

En-route Ed.S. in Curriculum & Instruction (with Curriculum concentration)

The en-route Ed.S. degree may be awarded when the student successfully completes 30 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The Ed.S. will not be awarded without completion of these 9 research credit hours.

Enroute-Ed.S. in Curriculum and Instruction Course Requirements Credit Hours:

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 9 hours

Advisor Guided Electives 21 hours

TOTAL Hours for Enroute 30 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the en-route Ed.S. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route Ed.S. portion of the program, unless special exception has been secured. Courses applied to the en-route Ed.S. must be completed within six years of enrollment.

The en-route Ed.S. degree may be awarded at any point during the program, given that the student:

• meets both the C&I Ed.S. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies. Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route Ed.S. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 48–49 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000– and 7000–level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

Note: Only students admitted to the ELPhD program are permitted to enroll in these courses.

Curriculum

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Research Knowledge, and Concentration Knowledge.

Credit hours are classified as follows:

• Core Coursework 13

- Core Concentration Coursework 23-24
- Advisor Guided Electives 6-7
- Research Coursework 21
- Dissertation 15+
- Total Degree Requirements 78-7

Admission Requirements

Admission Requirements

Admission Requirements

A multifaceted approach is taken in the application and admissions decisions process. The applicant will be evaluated on the criteria listed below in order to determine the applicant's overall potential for success in the ELPhD program. Please note, however, that fulfillment of the minimum requirements does not guarantee admission.

1. **QPA**–Consideration for admission to the program is based on the applicant's grade point average (GPA) in the last graduate degree or the last 60 hours of undergraduate work if no graduate degree has been completed. If a student has successfully completed some graduate hours but not attained a graduate degree, the GPA for these courses may also be considered. An average of 3.0 (on a 4.0 scale) or above from a recognized baccalaureate, graduate, or professional degree from an accredited college or university, or an international equivalent based on a four-year curriculum is required for admission.

2. **GRE**– valid GRE scores (score date within 5 years of application) must be submitted as part of the ELPhD application.

3. **Scholarly Writing**–Students must demonstrate scholarly writing skill and mastery by submitting a reference-based paper, thesis, or other written document. The writing sample should use multiple, credible sources to support a particular point of view, argument, or claim and show the applicant's writing quality, skillful analysis/argument, and proficiency with synthesizing information. The applicant must be the sole author. The scholarly writing sample does not have a specific topic requirement.

4. **Statement of Intent**–One (1) to two (2) pages that address the following: intended enrollment (semester and year), intended concentration, autobiographical statement, educational and professional goals, and area of interest for future research. Applicants to the ABA concentration must indicate the track in which they wish to enroll: School-Aged & Adult Populations (ABAS) or Young Children & Families (YCF).

5. **Three Letters of Recommendation**–Recommendation letters should be from individuals, preferably professors, who are able to comment on the student's qualifications and scholarly aptitude for doctoral study. The letter should also address characteristics that will contribute to the student's success as a doctoral student should you be accepted in the ELPhD program. Consideration will be made based upon the content of these letters. Please make certain the recommenders know they must submit a letter as well as evaluate the applicant on a series of qualities (done when submitting the letter). Applications without three letters may not receive full consideration.

6. **Professional Curriculum Vitae (CV)/Resume**

7. **Interviews** - Applicants who pass the initial evaluation will be required to have an interview with the ELPhD program faculty and director of graduate programs.

8. **International Students** must also meet the English Language Requirement by providing TOEFL test scores: a minimum of 80 on the TOEFL iBT is required. If you have taken another TOEFL version and the results are still valid (no more than 5 years old), the score requirements are: 213 on TOEFL CBT or 550 on TOEFL PBT.

Applicants who have citizenship in a country where English is a primary language or have been awarded a degree from a university in one of the following countries are exempt from the English Language requirement: Australia, Belize, the British Caribbean and British West Indies, Canada (except Quebec), England, Guyana, Ireland, Liberia, New Zealand, Scotland, the United States, and Wales.

If a candidate does not have access to a TOEFL testing site, it may be possible to accept another language proficiency test score. Candidates should inquire before submitting a test score other than the TOEFL.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Research Knowledge, and Concentration Knowledge. Credit hours are classified as follows:

- **Core Coursework:** 13 hours
- **Research Coursework:** 21 hours
- **Dissertation:** 15+ hours
- **Core Concentration Coursework:** 23-24 hours
- **Advisor Guided Electives:** 6-7 hours
- **Total Degree Requirements:** 78-79 hours

Degree Requirements
Type
Completion Requirement

Core Coursework (Select 13 hours)

Complete ALL of the following Courses:
- EDU7000 - Trans-Concentration Seminar
- EDU7010 - Theoretical Foundtns/Research
- EDU7020 - At-Risk Population:Rsrch, Serv
- EDU7040 - Program Planning/Evaluation
- CUED7430 - Spec App/Tech to Education
  OR EDU7440 - Tech App:Inst Dissem-Info

Research Coursework (Select 21 hours)

Complete ALL of the following Courses:
- EDU7300 - Research Design
- EDU7330 - Qualitative Inquiry/Research
- EDU7340 - Data Analysis/Reprsnt/Qual Inq
- EDU7420 - Quant Inquiry in Edu I
- EDU7430 - Quant Inquiry in Edu II
- EDU7920 - Research Seminar/Education
- EDU7320 - Rsch Meth/Behavior Analysis
  OR EDU7350 - Advanced Regression Analysis
  OR EDUP7410 - Adv Planning & Eval Meth I
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
  OR EDU7950 - Doctoral Sem:Sp Top/Education

Note:

* EDU7950 Doctoral Sem:Sp Top/Education only if a research-based topic

** EDUP7410 Adv Planning & Eval Meth I counts as research for non-PPE concentration students

Dissertation (15 hours)

Complete ALL of the following Courses:

- EDU7990 - Research and Dissertation

The 15 hours are generally taken in 9 & 6 hour blocks.

Core Concentration Coursework

The Health Behavior and Wellness Education (HBWE) concentration offers cutting-edge, hands-on experiential courses along with related pedagogical methods and theory. HBWE research courses supply additional opportunities to research and address discipline-specific concerns. This comprehensive and novel design supplies students with the knowledge, skills, and abilities necessary to succeed professionally and lead change in health sciences and wellness disciplines. HBWE students will select 24 credit hours from the following courses:

Complete ALL of the following Courses:
- EDUH7000 - Current Issues in EXPW/EDUH
- EDUH7010 - Pedagogical Theory of Phy Edu
- EDUH7020 - Adv Tchng/Ex Sci-Hlth Rl Flds
- EDUH7100 - Biomechanics of Human Movement
- EDUH7200 - Foundations/Health Promotion
- EDUH7300 - Bhvrl Aspects/Phys Actvity
- EDUH7500 - Hlth Bhvr & Welns Edu Rsrch
- EDUH7520 - Inquiry/Hlth Bhvr & Welns Edu
- EDUH7600 - Sp Top/EXPW
- EDUH7610 - Ind Study in EXPW/EDUH

Advisor Guided Electives (6-7 Hours)

Complete ANY of the following Courses:
- CUED6010 - Curr Development & Eval
- CUED7010 - Learning Theories
- CUED7030 - Rural Schools & Communities
- CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
- EDU7060 - Issues in Education
- EDU7950 - Doctoral Sem:Sp Top/Education
- EDUL7200 - Equity Literacy
- EDUL7300 - Multiliteracies
- EDUL7400 - Lit-Cultura/Linguistic Div Pop
- EDUL7500 - Linguistic Perceptions
- EDUP7410 - Adv Planning & Eval Meth I
- ENGL4511 - Intro/Descriptive Linguistics
- ENGL4561 - American English
- ENGL6010 - Teaching Composition
- FOED6020 - Perspectives-American Edu
- FOED7020 - Philosophy & Public Policy
- SPED6120 - Erly Chldhd SPED Assessment
- SPED7110 - Family Collaboration in SPED

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information

Information And Additional Notes

Program Requirements

The student must maintain a cumulative point average of 3.25 and, in addition to adhering to the general regulations of the College of Graduate Studies, adhere to the specific regulations for the Ph.D. in Exceptional Learning program. These regulations, standards, and expectations include:

1. A minimum of 78–79 semester hours of successfully completed course work: 13 hours core courses, 21 hours research courses, 23–24 hours concentration courses, 6 hours elective courses, and a minimum of 15 dissertation hours. All hours should be taken at the 6000– and 7000–levels (transfer credit may include other level courses with approval). Note: if an equivalent specialty course is not available at the 6000– or 7000– level, a 5000–level course that is germane to the student's research/areas of research interest may be used to meet the minimum requirements of course work only by permission of the instructor of the course in question, student's advisor or graduate advisory committee, and the Director of Graduate Programs. Written approval must be secured before enrolling; this may be through inclusion on the approved Program of Study or separate documentation, such as a Substitution form.

a. A minimum of 51 semester hours of course work beyond the baccalaureate must be completed after admittance into the doctoral program, including a minimum of 12 semester hours at the 7000- level (excluding dissertation credit).
b. Upon approval from the student's advisory committee and the Director of Graduate Programs, up to nine (9) graduate credit hours with a grade of B or better can be counted toward the first 33 hours of the ELPhD Program of Study; these may be credits that are independent of or included in a previously earned degree. Requests to transfer more than a total of 18 credit hours must be approved by the Director of Graduate Programs prior to submitting the Program of Study or transfer request. No more than 27 semester hours of credit at the Master's and Educational Specialist levels, excluding theses and problems courses, may be accepted for transfer credit toward the doctorate. All transfer credit must align with Tennessee Tech and SACSCOC guidelines.

2. All requirements, including the dissertation, must be completed within a period of no more than eight (8) consecutive years.

3. As and Bs are required in coursework. A grade of C is considered a failing grade in doctoral programs. The student is allowed to maintain a grade of C in only one (1) course completed toward the Ph.D. degree. A student receiving two (2) Cs will be dismissed from the program. If a second C is received, it may not be substituted or moved out of the student's program of study in order to avoid dismissal.

4. Ds and Fs are not acceptable in the Ph.D. in Exceptional Learning program. If a student receives a grade of D or F in a course, she/he will be dismissed from the program.

5. If an Incomplete is granted, the student has one (1) academic year to complete the requirements. If the requirements have not been met in the allotted time period, the grade is converted to an IF and the student will be dismissed from the program.

6. A maximum of twelve (12) credit hours may be taken in one (1) semester. Written approval from the student's advisor/chair, department chair, and director of graduate programs is required to register and take more than 12 credit hours in one semester.

7. Course repetition is not allowed in the ELPhD program.

8. Course substitutions are allowed upon written approval from the advisor/ graduate advisory committee, department chair, and director of graduate programs.

9. Students should complete their Comprehensive Examinations either a) following completion of all course work, excluding EDU 7920 and EDU 7990, or b) during the last semester during which such course work is to be completed. Comprehensive Examinations should occur no later than the end of the semester in which the student completes EDU 7920.

10. Approval of the dissertation topic, a successful dissertation proposal presentation to the entire graduate advisory committee, and IRB approval (where appropriate) must precede any significant work on the dissertation. IRB approval must be obtained for any human subjects research project initiated by a student (or faculty member); this includes studies using secondary data.

11. Satisfactory completion of the dissertation requires an oral defense.

12. Dissertation hours (15 hours minimum) may not be completed in fewer than 2 semesters.

EDU-LIT - Exceptional Learning, Critical Discourse and Literacy Studies, Ph.D.

Program Overview

Program Long Title
Exceptional Learning, Critical Discourse and Literacy Studies, Ph.D.

College/School	Department(s)
Education	Curriculum and Instruction

Catalog Full Description
The Exceptional Learning Ph.D. (ELPhD) program focuses on the characteristics, strengths, and educational needs of individuals and groups whose learning potential and opportunities for success are frequently unrealized. Exceptional populations include people for whom social, economic, and physical characteristics may serve as a barrier to development and learning.

The ELPhD program offers robust academic preparation of professionals who serve their communities, public school systems, institutions of higher education, and nontraditional educational environments. Our graduates are leaders who work across local, regional, national, and international platforms to effect positive change in diverse populations of exceptional learners and educational contexts, addressing barriers to learning, primarily through research and service activities.

The ELPhD curriculum is organized around three areas of knowledge development-core, concentration, and research. Core knowledge includes an orientation to the program, theory, foundations for understanding exceptional populations, program planning and evaluation, and technology. Concentration knowledge helps students to deepen and hone their specific interests. The innovative research sequence grounds students in quantitative and qualitative research methodologies.

Critical Discourse and Literacy Studies empowers educational innovators to develop cutting-edge, socially conscious approaches to multiliteracies and challenge narrow conceptions of learners, families, and worldviews. (Concentration Leader – Dr. Janet Isbell)

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Research Knowledge, and Concentration Knowledge. Credit hours are classified as follows:

- Core Coursework 13
- Core Concentration Coursework 23-24
- Advisor Guided Electives 6-7
- Research Coursework 21
- Dissertation 15+
- Total Degree Requirements 78-79

En-route M.A. or Ed.S Degree in Curriculum and Instruction (C&I)

A student pursuing an Exceptional Learning Ph.D. may elect to earn an en-route degree as they progress through the ELPhD program. Those students entering the program with no prior graduate degree may earn an M.A. in Curriculum & Instruction (C&I) with a Curriculum concentration, as the student successfully advances toward completion of the Ph.D. Those who enter the program with a graduate degree may elect to earn either the M.A. or an Ed.S. in Curriculum & Instruction with a Curriculum concentration.

If a student elects to forego the en-route degree, the full 79 credit hours of the program must be completed. The Ph.D. is not reduced to 46–49 hours, even if a student enters with one or more graduate degrees.

En-route M.A. in Curriculum & Instruction (with Curriculum concentration)

The en-route M.A. degree may be awarded when the student successfully completes 33 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The M.A. will not be awarded without completion of these 9 research credit hours.

Enroute-MA in Curriculum and Instruction

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 . 9 hours

Advisor Guided Electives 24 hours

TOTAL Hours for Enroute MA 33 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the M.A. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route M.A. portion of the program, unless special exception has been secured. Courses applied to the en-route M.A. must be completed within six years of enrollment.

The en-route M.A. degree may be awarded at any point during the program, given that the student:

• meets both the C&I M.A. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies.

Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route M.A. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 45–46 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000– and 7000–level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

En-route Ed.S. in Curriculum & Instruction (with Curriculum concentration)

The en-route Ed.S. degree may be awarded when the student successfully completes 30 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The Ed.S. will not be awarded without completion of these 9 research credit hours.

Enroute-Ed.S. in Curriculum and Instruction Course Requirements Credit Hours:

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 9 hours

Advisor Guided Electives 21 hours

TOTAL Hours for Enroute 30 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the en-route Ed.S. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route Ed.S. portion of the program, unless special exception has been secured. Courses applied to the en-route Ed.S. must be completed within six years of enrollment.

The en-route Ed.S. degree may be awarded at any point during the program, given that the student:

• meets both the C&I Ed.S. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies. Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route Ed.S. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 48–49 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000– and 7000–level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

Note: Only students admitted to the ELPhD program are permitted to enroll in these courses.

Admission Requirements

Admission Requirements
A multifaceted approach is taken in the application and admissions decisions process. The applicant will be evaluated on the criteria listed below in order to determine the applicant's overall potential for success in the ELPhD program. Please note, however, that fulfillment of the minimum requirements does not guarantee admission.

1. **QPA**–Consideration for admission to the program is based on the applicant's grade point average (GPA) in the last graduate degree or the last 60 hours of undergraduate work if no graduate degree has been completed. If a student has successfully completed some graduate hours but not attained a graduate degree, the GPA for these courses may also be considered. An average of 3.0 (on a 4.0 scale) or above from a recognized baccalaureate, graduate, or professional degree from an accredited college or university, or an international equivalent based on a four-year curriculum is required for admission.

2. **GRE**– valid GRE scores (score date within 5 years of application) must be submitted as part of the ELPhD application.

3. **Scholarly Writing**–Students must demonstrate scholarly writing skill and mastery by submitting a reference-based paper, thesis, or other written document. The writing sample should use multiple, credible sources to support a particular point of view, argument, or claim and show the applicant's writing quality, skillful analysis/argument, and proficiency with synthesizing information. The applicant must be the sole author. The scholarly writing sample does not have a specific topic requirement.

4. **Statement of Intent**–One (1) to two (2) pages that address the following: intended enrollment (semester and year), intended concentration, autobiographical statement, educational and professional goals, and area of interest for future research. Applicants to the ABA concentration must indicate the track in which they wish to enroll: School-Aged & Adult Populations (ABAS) or Young Children & Families (YCF).

5. **Three Letters of Recommendation**–Recommendation letters should be from individuals, preferably professors, who are able to comment on the student's qualifications and scholarly aptitude for doctoral study. The letter should also address characteristics that will contribute to the student's success as a doctoral student should you be accepted in the ELPhD program. Consideration will be made based upon the content of these letters. Please make certain the recommenders know they must submit a letter as well as evaluate the applicant on a series of qualities (done when submitting the letter). Applications without three letters may not receive full consideration.

6. **Professional Curriculum Vitae (CV)/Resume**

7. **Interviews** - Applicants who pass the initial evaluation will be required to have an interview with the ELPhD program faculty and director of graduate programs.

8. **International Students** must also meet the English Language Requirement by providing TOEFL test scores: a minimum of 80 on the TOEFL iBT is required. If you have taken another TOEFL version and the results are still valid (no more than 5 years old), the score requirements are: 213 on TOEFL CBT or 550 on TOEFL PBT.

Applicants who have citizenship in a country where English is a primary language or have been awarded a degree from a university in one of the following countries are exempt from the English Language requirement: Australia, Belize, the British Caribbean and British West Indies, Canada (except Quebec), England, Guyana, Ireland, Liberia, New Zealand, Scotland, the United States, and Wales.

If a candidate does not have access to a TOEFL testing site, it may be possible to accept another language proficiency test score. Candidates should inquire before submitting a test score other than the TOEFL.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Research Knowledge, and Concentration Knowledge. Credit hours are classified as follows:

- **Core Coursework:** 13 hours
- **Research Coursework:** 21 hours
- **Dissertation:** 15+ hours
- **Core Concentration Coursework:** 23-24 hours
- **Advisor Guided Electives:** 6-7 hours
- **Total Degree Requirements:** 78-79 hours

Degree Requirements
Type
Completion Requirement

Core Coursework (Select 13 hours)

Complete ALL of the following Courses:
- EDU7000 - Trans-Concentration Seminar
- EDU7010 - Theoretical Foundtns/Research
- EDU7020 - At-Risk Population:Rsrch, Serv
- EDU7040 - Program Planning/Evaluation
- CUED7430 - Spec App/Tech to Education
  OR EDU7440 - Tech App:Inst Dissem-Info

Research Coursework (Select 21 hours)

Complete ALL of the following Courses:
- EDU7300 - Research Design

- EDU7330 - Qualitative Inquiry/Research
- EDU7340 - Data Analysis/Reprsnt/Qual Inq
- EDU7420 - Quant Inquiry in Edu I
- EDU7430 - Quant Inquiry in Edu II
- EDU7920 - Research Seminar/Education
- EDU7320 - Rsch Meth/Behavior Analysis
  OR EDU7350 - Advanced Regression Analysis
  OR EDUP7410 - Adv Planning & Eval Meth I
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
  OR EDU7950 - Doctoral Sem:Sp Top/Education

Note:

* <u>EDU7950 Doctoral Sem:Sp Top/Education</u> only if a research-based topic

** <u>EDUP7410 Adv Planning & Eval Meth I</u> counts as research for non-PPE concentration students

Dissertation (15 hours)

Complete ALL of the following Courses:
- EDU7990 - Research and Dissertation

The 15 hours are generally taken in 9 & 6 hour blocks.

Core Concentration Coursework

The Literacy concentration engages students in a continuum of exploration to develop well-rounded knowledge of literacy research, theory, and practice, as well as expand expertise in the student's choice of topic.

Complete ALL of the following Courses:
- EDUL7100 - Literacy Hist, Theory & Policy
- EDUL7200 - Equity Literacy
- EDUL7300 - Multiliteracies
- EDUL7400 - Lit-Cultura/Linguistic Div Pop
- EDUL7500 - Linguistic Perceptions
- EDUL7600 - The Literacy Professional
- EDUL7700 - Thry, Mthds, Trnds/Lit Rsrch
- EDUL7900 - Community Literacy

Advisor Guided Electives (6-7 Hours)

Complete ANY of the following Courses:
- CUED6010 - Curr Development & Eval
- CUED7010 - Learning Theories
- CUED7030 - Rural Schools & Communities
- CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
- EDU7060 - Issues in Education
- EDU7950 - Doctoral Sem:Sp Top/Education
- EDUL7200 - Equity Literacy
- EDUL7300 - Multiliteracies
- EDUL7400 - Lit-Cultura/Linguistic Div Pop
- EDUL7500 - Linguistic Perceptions
- EDUP7410 - Adv Planning & Eval Meth I
- ENGL4511 - Intro/Descriptive Linguistics
- ENGL4561 - American English
- ENGL6010 - Teaching Composition
- FOED6020 - Perspectives-American Edu
- FOED7020 - Philosophy & Public Policy
- SPED6120 - Erly Chldhd SPED Assessment
- SPED7110 - Family Collaboration in SPED

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information
Information And Additional Notes

Program Requirements

The student must maintain a cumulative point average of 3.25 and, in addition to adhering to the general regulations of the College of Graduate Studies, adhere to the specific regulations for the Ph.D. in Exceptional Learning program. These regulations, standards, and expectations include:

1. A minimum of 78–79 semester hours of successfully completed course work: 13 hours core courses, 21 hours research courses, 23–24 hours concentration courses, 6 hours elective courses, and a minimum of 15 dissertation hours. All hours should be taken at the 6000– and 7000–levels (transfer credit may include other level courses with approval). Note: if an equivalent specialty course is not available at the 6000– or 7000– level, a 5000–level course that is germane to the student's research/areas of research interest may be used to meet the minimum requirements of course work only by permission of the instructor of the course in question, student's advisor or graduate advisory committee, and the Director of Graduate Programs. Written approval must be secured before enrolling; this may be through inclusion on the approved Program of Study or separate documentation, such as a Substitution form.

a. A minimum of 51 semester hours of course work beyond the baccalaureate must be completed after admittance into the doctoral program, including a minimum of 12 semester hours at the 7000- level (excluding dissertation credit).
b. Upon approval from the student's advisory committee and the Director of Graduate Programs, up to nine (9) graduate credit hours with a grade of B or better can be counted toward the first 33 hours of the ELPhD Program of Study; these may be credits that are independent of or included in a previously earned degree. Requests to transfer more than a total of 18 credit hours must be approved by the Director of Graduate Programs prior to submitting the Program of Study or transfer request. No more than 27 semester hours of credit at the Master's and Educational Specialist levels, excluding theses and problems courses, may be accepted for transfer credit toward the doctorate. All transfer credit must align with Tennessee Tech and SACSCOC guidelines.

2. All requirements, including the dissertation, must be completed within a period of no more than eight (8) consecutive years.

3. As and Bs are required in coursework. A grade of C is considered a failing grade in doctoral programs. The student is allowed to maintain a grade of C in only one (1) course completed toward the Ph.D. degree. A student receiving two (2) Cs will be dismissed from the program. If a second C is received, it may not be substituted or moved out of the student's program of study in order to avoid dismissal.

4. Ds and Fs are not acceptable in the Ph.D. in Exceptional Learning program. If a student receives a grade of D or F in a course, she/he will be dismissed from the program.

5. If an Incomplete is granted, the student has one (1) academic year to complete the requirements. If the requirements have not been met in the allotted time period, the grade is converted to an IF and the student will be dismissed from the program.

6. A maximum of twelve (12) credit hours may be taken in one (1) semester. Written approval from the student's advisor/chair, department chair, and director of graduate programs is required to register and take more than 12 credit hours in one semester.

7. Course repetition is not allowed in the ELPhD program.

8. Course substitutions are allowed upon written approval from the advisor/ graduate advisory committee, department chair, and director of graduate programs.

9. Students should complete their Comprehensive Examinations either a) following completion of all course work, excluding EDU 7920 and EDU 7990, or b) during the last semester during which such course work is to be completed. Comprehensive Examinations should occur no later than the end of the semester in which the student completes EDU 7920.

10. Approval of the dissertation topic, a successful dissertation proposal presentation to the entire graduate advisory committee, and IRB approval (where appropriate) must precede any significant work on the dissertation. IRB approval must be obtained for any human subjects research project initiated by a student (or faculty member); this includes studies using secondary data.

11. Satisfactory completion of the dissertation requires an oral defense.

12. Dissertation hours (15 hours minimum) may not be completed in fewer than 2 semesters.

EDU-PPLE - Exceptional Learning, Program Planning and Evaluation Concentration, Ph.D.

Program Overview

Program Long Title
Exceptional Learning, Program Planning and Evaluation Concentration, Ph.D.

College/School	Department(s)
Education	Curriculum and Instruction

Catalog Full Description
The Exceptional Learning Ph.D. (ELPhD) program focuses on the characteristics, strengths, and educational needs of individuals and groups whose learning potential and opportunities for success are frequently unrealized. Exceptional populations include people for whom social, economic, and physical characteristics may serve as a barrier to development and learning.

The ELPhD program offers robust academic preparation of professionals who serve their communities, public school systems, institutions of higher education, and nontraditional educational environments. Our graduates are leaders who work across local, regional, national, and international platforms to effect positive change in diverse populations of exceptional learners and educational contexts, addressing barriers to learning, primarily through research and service activities.

The ELPhD curriculum is organized around three areas of knowledge development-core, concentration, and research. Core knowledge includes an orientation to the program, theory, foundations for understanding exceptional populations, program planning and evaluation, and technology. Concentration knowledge helps students to deepen and hone their specific interests. The innovative research sequence grounds students in quantitative and qualitative research methodologies.

Program Planning and Evaluation (PPE) prepares professionals for leadership roles in the field of PPE. Program content includes the history of the field, influence in context and cultures in PPE design and methodology, quantitative and qualitative methods, and practical application of PPE skills through practicum experiences. (Concentration Leader – Dr. George Chitiyo)

Curriculum

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Research Knowledge, and Concentration Knowledge. Credit hours are classified as follows:

- Core Coursework 13
- Core Concentration Coursework 23-24
- Advisor Guided Electives 6-7
- Research Coursework 21
- Dissertation 15+

- Total Degree Requirements 78-7

En-route M.A. or Ed.S Degree in Curriculum and Instruction (C&I)

A student pursuing an Exceptional Learning Ph.D. may elect to earn an en-route degree as they progress through the ELPhD program. Those students entering the program with no prior graduate degree may earn an M.A. in Curriculum & Instruction (C&I) with a Curriculum concentration, as the student successfully advances toward completion of the Ph.D. Those who enter the program with a graduate degree may elect to earn either the M.A. or an Ed.S. in Curriculum & Instruction with a Curriculum concentration.

If a student elects to forego the en-route degree, the full 79 credit hours of the program must be completed. The Ph.D. is not reduced to 46–49 hours, even if a student enters with one or more graduate degrees.

En-route M.A. in Curriculum & Instruction (with Curriculum concentration)

The en-route M.A. degree may be awarded when the student successfully completes 33 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The M.A. will not be awarded without completion of these 9 research credit hours.

Enroute-MA in Curriculum and Instruction

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 . 9 hours

Advisor Guided Electives 24 hours

TOTAL Hours for Enroute MA 33 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the M.A. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route M.A. portion of the program, unless special exception has been secured. Courses applied to the en-route M.A. must be completed within six years of enrollment.

The en-route M.A. degree may be awarded at any point during the program, given that the student:

• meets both the C&I M.A. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies.

Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route M.A. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 45–46 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000- and 7000-level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

En-route Ed.S. in Curriculum & Instruction (with Curriculum concentration)

The en-route Ed.S. degree may be awarded when the student successfully completes 30 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The Ed.S. will not be awarded without completion of these 9 research credit hours.

Enroute-Ed.S. in Curriculum and Instruction Course Requirements Credit Hours:

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 9 hours

Advisor Guided Electives 21 hours

TOTAL Hours for Enroute 30 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the en-route Ed.S. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route Ed.S. portion of the program, unless special exception has been secured. Courses applied to the en-route Ed.S. must be completed within six years of enrollment.

The en-route Ed.S. degree may be awarded at any point during the program, given that the student:

• meets both the C&I Ed.S. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies. Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route Ed.S. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 48–49 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000– and 7000–level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

Note: Only students admitted to the ELPhD program are permitted to enroll in these courses.

Admission Requirements

Admission Requirements
A multifaceted approach is taken in the application and admissions decisions process. The applicant will be evaluated on the criteria listed below in order to determine the applicant's overall potential for success in the ELPhD program. Please note, however, that fulfillment of the minimum requirements does not guarantee admission.

1. **QPA**–Consideration for admission to the program is based on the applicant's grade point average (GPA) in the last graduate degree or the last 60 hours of undergraduate work if no graduate degree has been completed. If a student has successfully completed some graduate hours but not attained a graduate degree, the GPA for these courses may also be considered. An average of 3.0 (on a 4.0 scale) or above from a recognized baccalaureate, graduate, or professional degree from an accredited college or university, or an international equivalent based on a four-year curriculum is required for admission.

2. **GRE**– valid GRE scores (score date within 5 years of application) must be submitted as part of the ELPhD application.

3. **Scholarly Writing**–Students must demonstrate scholarly writing skill and mastery by submitting a reference-based paper, thesis, or other written document. The writing sample should use multiple, credible sources to support a particular point of view, argument, or claim and show the applicant's writing quality, skillful analysis/argument, and proficiency with synthesizing information. The applicant must be the sole author. The scholarly writing sample does not have a specific topic requirement.

4. **Statement of Intent**–One (1) to two (2) pages that address the following: intended enrollment (semester and year), intended concentration, autobiographical statement, educational and professional goals, and area of interest for future research. Applicants to the ABA concentration must indicate the track in which they wish to enroll: School-Aged & Adult Populations (ABAS) or Young Children & Families (YCF).

5. **Three Letters of Recommendation**–Recommendation letters should be from individuals, preferably professors, who are able to comment on the student's qualifications and scholarly aptitude for doctoral study. The letter should also address characteristics that will contribute to the student's success as a doctoral student should you be accepted in the ELPhD program. Consideration will be made based upon the content of these letters. Please make certain the recommenders know they must submit a letter as well as evaluate the applicant on a series of qualities (done when submitting the letter). Applications without three letters may not receive full consideration.

6. **Professional Curriculum Vitae (CV)/Resume**

7. **Interviews** - Applicants who pass the initial evaluation will be required to have an interview with the ELPhD program faculty and director of graduate programs.

8. **International Students** must also meet the English Language Requirement by providing TOEFL test scores: a minimum of 80 on the TOEFL iBT is required. If you have taken another TOEFL version and the results are still valid (no more than 5 years old), the score requirements are: 213 on TOEFL CBT or 550 on TOEFL PBT.

Applicants who have citizenship in a country where English is a primary language or have been awarded a degree from a university in one of the following countries are exempt from the English Language requirement: Australia, Belize, the British Caribbean and British West Indies, Canada (except Quebec), England, Guyana, Ireland, Liberia, New Zealand, Scotland, the United States, and Wales.

If a candidate does not have access to a TOEFL testing site, it may be possible to accept another language proficiency test score. Candidates should inquire before submitting a test score other than the TOEFL.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Research Knowledge, and Concentration Knowledge. Credit hours are classified as follows:

- **Core Coursework:** 13 hours
- **Research Coursework:** 21 hours
- **Dissertation:** 15+ hours
- **Core Concentration Coursework:** 23-24 hours
- **Advisor Guided Electives:** 6-7 hours
- **Total Degree Requirements:** 78-79 hours

Degree Requirements
Type
Completion Requirement

Core Coursework (Select 13 hours)

Complete ALL of the following Courses:
- EDU7000 - Trans-Concentration Seminar
- EDU7010 - Theoretical Foundtns/Research
- EDU7020 - At-Risk Population:Rsrch, Serv
- EDU7040 - Program Planning/Evaluation
- CUED7430 - Spec App/Tech to Education
  OR EDU7440 - Tech App:Inst Dissem-Info

Research Coursework (Select 21 hours)

Complete ALL of the following Courses:

- EDU7300 - Research Design
- EDU7330 - Qualitative Inquiry/Research
- EDU7340 - Data Analysis/Reprsnt/Qual Inq
- EDU7420 - Quant Inquiry in Edu I
- EDU7430 - Quant Inquiry in Edu II
- EDU7920 - Research Seminar/Education
- EDU7320 - Rsch Meth/Behavior Analysis
  OR EDU7350 - Advanced Regression Analysis
  OR EDUP7410 - Adv Planning & Eval Meth I
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
  OR EDU7950 - Doctoral Sem:Sp Top/Education

Note:

* EDU7950 Doctoral Sem:Sp Top/Education only if a research-based topic

** EDUP7410 Adv Planning & Eval Meth I counts as research for non-PPE concentration students

Dissertation (15 hours)

Complete ALL of the following Courses:

- EDU7990 - Research and Dissertation

The 15 hours are generally taken in 9 & 6 hour blocks.

Core Concentration Coursework

This concentration prepares professionals for leadership roles in program planning and evaluation in various settings. In addition to exposing students to different theories of evaluation, the program equips students with both qualitative and quantitative research/evaluation methods.

Complete ALL of the following Courses:

- EDUP7410 - Adv Planning & Eval Meth I
- EDUP7420 - Adv Planning & Eval Meth II
- EDUP7810 - Pract/Planning & Evaluation

- 18 credit hours of EDUP7810 Pract/Planning & Evaluation is required, and may be taken in blocks of 3, 6, and/or 9 credit hours.

Advisor Guided Electives (6-7 Hours)

Complete ANY of the following Courses:

- CUED6010 - Curr Development & Eval
- CUED7010 - Learning Theories
- CUED7030 - Rural Schools & Communities
- CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
- EDU7060 - Issues in Education
- EDU7950 - Doctoral Sem:Sp Top/Education
- EDUL7200 - Equity Literacy
- EDUL7300 - Multiliteracies
- EDUL7400 - Lit-Cultura/Linguistic Div Pop
- EDUL7500 - Linguistic Perceptions
- EDUP7410 - Adv Planning & Eval Meth I
- ENGL4511 - Intro/Descriptive Linguistics
- ENGL4561 - American English
- ENGL6010 - Teaching Composition
- FOED6020 - Perspectives-American Edu
- FOED7020 - Philosophy & Public Policy
- SPED6120 - Erly Chldhd SPED Assessment
- SPED7110 - Family Collaboration in SPED

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information

Information And Additional Notes

Program Requirements

The student must maintain a cumulative point average of 3.25 and, in addition to adhering to the general regulations of the College of Graduate Studies, adhere to the specific regulations for the Ph.D. in Exceptional Learning program. These regulations, standards, and expectations include:

1. A minimum of 78–79 semester hours of successfully completed course work: 13 hours core courses, 21 hours research courses, 23–24 hours concentration courses, 6 hours elective courses, and a minimum of 15 dissertation hours. All hours should be taken at the 6000– and 7000–levels (transfer credit may include other level courses with approval). Note: if an equivalent specialty course is not available at the 6000– or 7000– level, a 5000–level course that is germane to the student's research/areas of research interest may be used to meet the minimum requirements of course work only by permission of the instructor of the course in question, student's advisor or graduate advisory committee, and the Director of Graduate Programs. Written approval must be secured before enrolling; this may be through inclusion on the approved Program of Study or separate documentation, such as a Substitution form.

a. A minimum of 51 semester hours of course work beyond the baccalaureate must be completed after admittance into the doctoral program, including a minimum of 12 semester hours at the 7000- level (excluding dissertation credit).
b. Upon approval from the student's advisory committee and the Director of Graduate Programs, up to nine (9) graduate credit hours with a grade of B or better can be counted toward the first 33 hours of the ELPhD Program of Study; these may be credits that are independent of or included in a previously earned degree. Requests to transfer more than a total of 18 credit hours must be approved by the Director of Graduate Programs prior to submitting the Program of Study or transfer request. No more than 27 semester hours of credit at the Master's and Educational Specialist levels, excluding theses and problems courses, may be accepted for transfer credit toward the doctorate. All transfer credit must align with Tennessee Tech and SACSCOC guidelines.

2. All requirements, including the dissertation, must be completed within a period of no more than eight (8) consecutive years.

3. As and Bs are required in coursework. A grade of C is considered a failing grade in doctoral programs. The student is allowed to maintain a grade of C in only one (1) course completed toward the Ph.D. degree. A student receiving two (2) Cs will be dismissed from the program. If a second C is received, it may not be substituted or moved out of the student's program of study in order to avoid dismissal.

4. Ds and Fs are not acceptable in the Ph.D. in Exceptional Learning program. If a student receives a grade of D or F in a course, she/he will be dismissed from the program.

5. If an Incomplete is granted, the student has one (1) academic year to complete the requirements. If the requirements have not been met in the allotted time period, the grade is converted to an IF and the student will be dismissed from the program.

6. A maximum of twelve (12) credit hours may be taken in one (1) semester. Written approval from the student's advisor/chair, department chair, and director of graduate programs is required to register and take more than 12 credit hours in one semester.

7. Course repetition is not allowed in the ELPhD program.

8. Course substitutions are allowed upon written approval from the advisor/ graduate advisory committee, department chair, and director of graduate programs.

9. Students should complete their Comprehensive Examinations either a) following completion of all course work, excluding EDU 7920 and EDU 7990, or b) during the last semester during which such course work is to be completed. Comprehensive Examinations should occur no later than the end of the semester in which the student completes EDU 7920.

10. Approval of the dissertation topic, a successful dissertation proposal presentation to the entire graduate advisory committee, and IRB approval (where appropriate) must precede any significant work on the dissertation. IRB approval must be obtained for any human subjects research project initiated by a student (or faculty member); this includes studies using secondary data.

11. Satisfactory completion of the dissertation requires an oral defense.

12. Dissertation hours (15 hours minimum) may not be completed in fewer than 2 semesters.

EDU-STEM - Exceptional Learning, STEM Education Concentration, Ph.D.

Program Overview

Program Long Title
Exceptional Learning, STEM Education Concentration, Ph.D.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description
The Exceptional Learning Ph.D. (ELPhD) program focuses on the characteristics, strengths, and educational needs of individuals and groups whose learning potential and opportunities for success are frequently unrealized. Exceptional populations include people for whom social, economic, and physical characteristics may serve as a barrier to development and learning.

The ELPhD program offers robust academic preparation of professionals who serve their communities, public school systems, institutions of higher education, and nontraditional educational environments. Our graduates are leaders who work across local, regional, national, and international platforms to effect positive change in diverse populations of exceptional learners and educational contexts, addressing barriers to learning, primarily through research and service activities.

The ELPhD curriculum is organized around three areas of knowledge development-core, concentration, and research. Core knowledge includes an orientation to the program, theory, foundations for understanding exceptional populations, program planning and evaluation, and technology. Concentration knowledge helps students to deepen and hone their specific interests. The innovative research sequence grounds students in quantitative and qualitative research methodologies.

STEM Education builds the capacity of innovative educational leaders to advance new ideas and to design/implement strategic innovations in science, technology, engineering and mathematics (STEM) education. (Concentration Leader – Dr. Holly Anthony)

Curriculum

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Research Knowledge, and Concentration Knowledge. Credit hours are classified as follows:

- Core Coursework 13

- Core Concentration Coursework 23-24

- Advisor Guided Electives 6-7

- Research Coursework 21

- Dissertation 15+

- Total Degree Requirements 78-7

En-route M.A. or Ed.S Degree in Curriculum and Instruction (C&I)

A student pursuing an Exceptional Learning Ph.D. may elect to earn an en-route degree as they progress through the ELPhD program. Those students entering the program with no prior graduate degree may earn an M.A. in Curriculum & Instruction (C&I) with a Curriculum concentration, as the student successfully advances toward completion of the Ph.D. Those who enter the program with a graduate degree may elect to earn either the M.A. or an Ed.S. in Curriculum & Instruction with a Curriculum concentration.

If a student elects to forego the en-route degree, the full 79 credit hours of the program must be completed. The Ph.D. is not reduced to 46–49 hours, even if a student enters with one or more graduate degrees.

En-route M.A. in Curriculum & Instruction (with Curriculum concentration)

The en-route M.A. degree may be awarded when the student successfully completes 33 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The M.A. will not be awarded without completion of these 9 research credit hours.

Enroute-MA in Curriculum and Instruction

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 . 9 hours

Advisor Guided Electives 24 hours

TOTAL Hours for Enroute MA 33 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the M.A. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route M.A. portion of the program, unless special exception has been secured. Courses applied to the en-route M.A. must be completed within six years of enrollment.

The en-route M.A. degree may be awarded at any point during the program, given that the student:

• meets both the C&I M.A. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies.

Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route M.A. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 45–46 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000– and 7000–level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

En-route Ed.S. in Curriculum & Instruction (with Curriculum concentration)

The en-route Ed.S. degree may be awarded when the student successfully completes 30 semester credit hours and must include successful completion of nine (9) credit hours of either quantitative (EDU 7420, EDU 7430, and EDU 7300) or qualitative (EDU 7010, EDU 7330, and EDU 7340) research. The Ed.S. will not be awarded without completion of these 9 research credit hours.

Enroute-Ed.S. in Curriculum and Instruction Course Requirements Credit Hours:

Research Requirement: Quantitative Track: EDU7420, EDU 7430 and EDU 7300 OR Qualitative Track: EDU 7010, EDU 7330 and EDU 7340 9 hours

Advisor Guided Electives 21 hours

TOTAL Hours for Enroute 30 hours

Students who have already earned a graduate degree before entering the ELPhD program or who have taken graduate courses that are relevant to the program (and for which the grade is a B or better) may be eligible to transfer in up to 9 credits for the en-route Ed.S. portion of the ELPhD program of study. Any courses taken or transferred in at the 5000-level must be applied to the en-route Ed.S. portion of the program, unless special exception has been secured. Courses applied to the en-route Ed.S. must be completed within six years of enrollment.

The en-route Ed.S. degree may be awarded at any point during the program, given that the student:

• meets both the C&I Ed.S. and Ph.D. research course requirements as listed above;

• has submitted an approved Program of Study with signatures from the student's advisory committee, the Chair of C&I, and the Director of Graduate Programs;

• has satisfied all College of Graduate Studies General Degree Requirements policies; and

• has applied for graduation in accordance with the requirements of the College of Graduate Studies. Students must apply for graduation as required in order to earn their en-route degree—it is not automatically awarded.

Once the en-route Ed.S. in Curriculum & Instruction has been awarded, the remaining portion of the Program of Study must include a minimum of 48–49 semester credits of appropriate graduate-level coursework consisting of research, concentration, core, and elective credits at the 6000– and 7000-level, as approved by the student's advisory committee and the Director of Graduate Programs. A minimum of 15 semester credit hours of doctoral research and dissertation is required in no fewer than two (2) semesters.

Note: Only students admitted to the ELPhD program are permitted to enroll in these courses.

Admission Requirements

Admission Requirements
A multifaceted approach is taken in the application and admissions decisions process. The applicant will be evaluated on the criteria listed below in order to determine the applicant's overall potential for success in the ELPhD program. Please note, however, that fulfillment of the minimum requirements does not guarantee admission.

1. **QPA**–Consideration for admission to the program is based on the applicant's grade point average (GPA) in the last graduate degree or the last 60 hours of undergraduate work if no graduate degree has been completed. If a student has successfully completed some graduate hours but not attained a graduate degree, the GPA for these courses may also be considered. An average of 3.0 (on a 4.0 scale) or above from a recognized baccalaureate, graduate, or professional degree from an accredited college or university, or an international equivalent based on a four-year curriculum is required for admission.

2. **GRE**– valid GRE scores (score date within 5 years of application) must be submitted as part of the ELPhD application.

3. **Scholarly Writing**–Students must demonstrate scholarly writing skill and mastery by submitting a reference-based paper, thesis, or other written document. The writing sample should use multiple, credible sources to support a particular point of view, argument, or claim and show the applicant's writing quality, skillful analysis/argument, and proficiency with synthesizing information. The applicant must be the sole author. The scholarly writing sample does not have a specific topic requirement.

4. **Statement of Intent**–One (1) to two (2) pages that address the following: intended enrollment (semester and year), intended concentration, autobiographical statement, educational and professional goals, and area of interest for future research. Applicants to the ABA concentration must indicate the track in which they wish to enroll: School-Aged & Adult Populations (ABAS) or Young Children & Families (YCF).

5. **Three Letters of Recommendation**–Recommendation letters should be from individuals, preferably professors, who are able to comment on the student's qualifications and scholarly aptitude for doctoral study. The letter should also address characteristics that will contribute to the student's success as a doctoral student should you be accepted in the ELPhD program. Consideration will be made based upon the content of these letters. Please make certain the recommenders know they must submit a letter as well as evaluate the applicant on a series of qualities (done when submitting the letter). Applications without three letters may not receive full consideration.

6. **Professional Curriculum Vitae (CV)/Resume**

7. **Interviews** - Applicants who pass the initial evaluation will be required to have an interview with the ELPhD program faculty and director of graduate programs.

8. **International Students** must also meet the English Language Requirement by providing TOEFL test scores: a minimum of 80 on the TOEFL iBT is required. If you have taken another TOEFL version and the results are still valid (no more than 5 years old), the score requirements are: 213 on TOEFL CBT or 550 on TOEFL PBT.

Applicants who have citizenship in a country where English is a primary language or have been awarded a degree from a university in one of the following countries are exempt from the English Language requirement: Australia, Belize, the British Caribbean and British West Indies, Canada (except Quebec), England, Guyana, Ireland, Liberia, New Zealand, Scotland, the United States, and Wales.

If a candidate does not have access to a TOEFL testing site, it may be possible to accept another language proficiency test score. Candidates should inquire before submitting a test score other than the TOEFL.

*Please note the STEM Education concentration requires the following additional admission requirements:

1. Three years of STEM teaching/outreach (P–16)

2. Master's Degree and

3. One of the following:
o A minimum of 18 semester hours of graduate credit in a STEM discipline;
o Teacher Licensure in a STEM discipline (Grades 6-8, 6–12, or 7-12);
o Teacher Licensure (K-5) with 24 semester hours in math/science; or
o Teacher Licensure (K-5) with a passing score on the state-approved licensure exam for a STEM content area.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
Degree Requirements

The Exceptional Learning Ph.D. requires 78-79 credit hours and is organized into three core areas: Core Knowledge, Research Knowledge, and Concentration Knowledge. Credit hours are classified as follows:

- **Core Coursework:** 13 hours
- **Research Coursework:** 21 hours
- **Dissertation:** 15+ hours
- **Core Concentration Coursework:** 23-24 hours
- **Advisor Guided Electives:** 6-7 hours
- **Total Degree Requirements:** 78-79 hours

Exceptional Learning Ph.D. requires 78-79 credit hours
Type
Completion Requirement

Core Coursework (Select 13 hours)

Complete ALL of the following Courses:
- EDU7000 - Trans-Concentration Seminar
- EDU7010 - Theoretical Foundtns/Research
- EDU7020 - At-Risk Population:Rsrch, Serv
- EDU7040 - Program Planning/Evaluation
- EDU7430 - Quant Inquiry in Edu II
- EDU7440 - Tech App:Inst Dissem-Info

Research Coursework (Select 21 hours)

Complete ALL of the following Courses:
- EDU7300 - Research Design
- EDU7330 - Qualitative Inquiry/Research
- EDU7340 - Data Analysis/Reprsnt/Qual Inq
- EDU7420 - Quant Inquiry in Edu I
- EDU7430 - Quant Inquiry in Edu II
- EDU7920 - Research Seminar/Education
- EDU7320 - Rsch Meth/Behavior Analysis
  OR EDU7350 - Advanced Regression Analysis
  OR EDUP7410 - Adv Planning & Eval Meth I
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
  OR EDU7950 - Doctoral Sem:Sp Top/Education

* EDU7950 Doctoral Sem:Sp Top/Education only if a research-based topic

** EDUP7410 Adv Planning & Eval Meth I counts as research for non-PPE concentration students

Dissertation (15 hours)

The 15 hours are generally taken in 9 & 6 hour blocks.

Complete ALL of the following Courses:
- EDU7990 - Research and Dissertation

STEM Education Concentration

The STEM education concentration provides students with the background and experience needed to assume leadership roles in the development, delivery, and assessment of STEM education programs.

Complete ALL of the following Courses:
- EDUS7500 - STEM Education Foundations
- EDUS7510 - STEM Curriculum & Assessment
- EDUS7540 - STEM Education Pedagogy
- EDUS7550 - STEM Edu Trends and Issues
- EDUS7530 - STEM Education Research
- EDUS7560 - STEM Learns and Learning
- EDUS7580 - STEM Education Field Study

- EDUS7570 - STEM Edu Policy & Leadership
- EDUS7515 - STEM Education Seminar
- EDUS7520 - STEM Technology Seminar

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information
Information And Additional Notes

Program Requirements

The student must maintain a cumulative point average of 3.25 and, in addition to adhering to the general regulations of the College of Graduate Studies, adhere to the specific regulations for the Ph.D. in Exceptional Learning program. These regulations, standards, and expectations include:

1. A minimum of 78–79 semester hours of successfully completed course work: 13 hours core courses, 21 hours research courses, 23–24 hours concentration courses, 6 hours elective courses, and a minimum of 15 dissertation hours. All hours should be taken at the 6000– and 7000–levels (transfer credit may include other level courses with approval). Note: if an equivalent specialty course is not available at the 6000– or 7000– level, a 5000–level course that is germane to the student's research/areas of research interest may be used to meet the minimum requirements of course work only by permission of the instructor of the course in question, student's advisor or graduate advisory committee, and the Director of Graduate Programs. Written approval must be secured before enrolling; this may be through inclusion on the approved Program of Study or separate documentation, such as a Substitution form.

a. A minimum of 51 semester hours of course work beyond the baccalaureate must be completed after admittance into the doctoral program, including a minimum of 12 semester hours at the 7000- level (excluding dissertation credit).
b. Upon approval from the student's advisory committee and the Director of Graduate Programs, up to nine (9) graduate credit hours with a grade of B or better can be counted toward the first 33 hours of the ELPhD Program of Study; these may be credits that are independent of or included in a previously earned degree. Requests to transfer more than a total of 18 credit hours must be approved by the Director of Graduate Programs prior to submitting the Program of Study or transfer request. No more than 27 semester hours of credit at the Master's and Educational Specialist levels, excluding theses and problems courses, may be accepted for transfer credit toward the doctorate. All transfer credit must align with Tennessee Tech and SACSCOC guidelines.

2. All requirements, including the dissertation, must be completed within a period of no more than eight (8) consecutive years.

3. As and Bs are required in coursework. A grade of C is considered a failing grade in doctoral programs. The student is allowed to maintain a grade of C in only one (1) course completed toward the Ph.D. degree. A student receiving two (2) Cs will be dismissed from the program. If a second C is received, it may not be substituted or moved out of the student's program of study in order to avoid dismissal.

4. Ds and Fs are not acceptable in the Ph.D. in Exceptional Learning program. If a student receives a grade of D or F in a course, she/he will be dismissed from the program.

5. If an Incomplete is granted, the student has one (1) academic year to complete the requirements. If the requirements have not been met in the allotted time period, the grade is converted to an IF and the student will be dismissed from the program.

6. A maximum of twelve (12) credit hours may be taken in one (1) semester. Written approval from the student's advisor/chair, department chair, and director of graduate programs is required to register and take more than 12 credit hours in one semester.

7. Course repetition is not allowed in the ELPhD program.

8. Course substitutions are allowed upon written approval from the advisor/ graduate advisory committee, department chair, and director of graduate programs.

9. Students should complete their Comprehensive Examinations either a) following completion of all course work, excluding EDU 7920 and EDU 7990, or b) during the last semester during which such course work is to be completed. Comprehensive Examinations should occur no later than the end of the semester in which the student completes EDU 7920.

10. Approval of the dissertation topic, a successful dissertation proposal presentation to the entire graduate advisory committee, and IRB approval (where appropriate) must precede any significant work on the dissertation. IRB approval must be obtained for any human subjects research project initiated by a student (or faculty member); this includes studies using secondary data.

11. Satisfactory completion of the dissertation requires an oral defense.

12. Dissertation hours (15 hours minimum) may not be completed in fewer than 2 semesters.

ESIL-EDS - Instructional Leadership, Ed.S.

Program Overview

Program Long Title
Instructional Leadership, Ed.S.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description
https://www.tntech.edu/education/ci/graduate.php

The Education Specialist degree (Ed.S.) is an online, 30 hour degree program. This program prepares educational professionals for positions as school administrators in the state of Tennessee.

- **Core Coursework:** 24 hours
- **Research Coursework:** 6 hours
- **Total Degree Requirements:** 30 hours

Graduation Requirement

- The candidate must pass the praxis exam, School Leaders Licensure Assessment (SLLA)
- Each candidate will be instructed to register for the School Leaders Licensure Assessment (SLLA) at the appropriate time during their program of study by and INSL advisor

Admission Requirements

Admission Requirements
In addition to the Department of Curriculum and Instruction Specialist in Education admission requirements, additional requirements for applicants of the Ed.S. in Instructional Leadership (INSL) program are:

1. A valid TN teaching license

2. A minimum of two (2) years teaching experience require

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The Education Specialist degree (Ed.S.) is a 30 hour degree program. This program prepares educational professionals for positions as school administrators in the state of Tennessee.

- **Core Coursework:** 24 hours
- **Research Coursework:** 6 hours
- **Total Degree Requirements:** 30 hours

Degree Requirements
Type
Completion Requirement

Core Coursework (24 hours)

Complete ALL of the following Courses:
- INSL7510 - Lgl/Ethicl/Dvrsty Issues-INSL
- INSL7520 - HR Mgmt & Public Relations
- INSL7530 - Assmnt/Eval: Improve. In Tchng
- INSL7010 - Instructional Leadership
- INSL7400 - School Ldrship & Supervision

Research Coursework (6 hours)

Complete ALL of the following Courses:
- CUED7801 - Lab/Field Exp in Edu/Tech
  OR CUED7802 - Lab/Fld Exp in Edu/Grant Writ
  OR CUED7803 - Lab/Fld Exp in Edu/Autoethnogr
- CUED7910 - Adv Research Project in ED

Total Degree Requirement: 30 hours

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

HRED-PHD - Higher Education, Ph.D.

Program Overview

Program Long Title
Higher Education, Ph.D.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description
The Doctor of Philosophy (PhD) in Higher Education will offer advanced graduate study to students seeking professional positions in higher education grounded in data science and technological innovation. The program will also include a quantitative research core which will emphasize mastery in various theoretical frameworks with an emphasis on data science in order "to foster creative, relevant solutions using reliable, valid data and innovative platforms and systems to drive

change." The program aims to prepare students for careers as academic faculty, administrators, policy analysts, and educational researchers who can leverage robust and complex data across educational systems to better understand student access, persistence, and success. The program is a self-paced, 67-credit hour online program, which is structured so that students who are enrolled full-time can complete the program in four (4) years, and will utilize intrusive advising, cohorting, and faculty and peer mentoring to ensure student success.

The doctoral program will require 67 credit hours comprised of the following program requirements:

TYPE OF COURSES	CREDIT HOURS
Core Courses	28
Data Science Courses	12
Research Courses	12
Dissertation	15
Total	67 Credit hours

Success and informed professionalism in these areas is vital in today's competitive university landscape. A terminal (doctoral) degree provides students an opportunity to move into professional roles as they gain more experience. In today's data-driven, evidence-based context, the knowledge and skills garnered through this program will contribute to additional growth and success and situate them for greater contributions to their institutions.

The program will provide preparation to be adapted to any postsecondary role with a focus to improve college access, student success, and persistence to completion. Driven by data science, program candidates will apply actionable approaches to face challenges confronting higher education. Ph.D. candidates will also learn to use cutting-edge technology to best serve students and guide higher education practices and policies.

Graduates will use their data science knowledge and skills to guide colleges and universities, state higher education agencies, foundations, and related associations.

Admission Requirements

Admission Requirements
To be considered for admission, students must submit their admissions application before July 1.

Statement of intent (1-2 pages) detailing intended enrollment, autobiographical statement, educational and professional goals, and area of interest for future research;

Two letters of recommendation that speak to the individual's scholarly aptitude and capability, particularly with respect to graduate-level work;

Academic transcripts from all institutions attended;

An academic writing sample that demonstrates excellent scholarly writing ability (applicant must be sole author);

3.0 or better (on a 4.0 scale) grade point average (GPA):

- Based on the applicant's GPA in the last graduate degree or the last 60 hours of undergraduate work (for those with an undergraduate degree only);
- From a recognized baccalaureate, graduate, or professional degree from a regionally accredited college or university, or an international equivalent based on a four-year curriculum.

Professional Curriculum Vitae (CV) / Resume

Degree Requirements and Requisites

Sample Review at the discretion of the Higher Education Ph.D. application review committee.

Degree Requirements
Once admitted, all students must maintain a 3.0 or higher average GPA each semester and cumulatively. Doctoral students are expected to perform at an A or B-level in all courses. A student is allowed to carry one C on their transcript without academic dismissal. A student receiving two Cs will be dismissed from the program. If a second C is received, it may not be substituted or moved out of the student's program of study to avoid dismissal.

The doctoral program will require 67 credit hours comprised of the following program requirements:

TYPE OF COURSES	CREDIT HOURS	
Core Courses	28	
Data Science Courses	12	
Research Courses	12	
Dissertation	15	
Total	67 Credit hours	

The program incorporates embedded field experiences into five (5) required courses. These field experiences will allow students an opportunity to connect with emerging issues at TTU or their campus and apply their developing data science skills to understanding various real-world problems in their area of interest. The program also incorporates a sequential assignment called the digital writing collaborative across five (5) core courses, allowing students to develop writing skills, build expertise in the field of higher education, and build relationships with faculty and students.

Core Courses = 28 Credit Hours
Type
Completion Requirement

Required Core Courses

Complete ALL of the following Courses:
- HRED7000 - Seminar in Higher Education
- HRED7010 - Trends & Issues in Higher Edu
- HRED7020 - Ethical Aspects of Higher Educ
- HRED7030 - College and University Finance
- HRED7040 - Public Policy & Higher Ed Law
- HRED7050 - Ed Tech, Dsgn, Innov/Higher Ed
- HRED7110 - Trends/Struct/Higher Ed Admin
- HRED7130 - Leadershp Devel & Transformatn
- HRED7140 - Col Access/Afford & St.Success
- HRED7150 - PPEA for HrEd Admins

Additional Comments:

Data Science Courses = 12 Credit Hours
Type
Completion Requirement

Data Science Courses

Complete ALL of the following Courses:
- HRED7160 - Fundamentals of Data Science
- HRED7170 - Applications of Data Analysis
- HRED7180 - Data Manipulation, Analytics, and Visualization
- HRED7190 - Predictive Analytics

Additional Comments:

Research Courses = 12 Credit Hours
Type
Completion Requirement

Research Courses

Complete ALL of the following Courses:
- EDU7300 - Research Design
- EDU7420 - Quant Inquiry in Edu I
- EDU7430 - Quant Inquiry in Edu II
- EDU7920 - Research Seminar/Education

Additional Comments:

Dissertation = 15 Credit Hours (minimum)
Type
Completion Requirement

Dissertation Hours

Complete ALL of the following Courses:
- EDU7990 - Research and Dissertation

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

IDVT-CER - Instructional Design and Virtual Teaching Certificate, Curriculum and Instruction

Program Overview

Program Long Title
Instructional Design and Virtual Teaching Certificate, Curriculum and Instruction

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description
The Instructional Design and Virtual Teaching certificate program is designed to enhance current concentrations within Curriculum and Instruction and create new pathways for faculty, administration, and students in this rapidly expanding field. This certificate is open to all graduate students at Tennessee Tech.

The certificate consists of a four-course sequence that is developed to support and prepare professionals for the challenges and opportunities of instructional design and virtual teaching principles. The certificate has a defined set of four core courses for a total of 12 hours.

Total Certificate Requires 12 credit hours.

Admission Requirements

Admission Requirements
Students will apply for the graduate certificate following the admissions requirements for the Master of Arts in Curriculum and Instruction as outlined below:

Requirements for Admission in Full Standing:

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing:

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students:

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The Instructional Design and Virtual Teaching certificate program is designed to enhance current concentrations within Curriculum and Instruction and create new pathways for faculty, administration, and students in this rapidly expanding field. This certificate is open to all graduate students at Tennessee Tech.

- **Core Required Courses:** 12 hours

- **TOTAL:** 12 hours

Certificate Requirements
Type
Completion Requirement

Certificate Requirements (12 Hours)

Complete ALL of the following Courses:
- CUED6430 - Dsgn Stu: Prod of Inst Mtrls
- CUED6450 - Immersive Tchn for /Tch-Lrn
- CUED7510 - Instrctl Design Foundations
- CUED7540 - Appl Instr Dsgn/Lrn Analytics

Additional Comments:

No Requirement Level

LDT-MA - Learning Design and Technology, M.A.

Program Overview

Program Long Title
Learning Design and Technology, M.A.

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description
The MA in Learning Design and Technology is an innovative program designed to prepare professionals in face-to-face and virtual positions in instructional design, virtual learning, and computer science education. Areas of the curriculum have flexibility that extends to the candidate's professional expertise. Emphasis is placed on leveraging technologies to enhance learning outcomes, including the use of multimedia, simulations, XR, and online platforms.

Total Degree Requirements (33 Hours)

Core Concentration Coursework*	27 hours
Research Coursework	6 hours
Total Degree Requirements	33 hours

Admission Requirements

Admission Requirements

Requirements for Admission in Full Standing (Licensure, Non-licensure, and Post-baccalaureate programs):

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.
- Provide contact information for three references (name and email)
- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing:

- Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75.
- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students:

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The MA in Learning Design and Technology is an innovative program designed to prepare professionals in face-to-face and virtual positions in instructional design, virtual learning, and computer science education. Areas of the curriculum have flexibility that extends to the candidate's professional expertise. Emphasis is placed on leveraging technologies to enhance learning outcomes, including the use of multimedia, simulations, XR, and online platforms.

Total Degree Requirements (33 Hours)

Core Concentration Coursework*	27 hours
Research Coursework	6 hours
Total Degree Requirements	33 hours

MA in Learning Design and Technology
Type
Completion Requirement

Core Concentration Coursework (27 Hours)

Complete ALL of the following Courses:

- CSED6000 - Digital Literacy & Computing
- CSED6010 - Prgmg Fundmtls & Cmpt Thinking for Educ
- CSED6020 - Computer Science Concepts for Teachers
  OR CUED7520 - Teaching and Learning Online
- CSED6030 - Computer Science Instructional Methods
  OR CUED6440 - Emerging Technologies/Edu
- FOED6820 - Applied Educational Assessment
- CUED6430 - Dsgn Stu: Prod of Inst Mtrls
- CUED6450 - Immersive Tchn for /Tch-Lrn
- CUED7510 - Instrctl Design Foundations
- CUED7540 - Appl Instr Dsgn/Lrn Analytics

Note: Core Concentration Courses listed below meet the Computer Science Education Optional Embedded Certificate requirements.

- CSED 6000 - Digital Literacy and Computing Cr. 3.
- CSED 6010 - Programming Fundamentals and Computational Thinking for Educators Cr. 3.
- CSED 6020 - Computer Science Concepts and Design Cr. 3.

Note: Core Concentration Courses listed below meet the Instructional Design & Virtual Teaching Embedded Certificate Requirements:

- CUED 6430 - Design Studio: Production of Instructional Materials Cr. 3.
- CUED 6450 - Immersive Technologies for Teaching and Learning Cr. 3.
- CUED 7510 - Instructional Design Foundations Cr. 3.
- CUED 7540 - Applied Instructional Design and Learning Analytics Credit 3.

Research Coursework (6 Hours)

Complete ALL of the following Courses:

- CUED6300 - Quantitative Edu Research
  OR CUED6310 - Qualitative Research in Edu
- CUED6305 - Quantitative Prob/Curriculum
  OR CUED6315 - Qualitative Prob/Curriculum

Additional Comments:

No Requirement Level

SRV2-CER - Students Engaging, Responding, Volunteering, & Impacting Communities Everywhere (SERVICE) Certificate

Program Overview

Program Long Title
Students Engaging, Responding, Volunteering, & Impacting Communities Everywhere (SERVICE) Certificate

College/School
Education

Department(s)
Curriculum and Instruction

Catalog Full Description
The Students Engaging, Responding, Volunteering, & Impacting Communities Everywhere (SERVICE) Certificate requires 12 credit hours of coursework (or equivalent). The certificate requires 6 credit hours of coursework to come from the College of Education and provides the option of the additional 6 hours to be attained from any TTU unit with appropriate service learning courses/options

available. Service Learning opportunities are available in a number of courses offered by the Department of Curriculum and Instruction, but students may also accumulate hours by self- identifying and pursuing service learning opportunities in the community.

Admission Requirements

Admission Requirements

Students apply for the graduate certificate following the Master of Arts in Curriculum and Instruction admissions criteria listed below:

Requirements for Admission in Full Standing:

- For full admission, overall undergraduate GPA of 2.75 or above upon completion of a baccalaureate degree program.

- Provide contact information for three references (name and email)

- Successfully complete additional College of Graduate Studies application requirements (transcripts, application, etc.)

Additional Admission Requirements for Provisional Standing:

Provisional standing may be requested by a departmental evaluation when the undergraduate GPA is lower than 2.75. Teacher licensure standards may require a separate minimum GPA for licensure.

- To advance from provisional to full admission, a student must earn a minimum of 3.0 GPA on the first nine (9) hours of graduate study.

Additional Admission Requirements for International Students:

International applicants must also meet or exceed the minimum English Language Requirements as set by the College of Graduate Studies in the current Graduate Catalog.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Students Engaging, Responding, Volunteering, & Impacting Communities Everywhere (SERVICE) Certificate requires 12 credit hours of coursework (or equivalent). The certificate requires 6 credit hours of coursework to come from the College of Education (see course list below) and provides the option of the additional 6 hours to be attained from any TTU unit with appropriate service learning courses/options available. Service Learning opportunities are available in a number of courses offered by the Department of Curriculum and Instruction, but students may also accumulate hours by self- identifying and pursuing service learning opportunities in the community.

Up to 6 credit hours of the 12 required may be certified by completing the equivalent of 90 clock hours (1 credit hour = 15 clock hours) of service learning. These hours must be pre-approved by the TTU Office of Service Learning who will track hours accumulated and maintain records of completion. Students will be able to count these hours in the certificate by enrolling in a Service Learning course (zero credits; no cost) in the semester in which the hours are completed.

1. The definition(s) of Service Learning as documented by the TTU Office of Service Learning will be used to guide decisions concerning what activities can be approved for the certificate. Decisions of that office will preside.

2. Coursework/clock hours for service learning in which students are receiving compensation (e.g., paid tutoring) and/or financial gain (e.g.., scholarships) cannot be counted for the certificate as this would constitute double-dipping.

Students may choose from among the courses listed below. Special topics courses can be offered at both undergraduate and graduate levels as needed to provide additional opportunities. Please talk with the Department of Curriculum & Instruction for details.

Students may also take any course certified by the TTU Office of Service Learning as eligible (see their website each semester for updated lists).

TOTAL: 12 credit hours

- **College of Education Courses (see list of approved courses below):** 6-12 credit hours

- **Advisor Guided Electives or Pre-Approved clock hours:** Up to 6 credit hours

Approved College of Education Courses: 6-12 credit hours
Type
Completion Requirement

Courses Open to Education Majors

Complete ANY of the following Courses:
- SEED5322 - Teaching Algebra in Middle/HS
- SPED5200 - Tch Stu w/ Autism Spect Disord

Courses Open to All Majors

Complete ANY of the following Courses:
- CUED5750 - Serv Lrn Informal STEM Edu
- CUED5850 - Workshop in Education
- CUED5900 - Study Abroad
- CUED6750 - Srv Lrning Informal STEM Edu
  OR CUED7750 - Srv Lrning Informal STEM Edu
- SVCL5150 - Topics
- SVCL6150 - Topics
  OR SVCL7150 - Topics
- SVCL5920 - Service Learning in Community
- SVCL6920 - Service Learning in Community
  OR SVCL7920 - Service Learning in Community

Total Credit Hours: 12 hours

Additional Comments:

Advisor Guided Electives or Pre-Approved clock hours: Up to 6 credit hours
Type
Completion Requirement

Additional Comments:

No Requirement Level

Courses

ABAP7120 - Behavior Support/Families

General

College/School
Education

Course Title
Behavior Support/Families

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ABAP

Course Number
7120

Credit Hours

Credit Hours Min
3

Course Description
Issues and practices associated with partnering with families in designing, implementing and evaluating positive behavior support for their children with challenging behavior.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

ABAP7910 - Ind Study/Early Child SPED

General

College/School
Education

Course Title
Ind Study/Early Child SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ABAP

Course Number
7910

Credit Hours

Credit Hours Min
2

Course Description
Advanced study of an individual basis focusing on an area directly related to young children with special needs and their families.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctor Program and consent of instructor.

ABAP7920 - Top,Iss,Rsrch/Early Child SPED

General

College/School
Education

Course Title
Top,Iss,Rsrch/Early Child SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ABAP

Course Number
7920

Credit Hours

Credit Hours Min
2

Course Description
Advanced study of a topic or topics relevant to research and/or practice in early childhood special education, early intervention or young children and positive behavior support.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program and consent of instructor.

CFS6610 - Fam:Norm/Catastrophic Issues

General

College/School
Education

Course Title
Fam:Norm/Catastrophic Issues

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CFS

Course Number
6610

Credit Hours

Credit Hours Min
3

Course Description
In-depth study of family stress and effective coping mechanisms that relate to normative transitions and crisis events.

CSED6000 - Digital Literacy & Computing

General

College/School
Education

Course Title
Digital Literacy & Computing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSED

Course Number
6000

Credit Hours

Credit Hours Min
3

Course Description
This course teaches students the ability to identify, find, evaluate and use computer science technologies for teaching and learning. This course will consist of modules related to hardware and operating systems, data abstraction, cyber

security and internet privacy, digital literacy, information literacy, and digital artifact design. Foundational theories and relevant literature regarding digital literacy and learning will be explored and analyzed. Concurrently, K-12 teaching methodologies related to these topics will be explored and discussed.

Requisites

Simple Requisites

> **Prerequisite**: None

CSED6010 - Prgmg Fundmtls & Cmpt Thinking for Educ

General

College/School
Education

Course Title
Programming for Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CSED

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
This course introduces the foundational building blocks of programming, including primitive data types, functions, algorithms, flow charts, common searching, basic data structures, and control structures. Computational thinking concepts will be defined and examined within programming languages. Computational thinking theoretical frameworks and relevant block-based programming literature will be analyzed and applied to teaching practice. Practicum embedded in course. A grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisite**: Full admission to the Teacher Education Program.

CSED6020 - Computer Science Concepts for Teachers

General

College/School
Education

Course Title
Comp Sci Concepts & Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSED

Course Number
6020

Credit Hours

Credit Hours Min
3

Course Description
This course covers the writing, modifying, and analyzing of text-based programming for teachers. Analysis of correctness, extensibility, modifiability and reusability of code will be completed. The three major programming structures

(sequence, conditionals, and iteration) will be investigated and practiced. Low vs. high level programming languages will be explored. Learners will ground programming procedures with theory in order to conceptualize their practice.

Requisites

Simple Requisites

> **Prerequisite**: None

CSED6030 - Computer Science Instructional Methods

General

College/School
Education

Course Title
Comp Sci Instr Methods

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CSED

Course Number
6030

Credit Hours

Credit Hours Min
3

Course Description
This course offers an examination and application of curricular issues, learning theories, pedagogical methods, and assessments for teaching K-12 computer science in multicultural and diverse classrooms. Comprehensive K-8 or 9-12 computer science lesson plans will be collaboratively developed. The fundamental intersections between computer science and other K-12 disciplines for the purpose of teaching will be investigated. Learners will propose an educational research plan themed around computer science integration.

Requisites

Simple Requisites

> **Prerequisite**: None

CTE5030 - Curr/Pgm Dvlpmt/Career Tech Ed

General

College/School
Education

Course Title
Curr/Pgm Dvlpmt/Career Tech Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CTE

Course Number
5030

Credit Hours

Credit Hours Min
3

Course Description
A study of the fundamental steps involved in the development of curriculum in occupational education. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

CTE5080 - Career Tech Stu Org/Tch Sprvsn

General

College/School
Education

Course Title
Career Tech Stu Org/Tch Sprvsn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CTE

Course Number
5080

Credit Hours

Credit Hours Min
3

Course Description
The methods of establishment, supervision, and evaluation of career technical youth organizations in industrial education. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

CTE5090 - Career Tech Ed/Stu w/ Sp Needs

General

College/School
Education

Course Title
Career Tech Ed/Stu w/ Sp Needs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CTE

Course Number
5090

Credit Hours

Credit Hours Min
3

Course Description
Overview of the nature of special needs students, technique of modification of career technical curriculum and development of appropriate teaching materials. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

CTE5850 - Use of Tech in Career Tech Ed

General

College/School
Education

Course Title
Use of Tech in Career Tech Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CTE

Course Number
5850

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Laboratory approach providing opportunities for experienced educational personnel to concentrate their study in depth. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

CUED5010 - Curriculum Improvement

General

College/School
Education

Course Title
Curriculum Improvement

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
5010

Credit Hours

Credit Hours Min
3

Course Description
A critical analysis of conventional and innovative approaches to curriculum improvement. The functions of leadership, evaluation, and research.

Requisites

Simple Requisites

> **Prerequisite**: None

CUED5120 - Mat & Meth-Speech & Thea

General

College/School
Education

Course Title
Mat & Meth-Speech & Thea

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
5120

Credit Hours

Credit Hours Min
3

Course Description
Principles, objectives, techniques, evaluation in secondary school teaching of speech and elementary and secondary school teaching of theatre. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: Full admission to the Teacher Education Program.
>
> **Corequisite**: FOED 3820, CUED 6800.

CUED5400 - Teaching Methods/Phys Science

General

College/School
Education

Course Title
Teaching Methods/Phys Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
5400

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on teaching methods associated with the physical sciences of physics and chemistry. Students will experience and learn the theories behind inquiry, modeling, and other appropriate classroom instructional methods for physics and chemistry topics. Methods and topics will cover grades K-12 with a strong emphasis on conceptual understanding and vertically-alligned standards-based instruction. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

CUED5750 - Serv Lrn Informal STEM Edu

General

College/School
Education

Course Title
Serv Lrn Informal STEM Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
5750

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
This course provides students with the opportunity to plan, prepare, and present informal activities/lessons in science, technology, engineering, and mathematics to PreK-12th graders. Students in the 5000-level course will complete additional work. May be repeated for credit.

CUED5800 - Practicum in Teaching

General

College/School
Education

Course Title
Practicum in Teaching

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
5800

Credit Hours

Credit Hours Min
1

Course Description
Supervised work experiences in public schools.

Requisites

Simple Requisites

> **Prerequisite**: None

CUED5850 - Workshop in Education

General

College/School
Education

Course Title
Workshop in Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
5850

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description

Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: None

CUED5870 - Supervised Field Exp/Tch I

General

College/School
Education

Course Title
Supervised Field Exp/Tch I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
5870

Credit Hours

Credit Hours Min
5

Course Description

A full day, full semester supervised field experience in an approved public school. The participant will be an employee of the school system and hold an Interim Probationary license or Probationary Permit for the grade/subject of the placement.

Requisites

Simple Requisites

Prerequisite: Admission to the Supervised Field Experiences in Teaching Program.

Corequisite: CUED5890 Grad Seminar/Stu Teaching

CUED5880 - Supervised Fld Exp/Teaching II

General

College/School
Education

Course Title
Supervised Fld Exp/Teaching II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
5880

Credit Hours

Credit Hours Min
5

Course Description

Continuation of CUED 5870.

Requisites

Simple Requisites

Prerequisite: CUED5870 Supervised Field Exp/Tch I

CUED5890 - Grad Seminar/Stu Teaching

General

College/School
Education

Course Title
Grad Seminar/Stu Teaching

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
5890

Credit Hours

Credit Hours Min
2

Course Description

Seminar on issues of student teaching with special emphasis on classroom management and professional development.

Requisites

Simple Requisites

Corequisites: ECED/ELED/SEED/SPED 4870, 4880.

CUED5900 - Study Abroad

General

College/School
Education

Course Title
Study Abroad

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
5900

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description

This course provides students the opportunity to engage in a Faculty-led study abroad experience which may involve a service-learning component. All participants must comply with established policy, procedures, and guidelines outlined in the Faculty-led Program Abroad Handbook maintained by Tennessee Tech's Study Abroad Office. Students in the 5000 level course will complete additional work. May be repeated for credit.

CUED6010 - Curr Development & Eval

General

College/School
Education

Course Title
Curr Development & Eval

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Current trends in curriculum development; defining objectives; planning for improvement; organization of instructional materials; curriculum evaluation.

Requisites

Simple Requisites

Prerequisites: None

CUED6050 - Readings in Curriculum

General

College/School
Education

Course Title
Readings in Curriculum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6050

Credit Hours

Credit Hours Min
3

Course Description
Readings and independent study involving exploration on a particular topic.

Requisites

Simple Requisites

Prerequisites: None

CUED6100 - Instructional Strategies

General

College/School
Education

Course Title
Instructional Strategies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
Advanced educational methods for K-12, including an emphasis on current research and best practice in the field.

Requisites

Simple Requisites

Prerequisites: None

CUED6150 - Middle School Curriculum

General

College/School
Education

Course Title
Middle School Curriculum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6150

Credit Hours

Credit Hours Min
3

Course Description
An examination of the function, organization, curricular offerings, instructional strategies, and trends in middle schools.

Requisites

Simple Requisites

Prerequisites: None

CUED6250 - School/Community Partnerships

General

College/School
Education

Course Title
School/Community Partnerships

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6250

Credit Hours

Credit Hours Min
3

Course Description
Techniques and procedures for interpreting school programs and building relationships between the school and community, and the improvement of the instructional program through community resources and involvement.

Requisites

Simple Requisites

> **Prerequisites:** None

CUED6300 - Quantitative Edu Research

General

College/School
Education

Course Title
Quantitative Edu Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6300

Credit Hours

Credit Hours Min
3

Course Description
Research design and quantitative methods of research in education.

Requisites

Simple Requisites

> **Prerequisites:** None

CUED6305 - Quantitative Prob/Curriculum

General

College/School
Education

Course Title
Quantitative Prob/Curriculum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6305

Credit Hours

Credit Hours Min
3

Course Description
Research of significant problems and issues in education.

Requisites

Simple Requisites

> **Prerequisite:** CUED6300 Quantitative Edu Research

CUED6310 - Qualitative Research in Edu

General

College/School
Education

Course Title
Qualitative Research in Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6310

Credit Hours

Credit Hours Min
3

Course Description
A study of qualitative research applications and analysis of design and selected research techniques.

Requisites

Simple Requisites

> **Prerequisites:** None

CUED6315 - Qualitative Prob/Curriculum

General

College/School
Education

Course Title
Qualitative Prob/Curriculum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6315

Credit Hours

Credit Hours Min
3

Course Description
Research of significant problems and issues in education.

Requisites

Simple Requisites

> **Prerequisite:** CUED6310 Qualitative Research in Edu

CUED6360 - Literacy/Diverse Populations

General

College/School
Education

Course Title
Literacy/Diverse Populations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6360

Credit Hours

Credit Hours Min
3

Course Description
This course will cover the five main components of reading and is an integration of concepts fundamental to the development of literacy with an emphasis on diverse learners including those with dyslexia. It includes a study of language development and communication skills, language arts, content area reading, and the assessment and selection of appropriate instructional strategies including the Orton Gillingham methodology.

Requisites
Simple Requisites

> **Prerequisites:** None

CUED6430 - Dsgn Stu: Prod of Inst Mtrls

General
College/School
Education

Course Title
Dsgn Stu: Prod of Inst Mtrls

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6430

Credit Hours
Credit Hours Min
3

Course Description
The course focus is on design, preparation, and production of instructional materials utilizing current trends and technologies in education.

Requisites
Simple Requisites

> **Prerequisites:** None

CUED6440 - Emerging Technologies/Edu

General
College/School
Education

Course Title
Emerging Technologies/Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6440

Credit Hours
Credit Hours Min
3

Course Description
Preferred content focus in educational technology.

Requisites
Simple Requisites

> **Prerequisites:** Consent of advisor and advanced graduate standing.

CUED6450 - Immersive Tchn for /Tch-Lrn

General
College/School
Education

Course Title
Immersive Tchn for /Tch-Lrn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6450

Credit Hours
Credit Hours Min
3

Course Description
In this course, students will increase their knowledge of teaching and learning using immersive technologies. These experiences will serve to advance student learning, creativity, and innovation. Students will promote and develop these objectives in both face-to-face and virtual environments.

Requisites
Simple Requisites

> **Prerequisites:** None

CUED6460 - Cnstrctvst Strgies-Clsrm Inst

General
College/School
Education

Course Title
Cnstrctvst Strgies-Clsrm Inst

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6460

Credit Hours
Credit Hours Min
3

Course Description
Preferred content focus in educational technology

Requisites
Simple Requisites

> **Prerequisites:** Consent of advisor and advanced graduate standing.

CUED6750 - Srv Lrning Informal STEM Edu

General

College/School
Education

Course Title
Srv Lrning Informal STEM Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6750

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
This course provides students with the opportunity to plan, prepare, and present informal activities/lessons in science, technology, engineering, and mathematics to PreK-12th graders. Students in the 7000-level course will complete additional work. May be repeated for credit.

CUED6780 - Job-Embedded Grad Seminar

General

College/School
Education

Course Title
Job-Embedded Grad Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6780

Credit Hours

Credit Hours Min
2

Course Description
Develop an understanding of state standards and curriculum, identify effective instructional strategies, and implement appropriate assessment methods to support and meet the needs of all learners. State specific licensure requirements for Job-Embedded educators will be addressed.

Requisites

Simple Requisites

> **Prerequisites:** None

CUED6800 - Field Experience

General

College/School
Education

Course Title
Field Experience

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6800

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Practical field experience in student's major area of emphasis.

Requisites

Simple Requisites

> **Prerequisite:** Full admission to the Teacher Education Program.

CUED6870 - Job-Embedded Grad Seminar

General

College/School
Education

Course Title
Job-Embedded Grad Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6870

Credit Hours

Credit Hours Min
2

Course Description
Develop an understanding of state standards and curriculum, identify effective instructional strategies, and implement appropriate assessment methods to support and meet the needs of all learners. State specific licensure requirements for Job-Embedded educators will be addressed.

Requisites

Simple Requisites

> **Prerequisites:** None

CUED6872 - Professional Seminar

General

College/School
Education

Course Title
Professional Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6872

Credit Hours

Credit Hours Min
3

Course Description

Seminar for licensure candidates to develop curriculum, identify effective instructional strategies, and implement appropriate assessment methods to support and meet the needs of all learners. A minimum grade of Bis required to meet requirements for licensure candidates.

Requisites

Simple Requisites

> Prerequisites: None

CUED6875 - Job-Embedded edTPA

General

College/School
Education

Course Title
Job-Embedded edTPA

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6875

Credit Hours

Credit Hours Min
2

Course Description

Supporting professional development in areas of planning, instruction, assessment, and reflection. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

> Prerequisites: None

CUED6880 - Student Teaching

General

College/School
Education

Course Title
Student Teaching

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6880

Credit Hours

Credit Hours Min
9

Course Description

A semester-long performance based clinical experience in authentic settings involving planning appropriate instruction based on student's needs, creating a positive learning environment, communicating and collaborating with colleagues and others, effectively assessing student learning and reflecting on practice. THIS COURSE REQUIRES A GRADE OF "B" OR BETTER.

Requisites

Simple Requisites

> Prerequisite: CUED6800 Field Experience and Full admission to the Teacher Education Program.

CUED6900 - Problems in Curriculum

General

College/School
Education

Course Title
Problems in Curriculum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description

A study of persistent problems relating to curriculum with special attention to research findings.

Requisites

Simple Requisites

> Prerequisite: FOED6920 Educational Research or FOED6980 Qualitative Research in Edu; consent of advisor.

CUED6920 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
6920

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description

Laboratory approach providing opportunities for experienced educational personnel to study in-depth educational problems.

CUED6921 - Topics

General

College/School
Education

Course Title	Academic Level (Course Level)
Topics	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
CUED	6921

Credit Hours

Credit Hours Min	Credit Hours Max
1	3

	Credit Hours Operator
	TO

Course Description

This course will provide up-to-date content in emerging educational issues for in-service teachers. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objectives and grading guidelines will be established by the faculty at the time each course is offered.

CUED6922 - Topics

General

College/School
Education

Course Title	Academic Level (Course Level)
Topics	Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
CUED	6922

Credit Hours

Credit Hours Min	Credit Hours Max
1	3

	Credit Hours Operator
	TO

Course Description

This course will provide up-to-date content in emerging educational issues for in-service teachers. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objectives and grading guidelines will be established by the faculty at the time each course is offered.

Requisites

Simple Requisites

Prerequisites: None

CUED6923 - Topics

General

College/School
Education

Course Title	Academic Level (Course Level)
Topics	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
CUED	6923

Credit Hours

Credit Hours Min	Credit Hours Max
1	3

	Credit Hours Operator
	TO

Course Description

This course will provide up-to-date content in emerging educational issues for in-service teachers. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objectives and grading guidelines will be established by the faculty at the time each course is offered.

Requisites

Simple Requisites

Prerequisites: None

CUED6924 - Topics

General

College/School
Education

Course Title	Academic Level (Course Level)
Topics	Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
CUED	6924

Credit Hours

Credit Hours Min	Credit Hours Max
1	3

	Credit Hours Operator
	TO

Course Description

This course will provide up-to-date content in emerging educational issues for in-service teachers. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objectives and grading guidelines will be established by the faculty at the time each course is offered.

Requisites

Simple Requisites

Prerequisites: None

CUED6925 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CUED

Course Number
6925

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
This course will provide up-to-date content in emerging educational issues for in-service teachers. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objectives and grading guidelines will be established by the faculty at the time each course is offered.

Requisites

Simple Requisites

> **Prerequisites:** None

CUED6926 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CUED

Course Number
6926

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
This course will provide up-to-date content in emerging educational issues for in-service teachers. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objectives and grading guidelines will be established by the faculty at the time each course is offered.

CUED6927 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CUED

Course Number
6927

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
This course will provide up-to-date content in emerging educational issues for in-service teachers. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objectives and grading guidelines will be established by the faculty at the time each course is offered.

CUED6928 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CUED

Course Number
6928

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
This course will provide up-to-date content in emerging educational issues for in-service teachers. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objectives and grading guidelines will be established by the faculty at the time each course is offered.

CUED6929 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CUED

Course Number
6929

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
This course will provide up-to-date content in emerging educational issues for in-service teachers. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objectives and grading guidelines will be established by the faculty at the time each course is offered.

CUED6930 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6930

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

CUED6931 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6931

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

CUED6932 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6932

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

CUED6990 - Research & Thesis

General

College/School
Education

Course Title
Research & Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
6990

Credit Hours

Credit Hours Min
3

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

CUED7010 - Learning Theories

General

College/School
Education

Course Title
Learning Theories

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
CUED

Course Number
7010

Credit Hours

Credit Hours Min
3

Course Description
An advanced study of major learning theories with emphasis on making connections to recent instructional trends, teaching innovations and student learning.

Requisites

Simple Requisites

Prerequisites: None

CUED7030 - Rural Schools & Communities

General

College/School
Education

Course Title
Rural Schools & Communities

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CUED

Course Number
7030

Credit Hours

Credit Hours Min
3

Course Description
An in-depth study of the historical, cultural, and economic characteristics of rural places and the role of schools and agencies in shaping the destiny of those places and their citizens.

Requisites

Simple Requisites

Prerequisite: Graduate Standing.

CUED7100 - Improvement in Teaching

General

College/School
Education

Course Title
Improvement in Teaching

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CUED

Course Number
7100

Credit Hours

Credit Hours Min
3

Course Description
Advanced study of innovations, recent trends, research findings, and evaluation relating to the improvement of teaching.

Requisites

Simple Requisites

Prerequisites: None

CUED7150 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CUED

Course Number
7150

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
This course will provide up-to-date content in emerging educational issues. The specific topic will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face and/or online attendance. Course objective and grading guidelines will be established by the faculty at the time each course is offered.

Requisites

Simple Requisites

Prerequisites: None

CUED7430 - Spec App/Tech to Education

General

College/School
Education

Course Title
Spec App/Tech to Education

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
CUED

Course Number
7430

Credit Hours

Credit Hours Min
3

Course Description

Application of current media technologies to maximize student learning with instructional design strategies appropriate for each technology.

Requisites

Simple Requisites

Prerequisite: CUED6430 Dsgn Stu: Prod of Inst Mtrls

CUED7440 - Assistive Tech/Young Chld/Fam

General

College/School
Education

Course Title
Assistive Tech/Young Chld/Fam

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
7440

Credit Hours

Credit Hours Min
2

Course Description

Application of assistive and adaptive technology and related equipment and procedures to support at-risk young children and families.

Requisites

Simple Requisites

Prerequisite: CUED7430 Spec App/Tech to Education

CUED7510 - Instrctl Design Foundations

General

College/School
Education

Course Title
Instrctl Design Foundations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
7510

Credit Hours

Credit Hours Min
3

Course Description

This course will focus on the tenets of Instructional System Design (IDS), and how it can be used to enhance and enrich the delivery of content in the P-12 classroom. Students will discover how ISD can strengthen instruction by making the acquisition of knowledge more efficient and appealing.

Requisites

Simple Requisites

Prerequisites: None

CUED7520 - Teaching and Learning Online

General

College/School
Education

Course Title
Teaching and Learning Online

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
7520

Credit Hours

Credit Hours Min
3

Course Description

Preferred content focus in educational technology.

Requisites

Simple Requisites

Prerequisites: Consent of advisor and advanced graduate standing.

CUED7530 - Design Intgrtd Tech Environs

General

College/School
Education

Course Title
Design Intgrtd Tech Environs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CUED

Course Number
7530

Credit Hours

Credit Hours Min
3

Course Description

Preferred content focus in educational technology.

Requisites

Simple Requisites

Prerequisites: Consent of advisor and advanced graduate standing.

CUED7540 - Appl Instr Dsgn/Lrn Analytics

General

College/School
Education

Course Title
Appl Instr Dsgn/Lrn Analytics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
7540

Credit Hours

Credit Hours Min
3

Course Description
This course will connect educational theories and pedagogical approaches to create more engaging learning/training modules. Interactive learning platforms used in various educational environments will be explored. Students will learn and apply analytics to improve and reflect on instructional design practices.

Requisites

Simple Requisites

> **Prerequisites:** None

CUED7750 - Srv Lrning Informal STEM Edu

General

College/School
Education

Course Title
Srv Lrning Informal STEM Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
7750

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
This course provides students with the opportunity to plan, prepare, and present informal activities/lessons in science, technology, engineering, and mathematics to PreK-12th graders. Students in the 7000-level course will complete additional work. May be repeated for credit.

CUED7800 - Lab & Field Exper in Edu

General

College/School
Education

Course Title
Lab & Field Exper in Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
7800

Credit Hours

Credit Hours Min
3

Course Description
Supervised practicums, observation, simulation, internships, and externships in education.

Requisites

Simple Requisites

> **Prerequisite:** Reading Specialists Concentration only. Consent of advisor and advanced graduate standing.

CUED7801 - Lab/Field Exp in Edu/Tech

General

College/School
Education

Course Title
Lab/Field Exp in Edu/Tech

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
7801

Credit Hours

Credit Hours Min
3

Course Description
Students will participate in a variety of field experience activities related to educational technology integration. Topics include classroom technology integration, emerging technologies, technology professional development, technology leadership learning opportunities.

Requisites

Simple Requisites

> **Prerequisite:** Consent of advisor and advanced graduate standing.

CUED7802 - Lab/Fld Exp in Edu/Grant Writ

General

College/School
Education

Course Title
Lab/Fld Exp in Edu/Grant Writ

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
7802

Credit Hours

Credit Hours Min
3

Course Description
Supervised practicums, observation, simulation, internships, and externships in education. Content focus on grant writing.

Requisites

Simple Requisites

> **Prerequisite:** Consent of advisor and advanced graduate standing.

CUED7803 - Lab/Fld Exp in Edu/Autoethnogr

General

College/School
Education

Course Title
Lab/Fld Exp in Edu/Autoethnogr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
7803

Credit Hours

Credit Hours Min
3

Course Description
Supervised practicums, observation, simulation, internships, and externships in education. Content focus on autoethnography.

Requisites

Simple Requisites

> **Prerequisite:** Consent of advisor and advanced graduate standing.

CUED7900 - Read & Research in Education

General

College/School
Education

Course Title
Read & Research in Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
7900

Credit Hours

Credit Hours Min
3

Course Description
Study on an individual basis in the area of education being emphasized.

Requisites

Simple Requisites

> **Prerequisite:** Advanced graduate standing and consent of advisor.

CUED7910 - Adv Research Project in ED

General

College/School
Education

Course Title
Adv Research Project in ED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CUED

Course Number
7910

Credit Hours

Credit Hours Min
3

Course Description
Study on an individual basis in the area of education being emphasized.

Requisites

Simple Requisites

> **Prerequisite:** Advanced graduate standing and consent of advisor.

ECED5210 - ECED-Curr & Methods

General

College/School
Education

Course Title
ECED-Curr & Methods

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
5210

Credit Hours

Credit Hours Min
2

Course Description
Objectives, curriculum, materials, principles of teaching, and physical facilities for young children. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Full admission to the second level.
>
> **Corequisite:** ECED4220 ECED Practicum II

ECED5220 - ECED Practicum II

General

College/School
Education

Course Title
ECED Practicum II

Academic Level (Course Level)
Undergraduate

Course Subject Code
ECED

Course Number
5220

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Full admission to the second level and ECED 2850 or consent of instructor. Corequisite: ECED 4210 (5210) or consent of instructor. Participation with children in kindergarten setting. Use of teacher-made materials, units, and innovative methods. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

No Requirements

ECED5230 - Early Intervention I

General

College/School
Education

Course Title
Early Intervention I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECED

Course Number
5230

Credit Hours

Credit Hours Min
3

Course Description
Methods of service delivery for infants and toddlers with developmental delays and their families. Effective consultation, trans-disciplinary collaboration, service coordination, family centeredness, and culturally responsive practices. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. A minimum grade of B is required to meet degree requirements for licensure and practitioner candidates.

Requisites

Simple Requisites

Prerequisite: ECSP2400 Children with Special Needs

ECED5240 - Early Intervention II

General

College/School
Education

Course Title
Early Intervention II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECED

Course Number
5240

Credit Hours

Credit Hours Min
3

Course Description
Best practices in early intervention for a variety of special needs. Methods and curriculum development to enable effective reciprocal relationships with families. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. A minimum grade of B is required to meet degree requirements for licensure and practitioner candidates.

Requisites

Simple Requisites

Prerequisite: ECED4230 Early Intervention I(ECED5230 Early Intervention I)

ECED5250 - Lang Arts & Comm Skills

General

College/School
Education

Course Title
Lang Arts & Comm Skills

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
5250

Credit Hours

Credit Hours Min
2

Course Description
Relationship of language development and thinking to teaching communication skills to children. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Full admission to the second level.

ECED5290 - Community Connections

General

College/School
Education

Course Title
Community Connections

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECED

Course Number
5290

Credit Hours

Credit Hours Min
3

Course Description
Survey of community resources for families and young children, with an emphasis on federal, state, and local programs. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ECSP2400 Children with Special Needs ECSP 2400

ECED5300 - Assessment of Young Children

General

College/School
Education

Course Title
Assessment of Young Children

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECED

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description
Theories, principles, and practices associated with child find, assessment and evaluation of young children, their families, and their environments.

Requisites

Simple Requisites

> **Prerequisite:** Full admission to the Teacher Education Program; CFS 2400, or consent of instructor.

ECED5840 - Lang Acquis/0-5 Years

General

College/School
Education

Course Title
Lang Acquis/0-5 Years

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
5840

Credit Hours

Credit Hours Min
1

Course Description
Study of early language development, problems, and acquisition in children from birth to five years of age. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Corequisite:** ECED4290 Community Connections(ECED5290 Community Connections) or permission of instructor.

ECED6200 - The Young Child

General

College/School
Education

Course Title
The Young Child

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECED

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description
Patterns of growth and development as related to the school curricula.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED6230 - Early Intervention

General

College/School
Education

Course Title
Early Intervention

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
6230

Credit Hours

Credit Hours Min
3

Course Description
Assessment specific to young children, their environments, and their families. Participants will gain knowledge and skills in interpreting assessment information for educational intervention.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED6300 - Math/Sci/Soc Stu/Tech-Yng Chld

General

College/School
Education

Course Title
Math/Sci/Soc Stu/Tech-Yng Chld

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECED

Course Number
6300

Credit Hours

Credit Hours Min
3

Course Description
Examination of methods and techniques for teaching math, science, social studies, and technology to children Pre K-3. Explores the integration of curriculum with special emphasis on inquiry methods for enhancing diverse learners' critical thinking abilities and includes practicum experience.

ECED6400 - Multiculture Ed: Persp & Inst

General

College/School
Education

Course Title
Multiculture Ed: Persp & Inst

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
6400

Credit Hours

Credit Hours Min
3

Course Description
Multicultural knowledge base, cultural themes, and appropriate learning activities for children in a diverse society.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED6810 - Pract/Early Childhood ED

General

College/School
Education

Course Title
Pract/Early Childhood ED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
6810

Credit Hours

Credit Hours Min
3

Course Description
Practical guided experiences using innovative techniques or materials with children.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED6900 - Problems in ECED

General

College/School
Education

Course Title
Problems in ECED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
A critical study of problems of early childhood education with special attention to research findings.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED6920 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECED

Course Number
6920

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Laboratory approach providing opportunities for experienced educational personnel to study in-depth early childhood education problems.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED6990 - Thesis

General

College/School
Education

Course Title
Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
6990

Credit Hours

Credit Hours Min
6

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED7210 - Early Childhood Curr

General

College/School
Education

Course Title
Early Childhood Curr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECED

Course Number
7210

Credit Hours

Credit Hours Min
3

Course Description
Major trends, programs, research, and innovations in Early Childhood Education with emphasis on curriculum development.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED7220 - Early Chld Instr/Materials

General

College/School
Education

Course Title
Early Chld Instr/Materials

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECED

Course Number
7220

Credit Hours

Credit Hours Min
3

Course Description
Planning objectives, activities, and materials for children, teaching techniques, and evaluation of curricula.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED7250 - Assessment & Management

General

College/School
Education

Course Title
Assessment & Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
7250

Credit Hours

Credit Hours Min
3

Course Description
Types, purposes and appropriateness of various assessment procedures and management styles for children, early education environments and curricula.

Requisites

Simple Requisites

> **Prerequisites:** None

ECED7350 - Adv Child, Fam & School Relat

General

College/School
Education

Course Title
Adv Child, Fam & School Relat

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
7350

Credit Hours

Credit Hours Min
3

Course Description
Study and research in social, emotional, cognitive, language, motor and perceptual development and learning with children from birth through age eight in the family and school contexts.

Requisites
Simple Requisites

> **Prerequisite:** ECED 6200 or consent of instructor.

ECED7800 - Lab & Field Experience in ED

General
College/School
Education

Course Title
Lab & Field Experience in ED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
7800

Credit Hours

Credit Hours Min
3

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Supervised practicums, observation and internships in education.

Requisites
Simple Requisites

> **Prerequisite:** Advanced graduate standing and consent of instructor.

ECED7900 - Reading & Research

General
College/School
Education

Course Title
Reading & Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
7900

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Study on an individual basis of current literature and research in the area of education being emphasized.

Requisites
Simple Requisites

> **Prerequisites:** None

ECED7910 - Ind Study in Education

General
College/School
Education

Course Title
Ind Study in Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECED

Course Number
7910

Credit Hours

Credit Hours Min
3

Course Description
All students who complete requirements for the Ed.S. degree must complete an independent study project.

Requisites
Simple Requisites

> **Prerequisite:** Advanced graduate standing and consent of instructor.

ECSP5300 - Assessment of Young Children

General
College/School
Education

Course Title
Assessment of Young Children

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECSP

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Full admission to the Teacher Education Program; ECSP 2400. Theories, principles, and practices associated with child find, assessment, and evaluation of young children, their families, and their environment.

ECSP6100 - Fndations/Early Chldhd Edu

General

College/School
Education

Course Title
Fndations/Early Chldhd Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECSP

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
Examination of major concepts guiding practice in the field of early childhood education. Discussion of various historical and contemporary models and delivery systems for grades Pre K-4 in diverse and inclusive settings and includes practicum experiences. A minimum grade of B is required to meet licensure requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisites:** None

ECSP6250 - Social/Emotional Tchng Strateg

General

College/School
Education

Course Title
Social/Emotional Tchng Strateg

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECSP

Course Number
6250

Credit Hours

Credit Hours Min
3

Course Description
Teaches skills to build rapport with children and families; create supportive learning environments; apply positive social-emotional teaching strategies; define specific discipline and guidance strategies; assess challenging behaviors; describe specific interventions related to challenging behaviors; and develop individualized behavior guidance plans.

Requisites

Simple Requisites

> **Prerequisites:** None

EDU7000 - Trans-Concentration Seminar

General

College/School
Education

Course Title
Trans-Concentration Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7000

Credit Hours

Credit Hours Min
1

Course Description
An introduction to the Ph.D. in Exceptional Learning familiarizing students with the procedures, requirements, and expectations of the program.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Ph.D. program.

EDU7010 - Theoretical Foundtns/Research

General

College/School
Education

Course Title
Theoretical Foundtns/Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7010

Credit Hours

Credit Hours Min
3

Course Description
The first of a three-course qualitative research sequence focusing on research theoretical and methodological foundations and qualitative research design.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

EDU7020 - At-Risk Population:Rsrch, Serv

General

College/School
Education

Course Title
At-Risk Population:Rsrch, Serv

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7020

Credit Hours

Credit Hours Min
3

Course Description
A survey of at-risk and diverse populations, their common and unique characteristics, and the research base for designing and implementing effective prevention and intervention strategies.

Requisites

Simple Requisites

Prerequisite: Admission to Doctoral Program.

EDU7040 - Program Planning/Evaluation

General

College/School
Education

Course Title
Program Planning/Evaluation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7040

Credit Hours

Credit Hours Min
3

Course Description
Theoretical perspectives, models, and effective practices in the development, planning, and evaluation of programs and services in a variety of educational settings.

Requisites

Simple Requisites

Prerequisite: Admission to Doctoral Program.

EDU7050 - Advanced Learning/Cognition

General

College/School
Education

Course Title
Advanced Learning/Cognition

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7050

Credit Hours

Credit Hours Min
3

Course Description
Advanced theory, research, and applications in human learning, memory, and cognitive processes, holding at the center of the investigation specifics of diverse and at-risk populations.

Requisites

Simple Requisites

Prerequisite: Admission to Doctoral Program.

EDU7060 - Issues in Education

General

College/School
Education

Course Title
Issues in Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7060

Credit Hours

Credit Hours Min
3

Course Description
An examination and analysis of contemporary trends and issues in education, including leadership, legal, and ethical issues.

Requisites

Simple Requisites

Prerequisite: Admission to Doctoral Program.

EDU7300 - Research Design

General

College/School
Education

Course Title
Research Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7300

Credit Hours

Credit Hours Min
3

Course Description
Overview of planning, designing, and conducting experimental and non-experimental research in order to maximize research validity.

Requisites

Simple Requisites

> **Prerequisite:** EDU7420 Quant Inquiry in Edu I and Admission to Doctoral Program.

EDU7310 - Research in Literacy

General

College/School
Education

Course Title
Research in Literacy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7310

Credit Hours

Credit Hours Min
3

Course Description
Advanced literacy research, including a study replication with submission of findings for publication..

Requisites

Simple Requisites

> **Prerequisite:** EDU7300 Research Design

EDU7320 - Rsch Meth/Behavior Analysis

General

College/School
Education

Course Title
Rsch Meth/Behavior Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7320

Credit Hours

Credit Hours Min
3

Course Description
An in-depth analysis of measurements, data, interpretation, and experimental design in behavior analysis focusing on single case methodology.

Requisites

Simple Requisites

> **Prerequisite:** EDU7300 Research Design and Admission to Doctoral Program.

EDU7330 - Qualitative Inquiry/Research

General

College/School
Education

Course Title
Qualitative Inquiry/Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7330

Credit Hours

Credit Hours Min
3

Course Description
The second qualitative research course focusing on implementation of a previously designed qualitative study, including data collection and reflexivity in research.

Requisites

Simple Requisites

> **Prerequisite:** EDU7010 Theoretical Foundtns/Research and Admission to Doctoral Program.

EDU7340 - Data Analysis/Reprsnt/Qual Inq

General

College/School
Education

Course Title
Data Analysis/Reprsnt/Qual Inq

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7340

Credit Hours

Credit Hours Min
3

Course Description
The culminating qualitative research course focusing on theoretical and practical dimensions and applications of qualitative data analysis and representation.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program and EDU7330 Qualitative Inquiry/Research.

EDU7350 - Advanced Regression Analysis

General

College/School
Education

Course Title
Advanced Regression Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7350

Credit Hours

Credit Hours Min
3

Course Description
Advanced applications of regression analysis techniques.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Doctoral Program; EDU7420 Quant Inquiry in Edu I and EDU7430 Quant Inquiry in Edu II.

EDU7420 - Quant Inquiry in Edu I

General

College/School
Education

Course Title
Quant Inquiry in Edu I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7420

Credit Hours

Credit Hours Min
3

Course Description
In-depth training and understanding of common descriptive and inferential statistical techniques for conducting research and engaging in scholarly activities.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program and introductory course in statistics.

EDU7430 - Quant Inquiry in Edu II

General

College/School
Education

Course Title
Quant Inquiry in Edu II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7430

Credit Hours

Credit Hours Min
3

Course Description
In-depth analysis that reinforces and expands common descriptive and inferential statistical techniques and includes advanced material appropriate for more complex research problems.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program and EDU7420 Quant Inquiry in Edu I.

EDU7440 - Tech App:Inst Dissem-Info

General

College/School
Education

Course Title
Tech App:Inst Dissem-Info

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7440

Credit Hours

Credit Hours Min
3

Course Description
Analysis of creation, collection, and distribution of institutional information.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

EDU7920 - Research Seminar/Education

General

College/School
Education

Course Title
Research Seminar/Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7920

Credit Hours

Credit Hours Min
3

Course Description
In depth examination of experimental, quasiexperimental, and evaluation research as applied to dissertation research.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program; EDU7010 Theoretical Foundtns/ Research, EDU7300 Research Design, EDU7330 Qualitative Inquiry/Research, EDU7340 Data Analysis/Reprsnt/Qual Inq, EDU7420 Quant Inquiry in Edu I, and EDU7430 Quant Inquiry in Edu II; EDU7310 Research in Literacy or EDU7320 Rsch Meth/Behavior Analysis

EDU7950 - Doctoral Sem:Sp Top/Education

General

College/School
Education

Course Title
Doctoral Sem:Sp Top/Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDU

Course Number
7950

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Consent of the student's doctoral chairperson required.

EDU7990 - Research and Dissertation

General

College/School
Education

Course Title
Research and Dissertation

Academic Level (Course Level)
Doctoral

Course Subject Code
EDU

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
Prerequisite: Admission to Doctoral Program; EDU 7920 .

EDUB6000 - Concept Tps/Prin in Behvl Anal

General

College/School
Education

Course Title
Concept Tps/Prin in Behvl Anal

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6000

Credit Hours

Credit Hours Min
3

Course Description
An introduction to concepts and principles related to behavior analytic procedures. For students in ABA concentration only. Students enrolled in the 7000-level course will be required complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

EDUB6001 - Prin of Behavior Analysis

General

College/School
Education

Course Title
Prin of Behavior Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6001

Credit Hours

Credit Hours Min
3

Course Description
Course content includes, but is not limited to, the basic concepts and principles of operant and respondent conditioning. Students enrolled in the 7000-level course must complete an additional assignment.

EDUB6002 - Behavior Assessment

General

College/School
Education

Course Title
Behavior Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6002

Credit Hours

Credit Hours Min
3

Course Description
Focuses on selecting, designing, implementing, and monitoring assessments used in applied behavior analysis. Students enrolled in the 7000-level course must complete an additional assignment.

EDUB6003 - Behavior Intervention

General

College/School
Education

Course Title
Behavior Intervention

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6003

Credit Hours

Credit Hours Min
3

Course Description
Focuses on behavior intervention techniques and approaches used in applied behavior analysis. Students enrolled in the 7000-level course must complete an additional assignment.

EDUB6004 - Theory & Phil in Bhav Analysis

General

College/School
Education

Course Title
Theory & Phil in Bhav Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6004

Credit Hours

Credit Hours Min
3

Course Description
Course content includes, but is not limited to, the underlying theoretical and philosophical foundations of behavior analysis (i.e., behaviorism). Students enrolled in the 7000-level course must complete an additional assignment.

EDUB6005 - Organizational Behavior Mngmt

General

College/School
Education

Course Title
Organizational Behavior Mngmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6005

Credit Hours

Credit Hours Min
3

Course Description
Focuses on research-based practices and content that includes, but is not limited to, performance analysis and management, supervision, staff training, behavioral systems analysis, organizational culture, and leadership. The design and delivery of

intervention and treatments to students with Autism Spectrum Disorders. Students enrolled in the 7000-level course must complete an additional assignment.

EDUB6006 - Ethics in ABA

General

College/School
Education

Course Title
Ethics in ABA

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6006

Credit Hours

Credit Hours Min
3

Course Description
An overview of the ethical concerns related to applied behavior analysis. Students enrolled in the 7000-level course must complete an additional assignment.

EDUB6007 - Resch Methods in Bhav Analysis

General

College/School
Education

Course Title
Resch Methods in Bhav Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6007

Credit Hours

Credit Hours Min
3

Course Description
The primary goal of this course is to provide students with a complete, accurate, and contemporary view of measurement and research methods in applied behavior analysis. Students enrolled in the 7000-level course must complete an additional assignment.

EDUB6008 - Topics/Applied Behavior Analys

General

College/School
Education

Course Title
Topics/Applied Behavior Analys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6008

Credit Hours

Credit Hours Min
3

Course Description
Up-to-date content on emerging behavior analysis topics. Students enrolled in the 7000-level course must complete an additional assignment.

EDUB6010 - Topics in Behavior Analysis

General
College/School
Education

Course Title
Topics in Behavior Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDUB

Course Number
6010

Credit Hours
Credit Hours Min
3

Course Description
An in-depth study of instructional methodologies for persons with moderate and severe disabilities. For students in ABA concentration only. Students in the 7000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** EDUB6050 ABA Aprchs/Devlpmtl Disablts

EDUB6020 - Behr Chng Proc/Syst Sup in ABA

General
College/School
Education

Course Title
Behr Chng Proc/Syst Sup in ABA

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
6020

Credit Hours
Credit Hours Min
3

Course Description
The design, implementation, and evaluation of behavioral interventions and individualized behavioral supports using theoretical origins and behavior-analytic behavior change procedures. For students in ABA concentration only. Students enrolled in the 7000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** EDUB6000 Concept Tps/Prin in Behvl Anal

EDUB6030 - Assessment/Behavior Analysis

General
College/School
Education

Course Title
Assessment/Behavior Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDUB

Course Number
6030

Credit Hours
Credit Hours Min
3

Course Description
Instruction in the functional analysis of severe and challenging behaviors. Students enrolled in the 7000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

EDUB6050 - ABA Aprchs/Devlpmtl Disablts

General
College/School
Education

Course Title
ABA Aprchs/Devlpmtl Disablts

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDUB

Course Number
6050

Credit Hours
Credit Hours Min
3

Course Description
A comprehensive overview of research-based practices in the design and delivery of intervention and treatments to students with Autism Spectrum Disorders. Students enrolled in the 7000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

EDUB6060 - Ethics in ABA

General
College/School
Education

Course Title	**Academic Level (Course Level)**
Ethics in ABA	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
EDUB	6060

Credit Hours

Credit Hours Min

3

Course Description

An overview of the ethical concerns related to the practice of applied behavior analysis. Students enrolled in the 7000-level course will be required to compete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

EDUB6320 - Rsch Meth/Behavior Analysis

General

College/School

Education

Course Title	**Academic Level (Course Level)**
Rsch Meth/Behavior Analysis	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
EDUB	6320

Credit Hours

Credit Hours Min

3

Course Description

An in-depth analysis of measurements, data, interpretation, and experimental design in behavior analysis focusing on single case methodology.

Requisites

Simple Requisites

Prerequisites: None

EDUB6810 - Practicum in Behavior Analysis

General

College/School

Education

Course Title	**Academic Level (Course Level)**
Practicum in Behavior Analysis	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
EDUB	6810

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	3

Credit Hours Operator

TO

Course Description

Cross-listing: EDUB 7810. Supervised practice in development and application of behavioral ntervention. Students enrolled in the 7000-level course will be required to complete additional work as stated in the syllabus. Course may be repeated multiple times.

EDUB7000 - Concept Tps/Prin in Behvl Anal

General

College/School

Education

Course Title	**Academic Level (Course Level)**
Concept Tps/Prin in Behvl Anal	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
EDUB	7000

Credit Hours

Credit Hours Min

3

Course Description

An introduction to concepts and principles related to behavior analytic procedures. For students in ABA concentration only. Students enrolled in the 7000-level course will be required complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

EDUB7001 - Prin of Behavior Analysis

General

College/School

Education

Course Title	**Academic Level (Course Level)**
Prin of Behavior Analysis	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
EDUB	7001

Credit Hours

Credit Hours Min

3

Course Description

Course content includes, but is not limited to, the basic concepts and principles of operant and respondent conditioning Students enrolled in the 7000-level course must complete an additional assignment.

EDUB7002 - Behavior Assessment

General

College/School
Education

Course Title
Behavior Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7002

Credit Hours

Credit Hours Min
3

Course Description
Focuses on selecting, designing, implementing, and monitoring assessments used in applied behavior analysis. Students enrolled in the 7000-level course must complete an additional assignment.

Requisites

Simple Requisites

> Prerequisite: Admission to the Doctoral Program or Admission to Specialist in Education (C&I) Applied Behavioral Analysis concentration.

EDUB7003 - Behavior Intervention

General

College/School
Education

Course Title
Behavior Intervention

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7003

Credit Hours

Credit Hours Min
3

Course Description
Focuses on behavior intervention techniques and approaches used in applied behavior analysis. Students enrolled in the 7000-level course must complete an additional assignment.

Requisites

Simple Requisites

> Prerequisite: Admission to the Doctoral Program or Admission to Specialist in Education (C&I) Applied Behavioral Analysis concentration.

EDUB7004 - Theory & Phil in Bhav Analysis

General

College/School
Education

Course Title
Theory & Phil in Bhav Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7004

Credit Hours

Credit Hours Min
3

Course Description
Course content includes, but is not limited to, the underlying theoretical and philosophical foundations of behavior analysis (i.e., behaviorism). Students enrolled in the 7000-level course must complete an additional assignment.

Requisites

Simple Requisites

> Prerequisite: Admission to the Doctoral Program or Admission to Specialist in Education (C&I) Applied Behavioral Analysis concentration.

EDUB7005 - Organizational Behavior Mngmt

General

College/School
Education

Course Title
Organizational Behavior Mngmt

Academic Level (Course Level)
Doctoral, Specialist in Education

Course Subject Code
EDUB

Course Number
7005

Credit Hours

Credit Hours Min
3

Course Description
Focuses on research-based practices and content that includes, but is not limited to, performance analysis and management, supervision, staff training, behavioral systems analysis, organizational culture, and leadership. The design and delivery of intervention and treatments to students with Autism Spectrum Disorders. Students enrolled in the 7000-level course must complete an additional assignment.

Requisites

Simple Requisites

> Prerequisite: Admission to the Doctoral Program or Admission to Specialist in Education (C&I) Applied Behavioral Analysis concentration.

EDUB7006 - Ethics in ABA

General

College/School
Education

Course Title
Ethics in ABA

Academic Level (Course Level)
Graduate, Specialist in Education, Doctoral

Course Subject Code
EDUB

Course Number
7006

Credit Hours

Credit Hours Min
3

Course Description
An overview of the ethical concerns related to applied behavior analysis. Students enrolled in the 7000-level course must complete an additional assignment.

Requisites

Simple Requisites

> **Prerequisite**
> **Type**
> Prerequisite
>
> > **Admission to Doctoral Program or Admission to Specialist in Education (C&I) Applied Behavior Analysis concentration.**
>
> **Additional Comments:**

EDUB7006 - Ethics in ABA

General

College/School
Education

Course Title
Ethics in ABA

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7006

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Admission to the Doctoral Program or Admission to Specialist in Education (C&I) Applied Behavioral Analysis concentration. An overview of the ethical concerns related to applied behavior analysis. Students enrolled in the 7000-level course must complete an additional assignment.

EDUB7007 - Resch Methods in Bhav Analysis

General

College/School
Education

Course Title
Resch Methods in Bhav Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7007

Credit Hours

Credit Hours Min
3

Course Description
The primary goal of this course is to provide students with a complete, accurate, and contemporary view of measurement and research methods in applied behavior analysis. Students enrolled in the 7000-level course must complete an additional assignment.

Requisites

Simple Requisites

> Prerequisite: Admission to the Doctoral Program or Admission to Specialist in Education (C&I) Applied Behavioral Analysis concentration.

EDUB7008 - Topics/Applied Behavior Analys

General

College/School
Education

Course Title
Topics/Applied Behavior Analys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7008

Credit Hours

Credit Hours Min
3

Course Description
Up-to-date content on emerging behavior analysis topics. Students enrolled in the 7000-level course must complete an additional assignment.

Requisites

Simple Requisites

> Prerequisite: Admission to the Doctoral Program or Admission to Specialist in Education (C&I) Applied Behavioral Analysis concentration.

EDUB7010 - Topics in Behavior Analysis

General

College/School
Education

Course Title
Topics in Behavior Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7010

Credit Hours

Credit Hours Min
3

Course Description
An in-depth study of instructional methodologies for persons with moderate and severe disabilities. For students in ABA concentration only. Students in the 7000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: EDUB6050 ABA Aprchs/Devlpmtl Disablts

EDUB7020 - Behvrl Chng Proc Sys Sup/ABA

General

College/School
Education

Course Title
Behvrl Chng Proc Sys Sup/ABA

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7020

Credit Hours

Credit Hours Min
3

Course Description
The design, implementation, and evaluation of behavioral interventions and individualized behavioral supports using theoretical origins and behavior-analytic behavior change procedures. For students in ABA concentration only. Students enrolled in the 7000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: EDUB7000 Concept Tps/Prin in Behvl Anal

EDUB7030 - Assessment/Behavior Analysis

General

College/School
Education

Course Title
Assessment/Behavior Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7030

Credit Hours

Credit Hours Min
3

Course Description
Instruction in the functional analysis of severe and challenging behaviors. Students enrolled in the 7000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: Admission to Doctoral Program.

EDUB7040 - Assmnt/Autism Spectrum Disrdrs

General

College/School
Education

Course Title
Assmnt/Autism Spectrum Disrdrs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7040

Credit Hours

Credit Hours Min
3

Course Description
A comprehensive overview of assessment methods used in the evaluation of children with Autism Spectrum Disorders.

Requisites

Simple Requisites

> **Prerequisites:** Admission to the Ph.D. program and SPED6050 Intro/Applied Behavior Analysi.

EDUB7050 - ABA Aprchs/Devlpmtl Disablts

General

College/School
Education

Course Title
ABA Aprchs/Devlpmtl Disablts

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7050

Credit Hours

Credit Hours Min
3

Course Description
Cross-listing: EDUB 6050. Prerequisites: Admission to the Ph.D. Program, and EDUB 7040. A comprehensive overview of research-based practices in the design and delivery of intervention and treatments to students with Autism Spectrum Disorders. Students enrolled in the 7000-level course will be required to complete additional work as stated in the syllabus.

EDUB7060 - Ethics in ABA

General

College/School
Education

Course Title
Ethics in ABA

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDUB

Course Number
7060

Credit Hours

Credit Hours Min
3

Course Description
An overview of the ethical concerns related to the practice of applied behavior analysis. Students enrolled in the 7000-level course will be required to compete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

EDUB7810 - Pract: Behavior Analysis

General

College/School
Education

Course Title
Pract: Behavior Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUB

Course Number
7810

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Cross-listing: EDUB 6810. Prerequisite: EDUB 7010, 7030; SPED 6050; Admission to Doctoral Program. Supervised practice in development and application of behavioral intervention. Students enrolled in the 7000-level course will be required to complete additional work as stated in the syllabus. Course may be repeated multiple times.

EDUC5200 - Evaluation of Tch & Lrn

General

College/School
Education

Course Title
Evaluation of Tch & Lrn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUC

Course Number
5200

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

EDUC7400 - Prog & Serv Delivery Models

General

College/School
Education

Course Title
Prog & Serv Delivery Models

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUC

Course Number
7400

Credit Hours

Credit Hours Min
3

Course Description
Analysis and comparison of organizations, program design, leadership, administrative, and supervisory practices.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

EDUC7450 - Doctoral Sem:Yng Child & Fam

General

College/School
Education

Course Title
Doctoral Sem:Yng Child & Fam

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDUC

Course Number
7450

Credit Hours

Credit Hours Min
3

Course Description
Inquiry into social policy, theory, research, issued, and intervention practices and personnel preparation.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

EDUC7800 - Lab and Field Exper in Edu

General

College/School
Education

Course Title
Lab and Field Exper in Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUC

Course Number
7800

Credit Hours

Credit Hours Min
3

Course Description
Supervised practicums, observation, simulation, internships, and externships in education.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

EDUC7910 - Ind Stu: Young Child & Family

General

College/School
Education

Course Title
Ind Stu: Young Child & Family

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUC

Course Number
7910

Credit Hours

Credit Hours Min
3

Course Description
Study on an individual basis focusing on an area directly related to young children at risk and/or their families.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

EDUL7000 - Sem: Reading & Lang Arts

General

College/School
Education

Course Title
Sem: Reading & Lang Arts

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUL

Course Number
7000

Credit Hours

Credit Hours Min
3

Course Description
Discussion of current issues and materials in reading and language arts.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

EDUL7100 - Literacy Hist, Theory & Policy

General

College/School
Education

Course Title
Literacy Hist, Theory & Policy

Academic Level (Course Level)
Doctoral

Course Subject Code
EDUL

Course Number
7100

Credit Hours

Credit Hours Min
3

Course Description
Pre-requisite: Admission to doctoral program. Exploration of the history and theory related to reading and writing instruction. Policies influencing literacy instruction, past and present, will also be examined.

EDUL7200 - Equity Literacy

General

College/School
Education

Course Title
Equity Literacy

Academic Level (Course Level)
Doctoral

Course Subject Code
EDUL

Course Number
7200

Credit Hours

Credit Hours Min
3

Course Description
Pre-requisite: Admission to doctoral program. Promotes understanding of deficit thinking in education as it relates to students who are disadvantaged by poverty and guides students to develop language, skills, and competencies for countering deficit thinking in order to promote equity in education.

EDUL7300 - Multiliteracies

General

College/School
Education

Course Title
Multiliteracies

Academic Level (Course Level)
Doctoral

Course Subject Code
EDUL

Course Number
7300

Credit Hours

Credit Hours Min
3

Course Description
Pre-requisite: Admission to doctoral program. Explores multiple and new literacies, moving beyond traditional reading and writing to examine the multimodal ways of meaning making and communicating and their place in pedagogy and practice. Prerequisite: admission to doctoral program.

EDUL7400 - Lit-Cultura/Linguistic Div Pop

General

College/School
Education

Course Title
Lit-Cultura/Linguistic Div Pop

Academic Level (Course Level)
Doctoral

Course Subject Code
EDUL

Course Number
7400

Credit Hours

Credit Hours Min
3

Course Description
Pre-requisite: Admission to doctoral program. Literacies of culturally and linguistically diverse groups through a critical lens.

EDUL7500 - Linguistic Perceptions

General

College/School
Education

Course Title
Linguistic Perceptions

Academic Level (Course Level)
Doctoral

Course Subject Code
EDUL

Course Number
7500

Credit Hours

Credit Hours Min
3

Course Description
Pre-requisite: Admission to doctoral program. Explores perceptions of the world through the language that we use and belief systems we create.

EDUL7600 - The Literacy Professional

General

College/School
Education

Course Title
The Literacy Professional

Academic Level (Course Level)
Doctoral

Course Subject Code
EDUL

Course Number
7600

Credit Hours

Credit Hours Min
3

Course Description
Pre-requisite: Admission to doctoral program. Exploring the various roles of the literacy professional. Preparing for grant and article submission.

EDUL7700 - Thry, Mthds, Trnds/Lit Rsrch

General

College/School
Education

Course Title
Thry, Mthds, Trnds/Lit Rsrch

Academic Level (Course Level)
Doctoral

Course Subject Code
EDUL

Course Number
7700

Credit Hours

Credit Hours Min
3

Course Description
Pre-requisite: Admission to doctoral program. Examines major theories and methodologies in literacy research and explores new trends in the field.

EDUL7800 - Prof Devlpmt in Edu Setting

General

College/School
Education

Course Title
Prof Devlpmt in Edu Setting

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUL

Course Number
7800

Credit Hours

Credit Hours Min
3

Course Description
Supervised practicums, observation, simulation, internships, and externships in education.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

EDUL7900 - Community Literacy

General

College/School
Education

Course Title
Community Literacy

Academic Level (Course Level)
Doctoral

Course Subject Code
EDUL

Course Number
7900

Credit Hours

Credit Hours Min
3

Course Description
Pre-requisite: Admission to doctoral program. Working to explore and participate in various literacy initiatives within the community.

EDUP7410 - Adv Planning & Eval Meth I

General

College/School
Education

Course Title
Adv Planning & Eval Meth I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUP

Course Number
7410

Credit Hours

Credit Hours Min
3

Course Description
Exploration of program planning and evaluation theories and methods used to evaluate programs and improvement initiatives.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Doctoral Program.

EDUP7420 - Adv Planning & Eval Meth II

General

College/School
Education

Course Title
Adv Planning & Eval Meth II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUP

Course Number
7420

Credit Hours

Credit Hours Min
3

Course Description
Integration and application of theories, best practices, and contextual knowledge to program planning and evaluation processes.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

EDUP7810 - Pract/Planning & Evaluation

General

College/School
Education

Course Title
Pract/Planning & Evaluation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDUP

Course Number
7810

Credit Hours

Credit Hours Min
3

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
Prerequisite: Admission to Doctoral Program. Supervised application of program planning and evaluation theories and practices in a variety of settings.

EDUS7500 - STEM Education Foundations

General

College/School
Education

Course Title
STEM Education Foundations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUS

Course Number
7500

Credit Hours

Credit Hours Min
3

Course Description
Introduction to the educational, political, economic, and socio-cultural foundations of the STEM and STEM education disciplines including the history and development of STEM education with attention to the STEM content in P-16 settings. Topics include: introduction to the nature of each of the STEM and STEM education disciplines; investigation of related political, economic, and socio-cultural foundations; and frameworks for constructing personal perspectives and philosophies of integrative STEM education.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program.

EDUS7510 - STEM Curriculum & Assessment

General

College/School
Education

Course Title
STEM Curriculum & Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUS

Course Number
7510

Credit Hours

Credit Hours Min
3

Course Description
Current trends in STEM curriculum development and assessment. Topics include: defining objectives; planning for improvement; organization of instructional materials; and STEM curriculum evaluation.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program.

EDUS7515 - STEM Education Seminar

General

College/School
Education

Course Title
STEM Education Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUS

Course Number
7515

Credit Hours

Credit Hours Min
1

Course Description
Designed as a general exploration into the issues surrounding the development of a STEM literate populace through education. This exploration will be facilitated by a blend of readings, discussions, and personal reflections.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program.

EDUS7520 - STEM Technology Seminar

General

College/School
Education

Course Title
STEM Technology Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUS

Course Number
7520

Credit Hours

Credit Hours Min
1

Course Description
Focused on STEM-specific technologies (e.g., Vernier probes, TI-Navigation systems, LoggerPro software, etc.), how to use them, and the issues surrounding their use in STEM education.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program.

EDUS7530 - STEM Education Research

General

College/School
Education

Course Title
STEM Education Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUS

Course Number
7530

Credit Hours

Credit Hours Min
3

Course Description
Survey of the educational research practices of STEM disciplines; investigates the approaches used in studying the teaching/learning processes within the context of each discipline; similarities, distinctions and overlaps among questions posed, research designs, and investigations into best practices with respect to improving teaching and learning among STEM disciplines.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program; EDU7420 Quant Inquiry in Edu I or EDU7010 Theoretical Foundtns/Research.

EDUS7540 - STEM Education Pedagogy

General

College/School
Education

Course Title
STEM Education Pedagogy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EDUS

Course Number
7540

Credit Hours

Credit Hours Min
3

Course Description
Signature pedagogies unique to the fields of science, technology, engineering, and mathematics (STEM) education; strengths and limitations associated with signature pedagogies; and insights into pedagogical strategies that can serve to enhance practices within chosen STEM fields.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program.

EDUS7550 - STEM Edu Trends and Issues

General

College/School
Education

Course Title
STEM Edu Trends and Issues

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUS

Course Number
7550

Credit Hours

Credit Hours Min
3

Course Description
Introduction to contemporary P-16 STEM education trends and issues, including both integrative and within-discipline trends/issues. Topics such as STEM literacy, integrative STEM teaching/learning, purposeful design and inquiry, legislative initiatives, and change theory are among those addressed in this course.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program.

EDUS7560 - STEM Learns and Learning

General

College/School
Education

Course Title
STEM Learns and Learning

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUS

Course Number
7560

Credit Hours

Credit Hours Min
3

Course Description
Designed to explore the theoretical bases for STEM learning. Topics will include the development of STEM learning environments; research on learning in STEM; and STEM learner exceptionalities.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program.

EDUS7570 - STEM Edu Policy & Leadership

General

College/School
Education

Course Title
STEM Edu Policy & Leadership

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUS

Course Number
7570

Credit Hours

Credit Hours Min
3

Course Description
Designed to explore the theoretical bases for STEM learning. Topics will include the development of STEM learning environments; research on learning in STEM; and STEM learner exceptionalities.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program.

EDUS7580 - STEM Education Field Study

General

College/School
Education

Course Title
STEM Education Field Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUS

Course Number
7580

Credit Hours

Credit Hours Min
2

Course Description
Applied study in one or more educational institutions. Research, evaluation, curricular, and instructional STEM projects are examples of appropriate areas of study.

Requisites

Simple Requisites

> **Prerequisite:** Admission to doctoral program.

ELED5250 - Language Arts/Comm Skills

General

College/School
Education

Course Title
Language Arts/Comm Skills

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ELED

Course Number
5250

Credit Hours

Credit Hours Min
2

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ELED5260 - Teach Learn Internet

General

College/School
Education

Course Title
Teach Learn Internet

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ELED

Course Number
5260

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ELED6120 - Elem School Programs

General

College/School
Education

Course Title
Elem School Programs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ELED

Course Number
6120

Credit Hours

Credit Hours Min
3

Course Description
The historical development of the elementary school curriculum; factors affecting curriculum planning; analysis of contemporary curricula.

Requisites

Simple Requisites

> **Prerequisites:** None

ELED6250 - Tech Tools TkLn

General

College/School
Education

Course Title
Tech Tools TkLn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ELED

Course Number
6250

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ELED6400 - Adv Studies/Elem Sci Edu

General

College/School
Education

Course Title
Adv Studies/Elem Sci Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ELED

Course Number
6400

Credit Hours

Credit Hours Min
3

Course Description
Explores and analyzes current issues and trends in methods, materials, and content in teaching elementary school science. Special emphasis will be on problem-solving skills.

Requisites

Simple Requisites

> **Prerequisites:** None

ELED6500 - Diag & Rem Tech Elem Math

General

College/School
Education

Course Title
Diag & Rem Tech Elem Math

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ELED

Course Number
6500

Credit Hours

Credit Hours Min
3

Course Description
Analyzes techniques used by regular classroom teachers in diagnosing and correcting learning difficulties associated with elementary school mathematics.

Requisites

Simple Requisites

> **Prerequisites:** None

ELED6600 - Organizing Theme-Soc Stu

General

College/School
Education

Course Title
Organizing Theme-Soc Stu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ELED

Course Number
6600

Credit Hours

Credit Hours Min
3

Course Description
Explores the basic organizing themes and conceptual framework utilized in social studies instruction.

Requisites

Simple Requisites

> **Prerequisites:** None

ELED6900 - Problems in Elem Education

General

College/School
Education

Course Title
Problems in Elem Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ELED

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
A critical study of problems of the elementary school with special attention to research findings.

Requisites

Simple Requisites

> **Prerequisites:** None

ELED6920 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ELED

Course Number
6920

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Laboratory approach providing opportunities for experienced educational personnel to study in-depth educational problems.

Requisites

Simple Requisites

> **Prerequisites:** None

ELED7400 - The Literacy Lang Arts Program

General

College/School
Education

Course Title
The Literacy Lang Arts Program

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ELED

Course Number
7400

Credit Hours

Credit Hours Min
3

Course Description
Current curricular issues concerning language arts education, including use of storytelling and writing activities to enhance reading and language skills.

Requisites

Simple Requisites

> **Prerequisites:** None

ESLP5100 - ESL M,M for Pre K-12

General

College/School
Education

Course Title
ESL M,M for Pre K-12

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ESLP

Course Number
5100

Credit Hours

Credit Hours Min
3

Course Description
Current approaches, methodologies, techniques, and materials for teaching ESL primarily in preK-12 situations; developing literacy skills appropriate for age and language proficiency levels. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Full admission to the Teacher Education Program.

ESLP5200 - ESL Assmnt: Reading & Writing

General

College/School
Education

Course Title
ESL Assmnt: Reading & Writing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ESLP

Course Number
5200

Credit Hours

Credit Hours Min
3

Course Description
Assessing proficiency for ESL placement and eventual integration into school curriculum mainstreaming with special emphasis on language literacy skills: reading and writing. A minimum grade of B is required to meet requirements for licensure candidates. Students enrolled in the 5000-level course will e required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Full admission to the Teacher Education Program; ESLP4100 ESL M,M for Pre K-12(ESLP5100 ESL M,M for Pre K-12).

ESLP5300 - Field Experience in ESL

General

College/School
Education

Course Title
Field Experience in ESL

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ESLP

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description
Teaching ESL in preK-12 under supervision of experienced ESL staff: writing objectives, planning lessons, materials evaluation, testing. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Full admission to the Teacher Education Program; ESLP4100 ESL M,M for Pre K-12(5100) or consent of instructor.

ESOL6100 - ESOL: Methodology and Materials for PreK-12

General

College/School
Education

Course Title
ESOL: Method/Matls for PreK-12

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ESOL

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
Language theories, culturally and linguistically appropriate practices, methodologies, strategies, and materials for teaching English language learners in preK-12 classrooms. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisite: Full admission to the Teacher Education Program.

ESOL6200 - ESOL Assessment in PreK-12 Classrooms

General

College/School
Education

Course Title
Assessment in PreK-12 Classrms

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ESOL

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description
Centers on understanding assessment and its impact on English language learners (ELLs). Explores linguistically and culturally responsive assessment methods. Coursework will aid students in developing, choosing, assessing, administering, interpreting, and communicating the most equitable for ELLs formal and informal assessment procedures. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisites: ESOL6100 ESOL: Method/Matls for PreK-12 and full admission to the Teacher Education Program.

ESOL6400 - Fndts/Lang for ESOL Eductrs

General

College/School
Education

Course Title
Fndts/Lang for ESOL Eductrs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ESOL

Course Number
6400

Credit Hours

Credit Hours Min
3

Course Description
Explores students' language acquisition and language development. Focuses on introduction of the language as a broad system in order to help future ESL educators to successfully navigate through language acquisition theories and foundations of linguistics. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisite: Full admission to the Teacher Education Program.

FOED6020 - Perspectives-American Edu

General

College/School
Education

Course Title
Perspectives-American Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FOED

Course Number
6020

Credit Hours

Credit Hours Min
3

Course Description
Study of theory, practice, and reform in American Education: a sociological and historical perspective.

Requisites

Simple Requisites

Prerequisites: None

FOED6320 - Educational App of Technology

General

College/School
Education

Course Title
Educational App of Technology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FOED

Course Number
6320

Credit Hours

Credit Hours Min
3

Course Description
Review and application of basic computer competencies as related to a variety of educational tasks.

Requisites
Simple Requisites

> **Prerequisites:** None

FOED6400 - Prin/Tech-Work/Stu Tchrs

General
College/School
Education

Course Title
Prin/Tech-Work/Stu Tchrs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FOED

Course Number
6400

Credit Hours
Credit Hours Min
3

Course Description
Principles and techniques of cooperative work with student teachers. Includes practical exercises in planning, teaching, and evaluation.

Requisites
Simple Requisites

> **Prerequisite:** Consent of instructor.

FOED6430 - Product/Instructional Material

General
College/School
Education

Course Title
Product/Instructional Material

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FOED

Course Number
6430

Credit Hours
Credit Hours Min
3

Course Description
The course focus is on design, preparation, and production of instructional materials utilizing current trends and technologies in education.

Requisites
Simple Requisites

> **Prerequisite:** Competence in basic computer skills and media or completion of FOED6320 Educational App of Technology.

FOED6800 - Field Experience

General
College/School
Education

Course Title
Field Experience

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FOED

Course Number
6800

Credit Hours
Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Practical field experience in student's major area of emphasis.

Requisites
Simple Requisites

> **Prerequisites:** None

FOED6820 - Applied Educational Assessment

General
College/School
Education

Course Title
Applied Educational Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FOED

Course Number
6820

Credit Hours
Credit Hours Min
3

Course Description
This course considers statistical techniques for describing and summarizing numerical data for educational research studies, and interpretation/evaluation of educational assessment data. Applied descriptive and inferential statistics, classroom test construction and improvement, and standardized testing applications will be considered within the context of the classroom and school improvement.

Requisites

Simple Requisites

> **Prerequisites:** None

FOED6840 - Field Experiences in ESL

General

College/School
Education

Course Title
Field Experiences in ESL

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
FOED

Course Number
6840

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Supervised work experiences in public schools, stressing the translation of theory into practice and focusing on teaching English Language Learners in PreK-12 settings. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisite:** ESLP4100 ESL M,M for Pre K-12(ESLP5100 ESL M,M for Pre K-12); Full admission to the Teacher Education Program.

FOED6920 - Educational Research

General

College/School
Education

Course Title
Educational Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FOED

Course Number
6920

Credit Hours

Credit Hours Min
3

Course Description
Qualitative and quantitative research methods in education.

Requisites

Simple Requisites

> **Prerequisites:** None

FOED6980 - Qualitative Research in Edu

General

College/School
Education

Course Title
Qualitative Research in Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FOED

Course Number
6980

Credit Hours

Credit Hours Min
3

Course Description
A study of Qualitative Research applications and analysis of design and selected research techniques.

Requisites

Simple Requisites

> **Prerequisites:** None

FOED7020 - Philosophy & Public Policy

General

College/School
Education

Course Title
Philosophy & Public Policy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FOED

Course Number
7020

Credit Hours

Credit Hours Min
3

Course Description
A philosophical analysis of educational theories and public policy.

Requisites

Simple Requisites

> **Prerequisites:** None

HRED7000 - Seminar in Higher Education

General

College/School
Education

Course Title
Seminar in Higher Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7000

Credit Hours

Credit Hours Min
1

Course Description
Introductory course to familiarize students with the procedures, requirements, and expectations of the program. Introduces students to a variety of perspectives and roles at higher education institutions. For students in Higher Education concentration only.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7010 - Trends & Issues in Higher Edu

General

College/School
Education

Course Title
Trends & Issues in Higher Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7010

Credit Hours

Credit Hours Min
3

Course Description
Analyze current trends and issues in higher education and historical circumstances that have led to the current state of post-secondary education. Explore the future state of education, anticipating trends and issues that higher education leaders will likely navigate moving forward.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7020 - Ethical Aspects of Higher Educ

General

College/School
Education

Course Title
Ethical Aspects of Higher Educ

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7020

Credit Hours

Credit Hours Min
3

Course Description
Overview of the ethical theories and influential case studies that have impacted the educational system, teaching, learning and student outcomes. Topics addressed include diversity ad inclusion, faculty academic freedom, shared governance, freedom of speech, and access and affordability.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the Doctoral Program.

HRED7030 - College and University Finance

General

College/School
Education

Course Title
College and University Finance

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7030

Credit Hours

Credit Hours Min
3

Course Description
Overview of the financial management of higher education institutions. Financial reporting, budgeting, and asset management processes. Examines contemporary funding opportunities for postsecondary institutions.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7040 - Public Policy & Higher Ed Law

General

College/School
Education

Course Title
Public Policy & Higher Ed Law

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7040

Credit Hours

Credit Hours Min
3

Course Description
Law, legal environment, processes, analysis of law, and legal problems in higher education. Overview of social, economical, cultural, political, and behavioral aspects of higher education policy analysis. Address a modern history of higher education.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7050 - Ed Tech, Dsgn, Innov/Higher Ed

General

College/School
Education

Course Title
Ed Tech, Dsgn, Innov/Higher Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7050

Credit Hours

Credit Hours Min
3

Course Description
Address and apply current research and theory related to learning, design, and technology with higher education.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7110 - Trends/Struct/Higher Ed Admin

General

College/School
Education

Course Title
Trends/Struct/Higher Ed Admin

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7110

Credit Hours

Credit Hours Min
3

Course Description
Investigates administrative trends and issues common across colleges and universities from a variety of perspectives. Organizational patterns and structure, roles and partnerships, curricular processes and program development in the higher education administrative setting.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7120 - Organiz. & Leadership Theories

General

College/School
Education

Course Title
Organiz. & Leadership Theories

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7120

Credit Hours

Credit Hours Min
3

Course Description
Incorporates culture, policy and resource development, and leadership theories in an organizational setting. Presents a perspective of organizational theory through historical and developmental contexts. Includes conceptional models of learning and leadership related to decision-making strategies.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7130 - Leadershp Devel & Transformatn

General

College/School
Education

Course Title
Leadershp Devel & Transformatn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7130

Credit Hours

Credit Hours Min
3

Course Description
Overview of basic concepts and theories of leadership. Emphasis placed on implementing leadership theory to analyze various situations and create and apply solutions for effective organizational transformation.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7140 - Col Access/Afford & St.Success

General

College/School
Education

Course Title
Col Access/Afford & St.Success

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7140

Credit Hours

Credit Hours Min
3

Course Description
Incorporates historical investments in college access and affordability, as well as costs, debts, and other barriers for entrance and success at the university level. Study supports and outcomes associated with success, persistence, and completion.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7150 - PPEA for HrEd Admins

General

College/School
Education

Course Title
PPEA for HrEd Admins

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7150

Credit Hours

Credit Hours Min
3

Course Description
Planning and evaluation of various programs and initiatives related to higher education administration to determine effectiveness and ability to meet designated goals and objectives. Research on the cycle planning efforts, the valuation setting, design, analysis, and outcomes. Study of planning, implementation, and improvements to assessments relative to higher education administrators.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7160 - Fundamentals of Data Science

General

College/School
Education

Course Title
Fundamentals of Data Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7160

Credit Hours

Credit Hours Min
3

Course Description
Introduction to foundational concepts, technologies, and theories of data and data science with a specific focus in higher education.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Doctoral Program; EDU7300 Research Design and EDU7430 Quant Inquiry in Edu II.

HRED7170 - Applications of Data Analysis

General

College/School
Education

Course Title
Applications of Data Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7170

Credit Hours

Credit Hours Min
3

Course Description
In depth study of programming language known as R. Use of RStudio, an accessory environment that allows work to be more efficient with R. Software applications and tools that are unique to R, such as R packages.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Doctoral Program; HRED7160 Fundamentals of Data Science.

HRED7180 - Data Manipulation, Analytics, and Visualization

General

College/School
Education

Course Title
Data Manip., Analyt, & Vis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7180

Credit Hours

Credit Hours Min
3

Course Description
Use of R and Python to obtain, store, and clean data.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Doctoral Program; HRED7170 Applications of Data Analysis.

HRED7190 - Predictive Analytics

General

College/School
Education

Course Title
Predictive Analytics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7190

Credit Hours

Credit Hours Min
3

Course Description
Introduction to the concepts, processes, and applications of predictive modeling, with a focus on linear regression and time series forecasting models.

Requisites

Simple Requisites

> **Prerequisites:** Admission to Doctoral Program; HRED7180 Data Manip., Analyt. & Vis.

HRED7210 - Stu. Pers. Serv. in Higher Ed.

General

College/School
Education

Course Title
Stu. Pers. Serv. in Higher Ed.

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7210

Credit Hours

Credit Hours Min
3

Course Description
Strategic analysis of the various services within student development such as admissions; career development; student success; student affairs; residential life, student activities; Greek life, scholarships; and how leaders can best utilize and collaborate to ensure institutional goals and/or student success outcomes are met.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7220 - Col Stu:Culture/Char/Coll Life

General

College/School
Education

Course Title
Col Stu:Culture/Char/Coll Life

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7220

Credit Hours

Credit Hours Min
3

Course Description
Examine the dynamics of traditional and non-traditional college students; emphasis will be placed on identification of student culture and characteristics across higher education institutions.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7230 - Research-based Stu. Success

General

College/School
Education

Course Title
Research-based Stu. Success

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7230

Credit Hours

Credit Hours Min
3

Course Description
Evaluate postsecondary research that supports student success, including the use of technology and tools to support learning environments, financial and academic barriers, various degree pathways, evidence-based teaching practices and engagement, advisement and support services, career planning, and educational achievement based on socioeconomic, ethnic, racial, cultural, and age variants.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7240 - Prof. Ldrship/Student Affairs

General

College/School
Education

Course Title
Prof. Ldrship/Student Affairs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7240

Credit Hours

Credit Hours Min
3

Course Description
Explore and engage in reflective practice and critical reflection relative to leadership in student affairs. The foci will be on leading and managing various units in student affairs, including strategies for effective communication, personnel and conflict management, budgetary decision making, research-based best practices, and leadership styles.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7250 - PPEA for Student Affairs Prsn

General

College/School
Education

Course Title
PPEA for Student Affairs Prsn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7250

Credit Hours

Credit Hours Min
3

Course Description
Planning and evaluation of various programs and initiatives related to student affairs in higher education to determine effectiveness and ability to meet designated goals and objectives. Research on the cycle of planning efforts, the evaluation setting, design, analysis, and outcomes. Study of planning, implementation, and improvements to assessments relevant to student affairs personnel.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

HRED7800 - Practicum in Higher Education

General

College/School
Education

Course Title
Practicum in Higher Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HRED

Course Number
7800

Credit Hours

Credit Hours Min
3

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
Field experience in a higher education professional setting. Maximum of nine credit hours.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Doctoral Program.

IED5040 - Advis Committee in IED

General

College/School
Education

Course Title
Advis Committee in IED

Academic Level (Course Level)
Undergraduate

Course Subject Code
IED

Course Number
5040

Credit Hours

Credit Hours Min
3

IED5050 - Acad Voc Interdependence

General

College/School
Education

Course Title
Acad Voc Interdependence

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
IED

Course Number
5050

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

IED5060 - Safety in IED

General

College/School
Education

Course Title
Safety in IED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
IED

Course Number
5060

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

IED5070 - History & Phil Of IED

General

College/School
Education

Course Title
History & Phil Of IED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
IED

Course Number
5070

Credit Hours

Credit Hours Min
2

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

IED6010 - The State Plan For IED

General

College/School
Education

Course Title
The State Plan For IED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
IED

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

IED6020 - Professional Dev In IED

General

College/School
Education

Course Title
Professional Dev In IED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
IED

Course Number
6020

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL5280 - Legal Aspects

General

College/School
Education

Course Title
Legal Aspects

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
5280

Credit Hours

Credit Hours Min
1

Course Description

Special topics concerning school law and legal issues in education presented in workshop and seminar formats. Students may repeat the course for credit. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

INSL6210 - School Fin/Facil & Aux Serv

General

College/School
Education

Course Title
School Fin/Facil & Aux Serv

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6210

Credit Hours

Credit Hours Min
3

Course Description

Financial issues and budgeting related to school operations, including facility development, transportation, and other auxiliary services.

Requisites

Simple Requisites

Prerequisites: None

INSL6250 - School & Comm Partnerships

General

College/School
Education

Course Title
School & Comm Partnerships

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6250

Credit Hours

Credit Hours Min
3

Course Description

Techniques and procedures for interpreting school programs and building relationships between the school and community, and the improvement of the instructional program through community resources and involvement.

Requisites

Simple Requisites

Prerequisites: None

INSL6280 - Public School Law

General

College/School
Education

Course Title
Public School Law

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6280

Credit Hours

Credit Hours Min
3

Course Description

A study of court cases, legal principles, school policies, law, and educational regulations applicable to school and classroom situations.

Requisites

Simple Requisites

Prerequisites: None

INSL6400 - Effective Teaching & Supervsn

General

College/School
Education

Course Title
Effective Teaching & Supervsn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6400

Credit Hours

Credit Hours Min
3

Course Description

Principles and practices of effective teaching and supervisory techniques in the school environment enhancing student learning, growth, and development.

Requisites

Simple Requisites

Prerequisites: None

INSL6420 - Prof Dev/Instruc Ldrship

General

College/School
Education

Course Title
Prof Dev/Instruc Ldrship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6420

Credit Hours

Credit Hours Min
3

Course Description
The development of an individualized professional development plan designed to enhance skills as a school leader through an independent, supervised study.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL6510 - School Leadership & Law

General

College/School
Education

Course Title
School Leadership & Law

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6510

Credit Hours

Credit Hours Min
6

Course Description
A study of content, topics, and competencies required for instructional leaders to engender student achievement and school success. Also, included are studies of court cases, legal principles, school policies, law, and educational regulations applicable to school classroom situations.

INSL6520 - Schl-Based Mgmt & Comm Rlt

General

College/School
Education

Course Title
Schl-Based Mgmt & Comm Rlt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6520

Credit Hours

Credit Hours Min
6

Course Description
Financial issues and budgeting related to school operations, including facility development, transportation, and other auxiliary services. Techniques and procedures for interpreting the public schools to the community. Principles, practices, and functions of supervision in public schools. Field experience component.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL6530 - Data Drvn Curic:Dev,Asmt,Eval

General

College/School
Education

Course Title
Data Drvn Curic:Dev,Asmt,Eval

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6530

Credit Hours

Credit Hours Min
6

Course Description
Using current trends in curriculum development and advanced educational methods for K-12 education, this course is designed to assist Instructional Leadership candidates in the areas of defining objectives, planning for improvement, organization of instructional materials, curriculum evaluation, and a strong emphasis on current research and best practices.

INSL6540 - INSL Sem:Effctv Tchng/Sprvisn

General

College/School
Education

Course Title
INSL Sem:Effctv Tchng/Sprvisn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6540

Credit Hours

Credit Hours Min
6

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL6550 - Int & Culmnting Exp in INSL

General

College/School
Education

Course Title
Int & Culmnting Exp in INSL

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6550

Credit Hours

Credit Hours Min
6

Course Description
Course description not available.

Requisites

Simple Requisites

> Prerequisite: INSL6540 INSL Sem:Effctv Tchng/Sprvisn

INSL6560 - Technology for Administrators

General

College/School
Education

Course Title
Technology for Administrators

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6560

Credit Hours

Credit Hours Min
3

Course Description
Course involves a survey of emerging and existing technologies related to school administration (operation), instruction, and planning. Emphasis is placed on effective knowledge, access, and use of available technology with ability to accurately retrieve, analyze, and disseminate school-related area.

INSL6800 - School-Based Internship

General

College/School
Education

Course Title
School-Based Internship

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6800

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours
Operator
TO

Course Description
School-based experiences to practice and reinforce knowledge and skills in instructional leadership.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL6900 - Problems in Instruc Ldrship

General

College/School
Education

Course Title
Problems in Instruc Ldrship

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
Research study of significant problems and issues in instructional leadership related areas.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL6920 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6920

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours
Operator
TO

Course Description
An in-depth study of selected topics and case studies.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL6980 - /Research Report

General

College/School
Education

Course Title
/Research Report

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6980

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL6990 - Research and Thesis

General

College/School
Education

Course Title
Research and Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
6990

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL7010 - Instructional Leadership

General

College/School
Education

Course Title
Instructional Leadership

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7010

Credit Hours

Credit Hours Min
3

Course Description
A study of content, topics, and competencies required for instructional leaders to engender student achievement and school success.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL7020 - Sch Personnel/Org Improvement

General

College/School
Education

Course Title
Sch Personnel/Org Improvement

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7020

Credit Hours

Credit Hours Min
3

Course Description
Developing positive relationships, promoting student success, and an examination of organizational behavior, structures, and professional skills impacting on schools.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL7250 - Public Relations For Schools

General

College/School
Education

Course Title
Public Relations For Schools

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Tennessee Technological University

Course Subject Code
INSL

Course Number
7250

Credit Hours

Credit Hours Min
3

Course Description
Practical, research-based information focused on technology, reform movements, and communication techniques designed to prepare school personnel for positive public relations programs and support for schools.

Requisites
Simple Requisites

Prerequisites: None

INSL7280 - Legal & Ethical Issues in Sch

General
College/School
Education

Course Title
Legal & Ethical Issues in Sch

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7280

Credit Hours
Credit Hours Min
3

Course Description
Legal and ethical issues impacting on instructional leadership, classroom activities, and other school practices.

Requisites
Simple Requisites

Prerequisites: None

INSL7400 - School Ldrship & Supervision

General
College/School
Education

Course Title
School Ldrship & Supervision

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7400

Credit Hours
Credit Hours Min
3

Course Description
Emphasis on teaching and leadership roles in the development of effective schools and student learning.

Requisites
Simple Requisites

Prerequisites: None

INSL7430 - Seminar in Instruc Ldrship

General
College/School
Education

Course Title
Seminar in Instruc Ldrship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7430

Credit Hours
Credit Hours Min
3

Course Description
A study and examination of relevant theories, problems, case studies, and issues in instructional leadership and classroom practices.

Requisites
Simple Requisites

Prerequisites: None

INSL7440 - Sch Finance & Grantsmanship

General
College/School
Education

Course Title
Sch Finance & Grantsmanship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7440

Credit Hours
Credit Hours Min
3

Course Description
A study of revenue sources, budgeting techniques, financial management, grant development, and practices relevant to school finance.

Requisites
Simple Requisites

Prerequisites: None

INSL7480 - Principalship and Leadership

General

College/School
Education

Course Title
Principalship and Leadership

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7480

Credit Hours

Credit Hours Min
3

Course Description
Concepts of school leadership, school operations, learning environment, and building level management.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL7510 - Lgl/Ethicl/Dvrsty Issues-INSL

General

College/School
Education

Course Title
Lgl/Ethicl/Dvrsty Issues-INSL

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7510

Credit Hours

Credit Hours Min
6

Course Description
A study of content, topics, and competencies required for instructional leaders to engender student achievement and school success. Also, included are legal and ethical issues impacting on instructional leadership, classroom activities, and other school practices.

INSL7520 - HR Mgmt & Public Relations

General

College/School
Education

Course Title
HR Mgmt & Public Relations

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7520

Credit Hours

Credit Hours Min
6

Course Description
A study of revenue sources, budgeting techniques, financial management, grant development, and practices relevant to school finance. Emphasis on teaching and roles in the development of effective schools and student learning. Practical, research-based information focused on technology, reform movements, and communication techniques designed to prepare school personnel for positive public relations programs and support for schools. Field experience component.

INSL7530 - Assmnt/Eval: Improve. In Tchng

General

College/School
Education

Course Title
Assmnt/Eval: Improve. In Tchng

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7530

Credit Hours

Credit Hours Min
6

Course Description
Current trends in curriculum development; defining objectives; planning for improvement; organization of instructional materials; curriculum evaluation. Advanced study of innovations, recent trends, research findings, and evaluation relating to the improvement of teaching.

INSL7540 - INSL Sem:Schl-Bsd Ldrshp/Supv

General

College/School
Education

Course Title
INSL Sem:Schl-Bsd Ldrshp/Supv

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7540

Credit Hours

Credit Hours Min
6

Course Description
A study and examination of relevant theories, problems, case studies, and issues in instructional leadership and classroom practices. Concepts of school leadership, school operations, learning environment, and building level management. Emphasis on Teaching and Roles in the development of effective schools and student learning.

INSL7550 - INSL Apprntcshp & Prtflio Dev

General

College/School
Education

Course Title
INSL Apprntcshp & Prtflio Dev

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7550

Credit Hours

Credit Hours Min
6

Course Description
Prerequisite: INSL 7540. Supervised practicums, laboratory, and case study experiences, observations, simulations, school site internships, and professional portfolio development.

INSL7800 - Lab & Field Exp In Education

General

College/School
Education

Course Title
Lab & Field Exp In Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7800

Credit Hours

Credit Hours Min
3

Course Description
Supervised practicums, laboratory, and case study experiences, observations, simulations, and school site internships.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL7900 - Read & Resrch/Instruc Ldrship

General

College/School
Education

Course Title
Read & Resrch/Instruc Ldrship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7900

Credit Hours

Credit Hours Min
3

Course Description
Reading and advanced research study in major concentration.

Requisites

Simple Requisites

> **Prerequisites:** None

INSL7910 - Adv Research Project in INSL

General

College/School
Education

Course Title
Adv Research Project in INSL

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
INSL

Course Number
7910

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Supervised research study or approved project in major area of concentration.

Requisites

Simple Requisites

> **Prerequisites:** None

LSCI5020 - Storytelling/Traditional Lit

General

College/School
Education

Course Title
Storytelling/Traditional Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
5020

Credit Hours

Credit Hours Min
3

Course Description
Storytelling techniques and literature presentation through storytelling. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

LSCI5400 - Audio-Visual Aids-Tchg

General

College/School
Education

Course Title
Audio-Visual Aids-Tchg

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
5400

Credit Hours

Credit Hours Min
2

Course Description
Survey of educational media available to educators with emphasis given to effective utilization. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: PSY2210 Educational Psychology

LSCI5500 - Children & Literature

General

College/School
Education

Course Title
Children & Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
5500

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Full admission to the Teacher Education Program. Survey of elementary school library materials for children, including classic and modern titles. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

LSCI5530 - Books/Rel Mtrl for Inf & Tod

General

College/School
Education

Course Title
Books/Rel Mtrl for Inf & Tod

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
5530

Credit Hours

Credit Hours Min
1

Course Description
Survey of developmentally appropriate books and materials for infants and toddlers. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisites: None

LSCI5540 - Multiethn Lit/Inf,Tod,Presch

General

College/School
Education

Course Title
Multiethn Lit/Inf,Tod,Presch

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
5540

Credit Hours

Credit Hours Min
1

Course Description
Introduction to preschool trade books and related materials reflecting an understanding of multiethnicity. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisites: None

LSCI5550 - Multiethnic Lit for Children

General

College/School
Education

Course Title
Multiethnic Lit for Children

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
5550

Credit Hours

Credit Hours Min
1

Course Description
Introduction to children¿s trade books and related materials reflecting an understanding of multiethnicity. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

LSCI5560 - Multiethn Lit/Adolesc & Adults

General
College/School
Education

Course Title
Multiethn Lit/Adolesc & Adults

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
5560

Credit Hours
Credit Hours Min
1

Course Description
Introduction to adolescent and adult trade books and related materials reflecting an understanding of multiethnicity. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

LSCI5570 - Young Adult Literature

General
College/School
Education

Course Title
Young Adult Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
5570

Credit Hours
Credit Hours Min
3

Course Description
A survey of young adult literature appropriate for middle and high school students with a focus on contemporary and diverse works. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

LSCI5800 - Library Practicum

General
College/School
Education

Course Title
Library Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
5800

Credit Hours
Credit Hours Min
2

Course Description
Prerequisite: 8 semester hours of LSCI work including LSCI 4010. Presents library procedure under actual working conditions. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

LSCI6000 - Ref & Info Sources & Services

General
College/School
Education

Course Title
Ref & Info Sources & Services

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
6000

Credit Hours
Credit Hours Min
3

Course Description
Course description not available.

Requisites
Simple Requisites

> **Prerequisites:** None

LSCI6010 - Class & Catalog Of Med & Mtrl

General
College/School
Education

Course Title
Class & Catalog Of Med & Mtrl

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Procedures for selecting, organizing, classifying, and cataloging school library materials. Collection development of print, digital, and other resources for the school library.

Requisites

Simple Requisites

Prerequisites: None

LSCI6030 - Admin-Sch Libr Media Cntr

General

College/School
Education

Course Title
Admin-Sch Libr Media Cntr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
6030

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

LSCI6550 - Contemporary Children's Lit

General

College/School
Education

Course Title
Contemporary Children's Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
6550

Credit Hours

Credit Hours Min
3

Course Description
Through the lens of the psychology of reading, a survey of contemporary and diverse children's literature and the authors and illustrators who create the books.

Requisites

Simple Requisites

Prerequisites: None

LSCI6600 - Lit Across the Curriculum

General

College/School
Education

Course Title
Lit Across the Curriculum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
6600

Credit Hours

Credit Hours Min
3

Course Description
Uses of literature in English/language arts, science, social studies, math, and other curricular areas. Equal emphasis on enhancement of content areas and integration across content areas.

Requisites

Simple Requisites

Prerequisites: None

LSCI6800 - Library Practicum

General

College/School
Education

Course Title
Library Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
6800

Credit Hours

Credit Hours Min
3

Course Description
Supervised field experience for students in library science in two (2) or more school libraries at various grade levels. 100 hours of experience required. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisites: None

LSCI7000 - Info Literacy Tools/Services

General

College/School
Education

Course Title
Info Literacy Tools/Services

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
7000

Credit Hours

Credit Hours Min
3

Course Description
A thorough analysis of the AASL National School Library Standards and how the school librarian uses them to support the learning community and its stakeholders.

Requisites

Simple Requisites

Prerequisites: None

LSCI7030 - Admin of the School Library

General

College/School
Education

Course Title
Admin of the School Library

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
7030

Credit Hours

Credit Hours Min
3

Course Description
An examination of the roles the school librarian in leadership, collaboration, advocacy, professional networking, and professional learning through the management of the school library.

Requisites

Simple Requisites

Prerequisites: None

LSCI7040 - Tech Engmnt/Support-Libraries

General

College/School
Education

Course Title
Tech Engmnt/Support-Libraries

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
7040

Credit Hours

Credit Hours Min
3

Course Description
Active engagement with emerging technologies and makerspaces appropriate for modern school libraries and their support of learning communities.

Requisites

Simple Requisites

Prerequisites: None

LSCI7570 - Contemporary Young Adult Lit

General

College/School
Education

Course Title
Contemporary Young Adult Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
LSCI

Course Number
7570

Credit Hours

Credit Hours Min
3

Course Description
Engagement and research into contemporary young adult literature, issues of diversity and inclusion, and incorporating YAL into the literacy goals of the learning community.

Requisites

Simple Requisites

Prerequisites: None

LSCI7800 - Library Practicum

General

College/School
Education

Course Title
Library Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LSCI

Course Number
7800

Credit Hours

Credit Hours Min
3

Course Description
Supervised field experience for students in library science in two (2) or more school libraries at various grade levels. 100 hours of experience required. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisites:** None

READ5020 - Storytelling/Traditional Lit

General

College/School
Education

Course Title
Storytelling/Traditional Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
5020

Credit Hours

Credit Hours Min
3

Course Description
Storytelling techniques and literature presentation through storytelling. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

READ5310 - Read-Write Strategy K-8

General

College/School
Education

Course Title
Read-Write Strategy K-8

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
5310

Credit Hours

Credit Hours Min
2

Course Description
Prerequisite/Corequisite: READ 3300 or 6340. Holistic views of reading and writing, naturalistic assessment, and appropriate intervention strategies. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

> No Requirements

READ5411 - Read/Write Connect:Secondary

General

College/School
Education

Course Title
Read/Write Connect:Secondary

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
5411

Credit Hours

Credit Hours Min
3

Course Description
Explores the connection between the reading and writing process as a means of mutual improvement. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Full admission to Teacher Education.
>
> **Corequisite:** READ 3350.

READ5540 - Multieth Lit/Inf,Tod,Presch

General

College/School
Education

Course Title
Multieth Lit/Inf,Tod,Presch

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
5540

Credit Hours

Credit Hours Min
1

Course Description
Introduction to preschool trade books and related materials reflecting an understanding of multiethnicity. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

READ5550 - Multiethnic Lit for Child

General

College/School
Education

Course Title
Multiethnic Lit for Child

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
5550

Credit Hours

Credit Hours Min
1

Course Description
Introduction to children¿s trade books and related materials reflecting an understanding of multiethnicity. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

READ5560 - Multieth Lit-Adolesc/Adults

General

College/School
Education

Course Title
Multieth Lit-Adolesc/Adults

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
5560

Credit Hours

Credit Hours Min
1

Course Description
Introduction to adolescent and adult trade books and related materials reflecting an understanding of multiethnicity. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

READ5570 - Young Adult Literature

General

College/School
Education

Course Title
Young Adult Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
5570

Credit Hours

Credit Hours Min
3

Course Description
A survey of young adult literature appropriate for middle and high school students with a focus on contemporary and diverse works.. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

READ6100 - Uses of Tech in Literacy Edu

General

College/School
Education

Course Title
Uses of Tech in Literacy Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
Analysis of technological applications in literacy instruction; emphasis on computer uses in reading and language arts instruction.

Requisites

Simple Requisites

> **Prerequisite:** None.

READ6200 - Foundations of Literacy

General

College/School
Education

Course Title
Foundations of Literacy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6200

Credit Hours

Credit Hours Min
6

Course Description

This course is an integration of concepts fundamental to the development, instruction, and assessment of literacy in the elementary grades. It integrates theory, children's literature, language development and communication skills, language arts, and the assessment and selection of appropriate instructional strategies based upon student need. Practicum embedded into course. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisite**: Full admission to the Teacher Education Program.

READ6310 - Asmnt/Intervention-Literacy

General

College/School
Education

Course Title
Asmnt/Intervention-Literacy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6310

Credit Hours

Credit Hours Min
3

Course Description

Nature and causes of literacy difficulties. Diagnostic and remedial procedures. Supervised practice in testing and remedial teaching

Requisites

Simple Requisites

> **Prerequisites**: READ6340 Literacy in Elementary School and READ6350 Literacy in Secondary School

READ6340 - Literacy in Elementary School

General

College/School
Education

Course Title
Literacy in Elementary School

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6340

Credit Hours

Credit Hours Min
3

Course Description

Developmental reading skills, instructional procedures, materials, and evaluation.

Requisites

Simple Requisites

> **Prerequisite**: None

READ6350 - Literacy in Secondary School

General

College/School
Education

Course Title
Literacy in Secondary School

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6350

Credit Hours

Credit Hours Min
3

Course Description

Advanced reading skills, content area reading skills, organization and supervision of secondary reading programs.

Requisites

Simple Requisites

> **Prerequisite**: None.

READ6360 - Literacy/Diverse Populations

General

College/School
Education

Course Title
Literacy/Diverse Populations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6360

Credit Hours

Credit Hours Min
3

Course Description
This course will cover the five main components of reading and is an integration of concepts fundamental to the development of literacy with an emphasis on diverse learners including those with dyslexia. It includes a study of language development

and communication skills, language arts, content area reading, and the assessment and selection of appropriate instructional strategies including the Orton Gillingham methodology. Practicum embedded into course. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisite: Full admission to the Teacher Education Program.

READ6370 - Whole Lang:Australian Perspect

General

College/School
Education

Course Title
Whole Lang:Australian Perspect

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6370

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisite: None

READ6410 - The Read-Write Conn:Sec

General

College/School
Education

Course Title
The Read-Write Conn:Sec

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6410

Credit Hours

Credit Hours Min
2

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisite: None

READ6550 - Contemporary Children's Lit

General

College/School
Education

Course Title
Contemporary Children's Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6550

Credit Hours

Credit Hours Min
3

Course Description
Through the lens of the psychology of reading, a survey of contemporary and diverse children's literature and the authors and illustrators who create the books.

Requisites

Simple Requisites

Prerequisite: None.

READ6600 - Lit Across the Curriculum

General

College/School
Education

Course Title
Lit Across the Curriculum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6600

Credit Hours

Credit Hours Min
3

Course Description
Uses of literature in English/language arts, science, social studies, math, and other curricular areas. Equal emphasis on enhancement of content areas and integration across content areas.

Requisites

Simple Requisites

Prerequisite: None.

READ6700 - Diversity/Equity in Literacy

General

College/School
Education

Course Title
Diversity/Equity in Literacy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6700

Credit Hours

Credit Hours Min
3

Course Description
Framed within a culturally responsive instruction model, the focus of this course is on diversity and equity among learners. It will address instructional needs of diverse linguistic speakers of English as well as those of English Language Learners. Additionally, it will examine pedagogy and methodology, including the use of children's and young adult literature, for students with wide-ranging learning styles and needs and from various socio-economic backgrounds.

Requisites

Simple Requisites

> **Prerequisite**: None.

READ6800 - Practicum Exp in Literacy

General

College/School
Education

Course Title
Practicum Exp in Literacy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6800

Credit Hours

Credit Hours Min
3

Course Description
Practical field experience in student's major area of emphasis. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisite**: Full admission to the Teacher Education Program; READ6340 Literacy in Elementary School and READ6350 Literacy in Secondary School.

READ6900 - Problems In Reading

General

College/School
Education

Course Title
Problems In Reading

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
Independent study of pertinent issues in reading.

Requisites

Simple Requisites

> **Prerequisite**: Admission to candidacy.

READ6920 - Topics In Reading

General

College/School
Education

Course Title
Topics In Reading

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6920

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Independent study of reading-related issues

Requisites

Simple Requisites

> **Prerequisite**: None.

READ6990 - Thesis

General

College/School
Education

Course Title
Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
6990

Credit Hours

Credit Hours Min
6

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: None

READ7000 - Seminar in Read/Lang Art

General

College/School
Education

Course Title
Seminar in Read/Lang Art

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
7000

Credit Hours

Credit Hours Min
3

Course Description
An examination and analysis of research, trends, and topics related to literacy education.

Requisites

Simple Requisites

> **Prerequisite**: None.

READ7010 - Literacy Across the Curr

General

College/School
Education

Course Title
Literacy Across the Curr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
7010

Credit Hours

Credit Hours Min
3

Course Description
Explores applications of literacy skills and strategies in all curricular areas.

Requisites

Simple Requisites

> **Prerequisite**: None.

READ7020 - Family Literacy

General

College/School
Education

Course Title
Family Literacy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
7020

Credit Hours

Credit Hours Min
3

Course Description
Issues related to enhancing literacy of all family members.

Requisites

Simple Requisites

> **Prerequisite**: None.

READ7370 - Ling:Theory-App for Educators

General

College/School
Education

Course Title
Ling:Theory-App for Educators

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
READ

Course Number
7370

Credit Hours

Credit Hours Min
3

Course Description
Explores language structures (semantics, syntax, morphology, and phonology) and first and second language acquisition and development.

Requisites

Simple Requisites

> **Prerequisite**: None.

READ7500 - Leadership in Literacy Edu

General

College/School
Education

Course Title
Leadership in Literacy Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
READ

Course Number
7500

Credit Hours

Credit Hours Min
3

Course Description
This course explores the roles of the literacy specialist and coach, and, in particular, their positions as school leaders in the field of literacy. Leadership skills related to literacy program design, evaluation, and supervision are emphasized as well as a focus on advocacy, reflection, research, policy, and practice. Practicum embedded into course. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisites**: Full admission to the Teacher Education Program; READ6310 Asmnt/Intervention-Literacy, READ6340 Literacy in Elementary School, and READ6350 Literacy in Secondary School

READ7800 - Practicum Experiences/Literacy

General

College/School
Education

Course Title
Practicum Experiences/Literacy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
READ

Course Number
7800

Credit Hours

Credit Hours Min
3

Course Description
Practical field experience in student's major area of emphasis. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisites**: Full admission to the Teacher Education Program; READ6340 Literacy in Elementary School and READ6350 Literacy in Secondary School.

SEED5120 - Mtrls/Meth-Tch English

General

College/School
Education

Course Title
Mtrls/Meth-Tch English

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
5120

Credit Hours

Credit Hours Min
3

Course Description
Principles, objectives, techniques, and evaluation in secondary school teaching of English. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

> No Requirements

SEED5121 - Mtrls/Meth-Tch Career Tech Ed

General

College/School
Education

Course Title
Mtrls/Meth-Tch Career Tech Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
5121

Credit Hours

Credit Hours Min
3

Course Description
Principles, objectives, techniques, evaluation in secondary school teaching of occupational education. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisite**: None

SEED5122 - Mtrls/Meth-Tch Math

General

College/School
Education

Course Title
Mtrls/Meth-Tch Math

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
5122

Credit Hours

Credit Hours Min
3

Course Description
Principles, objectives, techniques, and evaluation in secondary school teaching of mathematics. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisite: Full admission to the Teacher Education Program.

Corequisite: FOED 3820.

SEED5123 - Mtrls/Meth-Tch Sciences

General

College/School
Education

Course Title
Mtrls/Meth-Tch Sciences

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
5123

Credit Hours

Credit Hours Min
3

Course Description
Principles, objectives, techniques, and evaluation in secondary school teaching of the sciences. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisite: Full admission to the Teacher Education Program.

Corequisite: FOED 3820

SEED5124 - Mtrls/Meth-Tch Soc Studies

General

College/School
Education

Course Title
Mtrls/Meth-Tch Soc Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
5124

Credit Hours

Credit Hours Min
3

Course Description
Principles, objectives, techniques, and evaluation in secondary school teaching of social studies. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisite: Full admission to the Teacher Education Program.

Corequisite: FOED 3820.

SEED5125 - Mtrls/Meth-Tch Foreign Lang

General

College/School
Education

Course Title
Mtrls/Meth-Tch Foreign Lang

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
5125

Credit Hours

Credit Hours Min
3

Course Description
Principles, objectives, techniques, and evaluation in secondary school teaching of foreign languages. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisite: Full admission to the Teacher Education Program.

Corequisite: FOED 3800 or CUED 6800.

SEED5322 - Teaching Algebra in Middle/HS

General

College/School
Education

Course Title
Teaching Algebra in Middle/HS

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
5322

Credit Hours

Credit Hours Min
3

Course Description
Topics in Algebra, philosophy, new trends, and methods of teaching algebra in Grades 5-12. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: None

SEED5422 - Teach Sec Math Using Techn

General

College/School
Education

Course Title
Teach Sec Math Using Techn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
5422

Credit Hours

Credit Hours Min
3

Course Description
Exploring technologies specific to mathematics teaching and appropriate applications of these technologies in the classroom. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: None

SEED6120 - Sem-Sec English Education

General

College/School
Education

Course Title
Sem-Sec English Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
6120

Credit Hours

Credit Hours Min
3

Course Description
A study of English Education with emphases on current research, traditions, and the teaching of Secondary English.

Requisites

Simple Requisites

Prerequisite: None.

SEED6121 - Sem-Sec Industrial Edu

General

College/School
Education

Course Title
Sem-Sec Industrial Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
6121

Credit Hours

Credit Hours Min
3

Course Description
A study of Industrial Education past and present with emphasis on implications on the future for curriculum development, evaluation, and methods of teaching.

Requisites

Simple Requisites

Prerequisite: None.

SEED6122 - Sem-Sec Social Study Ed

General

College/School
Education

Course Title
Sem-Sec Social Study Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
6122

Credit Hours

Credit Hours Min
3

Course Description
Analysis of the history and assumptions of major curricular traditions, related research, and instructional strategies will be stressed.

Requisites

Simple Requisites

Prerequisite: None.

SEED6123 - Seminar/Sec/Math & Sci

General

College/School
Education

Course Title
Seminar/Sec/Math & Sci

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
6123

Credit Hours

Credit Hours Min
3

Course Description
A study of science and math education with emphasis on trends and present practices.

Requisites

Simple Requisites

> **Prerequisite**: None.

SEED6210 - Secondary School Prog

General

College/School
Education

Course Title
Secondary School Prog

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SEED

Course Number
6210

Credit Hours

Credit Hours Min
3

Course Description
A study of curricular and instructional issues in various secondary school content areas as they relate to high school programs.

Requisites

Simple Requisites

> **Prerequisite**: None.

SPED5000 - Intro Communication Disorders

General

College/School
Education

Course Title
Intro Communication Disorders

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5000

Credit Hours

Credit Hours Min
3

Course Description
Principles of and therapeutic approaches to speech, language, and hearing disorders. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

SPED5010 - Survey-Early Chldhd SPED

General

College/School
Education

Course Title
Survey-Early Chldhd SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5010

Credit Hours

Credit Hours Min
3

Course Description
Overview including history, current status, trends, and best practices specific to assessment, intervention, and family empowerment.

SPED5040 - Intro-Edu/Gifted & Talented

General

College/School
Education

Course Title
Intro-Edu/Gifted & Talented

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5040

Credit Hours

Credit Hours Min
3

Course Description
Topics to include: characteristics, incidence, identification, diagnosis and educational needs of gifted and talented children/youth. Graduate work would include but not be limited to a case study of gifted persons. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

SPED5050 - Sign Language I

General

College/School
Education

Course Title
Sign Language I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5050

Credit Hours

Credit Hours Min
3

Course Description
Introduction to and development of a basic vocabulary in Signed English and concepts in the use of alternated methods of communication. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

SPED5090 - Sign Language II

General

College/School
Education

Course Title
Sign Language II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5090

Credit Hours

Credit Hours Min
3

Course Description
Continuation of vocabulary development in Signed English and appreciation of practical situations in various professional fields. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SPED5050 Sign Language I

SPED5130 - Meth/Tch Per W M/M Disa

General

College/School
Education

Course Title
Meth/Tch Per W M/M Disa

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5130

Credit Hours

Credit Hours Min
3

Course Description
Designed to empower the preservice special educator with skills necessary to implement an integrated curriculum in a variety of placements. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SPED4320 Assess Procedures in SPED or SPED5320 Assess-Proced In SPED or SPED6320 Assess Persons w/ Disab and admission to the Teacher Education Program.

SPED5140 - Curr Dev-Edu/G-T Child/Yth

General

College/School
Education

Course Title
Curr Dev-Edu/G-T Child/Yth

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5140

Credit Hours

Credit Hours Min
3

Course Description
Topics to include: school programs, curricula, materials, and methods for the education of gifted and talented. Graduate work would include but not be limited to comparing and contrasting three models in gifted education. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

SPED5150 - Spch & Lang Acquisition-Dev

General

College/School
Education

Course Title
Spch & Lang Acquisition-Dev

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
SPED	5150

Credit Hours

Credit Hours Min

3

Course Description

Normal speech/language development, anatomy of speech structures, distinctive features and implications of process and analysis systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

SPED5160 - Spch Pathology in School

General

College/School

Education

Course Title
Spch Pathology in School

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5160

Credit Hours

Credit Hours Min

3

Course Description

Prevalence and types of speech/language disorders in school-aged children. Programs for identification, conservation and remediation. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

SPED5200 - Tch Stu w/ Autism Spect Disord

General

College/School

Education

Course Title
Tch Stu w/ Autism Spect Disord

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5200

Credit Hours

Credit Hours Min

3

Course Description

Within the context of persons with ASD, this course is designed to provide the student with a model of the teaching process progressing from identification, to instructional design, to the use of research-validated methods for instructional delivery and the provision of needed educational, social, academic, and behavioral supports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. A minimum grade of B is required to meet requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisite**: Full admission to the Teacher Education Program.

SPED5320 - Assess-Proced In SPED

General

College/School

Education

Course Title
Assess-Proced In SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5320

Credit Hours

Credit Hours Min

3

SPED5340 - Systematic Instr-Disability

General

College/School

Education

Course Title
Systematic Instr-Disability

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5340

Credit Hours

Credit Hours Min

3

Course Description

Examination of assessment procedures, effective and efficient instructional approaches for achievement of learning mastery and proficiency.

Requisites

Simple Requisites

> **Prerequisites**: SPED6010 Surv-Disab Char,Proc,Meth/SPED and SPED6320 Assess Persons w/ Disab and SPED4030 App Behav Analy for Teachers and full admission to the second level

SPED5850 - Workshop in Education

General

College/School

Education

Course Title
Workshop in Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
5850

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Laboratory approach providing opportunities for experienced education personnel to study in-depth special education problems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

SPED6000 - Behav Interven & Supports

General

College/School
Education

Course Title
Behav Interven & Supports

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6000

Credit Hours

Credit Hours Min
3

Course Description
The design, implementation, and evaluation of behavioral interventions and individualized behavioral supports for children and youth with disabilities who display challenging behavior.

Requisites

Simple Requisites

> **Prerequisite**: None.

SPED6010 - Surv-Disab Char,Proc,Meth/SPED

General

College/School
Education

Course Title
Surv-Disab Char,Proc,Meth/SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
A survey of the characteristics and educational needs of persons with disabilities; educational methods and procedures.

Requisites

Simple Requisites

> **Prerequisite**: None.

SPED6020 - Intellectual Disability

General

College/School
Education

Course Title
Intellectual Disability

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6020

Credit Hours

Credit Hours Min
3

Course Description
An introduction to the diagnosis, characteristics, interventions, and best practices for working with individuals with intellectual disabilities.

Requisites

Simple Requisites

> **Prerequisite**: SPED6010 Surv-Disab Char,Proc,Meth/SPED

SPED6030 - Learning Disabilities

General

College/School
Education

Course Title
Learning Disabilities

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6030

Credit Hours

Credit Hours Min
3

Course Description
A detailed overview of historical and contemporary concepts and practices concerning children with specific learning disabilities.

Requisites

Simple Requisites

> **Prerequisite**: SPED6010 Surv-Disab Char,Proc,Meth/SPED

SPED6040 - Classrm Applications using ABA

General

College/School
Education

Course Title
Classrm Applications using ABA

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6040

Credit Hours

Credit Hours Min
3

Course Description
Classroom applications focusing on an analysis of theories, identification, diagnosis, treatment, and education of children and youth with emotional behavior disorders.

Requisites

Simple Requisites

> **Prerequisite**: SPED6010 Surv-Disab Char,Proc,Meth/SPED or consent of instructor.

SPED6050 - Intro/Applied Behavior Analysi

General

College/School
Education

Course Title
Intro/Applied Behavior Analysi

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6050

Credit Hours

Credit Hours Min
3

Course Description
An introduction to the application of applied behavior analysis including the theoretical origins and development of behavioral supports for individuals with learning and behavioral challenges.

Requisites

Simple Requisites

> **Prerequisite**: None.

SPED6060 - Ed-Orth & Motor Impaired

General

College/School
Education

Course Title
Ed-Orth & Motor Impaired

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6060

Credit Hours

Credit Hours Min
3

Course Description
Research and program intervention in learning abilities of individuals with orthopedic and neurologic limitations and other health-related programs.

Requisites

Simple Requisites

> **Prerequisite:** SPED6010 Surv-Disab Char,Proc,Meth/SPED.

SPED6070 - Indiv. Educational Planning

General

College/School
Education

Course Title
Indiv. Educational Planning

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6070

Credit Hours

Credit Hours Min
3

Course Description
Develop knowledge of core components of individualized education plans and formal lesson plans and the skills needed to thoughtfully create these plans. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisite:** Full admission to the Teacher Education Program.

SPED6120 - Erly Chldhd SPED Assessment

General

College/School
Education

Course Title
Erly Chldhd SPED Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6120

Credit Hours

Credit Hours Min
3

Course Description
Assessment, planning, and intervention procedures specific to child, environment, and family. Design and evaluation of intervention plans.

Requisites

Simple Requisites

> **Prerequisites**: None.

SPED6320 - Assess Persons w/ Disab

General

College/School
Education

Course Title
Assess Persons w/ Disab

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6320

Credit Hours

Credit Hours Min
3

Course Description
Provides the student with knowledge and skills in the administration and interpretation of educational assessment instruments used in the evaluation of persons with disabilities. A minimum grade of B is required to meet licensure requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisite**: SPED6010 Surv-Disab Char,Proc,Meth/SPED; Full admission to the Teacher Education Program.

SPED6490 - Read & Research

General

College/School
Education

Course Title
Read & Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6490

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
(SPED faculty sponsor required.) Supervised study and analysis of selected timely issues in professional special education research.

SPED6810 - Pract & Sem In SPED

General

College/School
Education

Course Title
Pract & Sem In SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6810

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
Supervised participation and seminar in special education programs for exceptional children.

Requisites

Simple Requisites

> **Prerequisite**: SPED6010 Surv-Disab Char,Proc,Meth/SPED

SPED6900 - Problems in SPED

General

College/School
Education

Course Title
Problems in SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
A critical study of problems of special education with special attention to research findings.

Requisites

Simple Requisites

> **Prerequisite**: None

SPED6920 - Topics in Special Education

General

College/School
Education

Course Title
Topics in Special Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6920

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Laboratory approach providing opportunities for experienced educational personnel to study in-depth special education problems of persons with disabilities.

Requisites

Simple Requisites

Prerequisite: None

SPED6990 - Research & Thesis

General

College/School
Education

Course Title
Research & Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
6990

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisite: None

SPED7110 - Family Collaboration in SPED

General

College/School
Education

Course Title
Family Collaboration in SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
7110

Credit Hours

Credit Hours Min
3

Course Description
Concepts, intervention strategies, and issues related to working with parents of exceptional children.

Requisites

Simple Requisites

Prerequisite: None

SPED7130 - Meth/Tchg Prs w Mild/Mod Dis

General

College/School
Education

Course Title
Meth/Tchg Prs w Mild/Mod Dis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
7130

Credit Hours

Credit Hours Min
3

Course Description
Designed to empower the candidate with skills necessary to implement an integrated curriculum in a variety of placements. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

Prerequisites: Full admission to the Teacher Education Program; SPED6030 Learning Disabilities and SPED6070 Indiv. Educational Planning

SPED7200 - Tchg Indiv/Autism Spec Disorde

General

College/School
Education

Course Title
Tchg Indiv/Autism Spec Disorde

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
7200

Credit Hours

Credit Hours Min

3

Course Description

Provides information about the characteristics of and strategies needed to work with individuals with a diagnosis of autism. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisite**: Full admission to the Teacher Education program.

SPED7300 - Seminar in SPED

General

College/School

Education

Course Title
Seminar in SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
7300

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Course Description

A critical study of current issues in Special Education (variable topics).

Requisites

Simple Requisites

> **Prerequisite**: None

SPED7340 - Sys Instr/Prs w Comp Disabl

General

College/School

Education

Course Title
Sys Instr/Prs w Comp Disabl

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
7340

Credit Hours

Credit Hours Min

3

Course Description

Assessment procedures, effective and efficient instructional approaches for achievement for individuals with moderate to severe disabilities. A minimum grade of B is required to meet degree requirements for licensure candidates.

Requisites

Simple Requisites

> **Prerequisites**: Full admission to the Teacher Education Program; SPED6020 Intellectual Disability and SPED6070 Indiv. Educational Planning

SPED7800 - Lab & Field Exper In Edu

General

College/School

Education

Course Title
Lab & Field Exper In Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
7800

Credit Hours

Credit Hours Min
3

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Supervised practicum, observation, simulation, internships, and externships in education, including direct instruction in and/or supervision of education programs serving exceptional children, youth, and adults.

Requisites

Simple Requisites

> **Prerequisite:** None

SPED7810 - Intern & Sem in SPED

General

College/School

Education

Course Title
Intern & Sem in SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
7810

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
Supervised participation in community-based special education programs for exceptional individuals.

Requisites

Simple Requisites

> **Prerequisite**: Advanced graduate standing or permission of instructor.

SPED7910 - Adv Research Project In SPED

General

College/School
Education

Course Title
Adv Research Project In SPED

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPED

Course Number
7910

Credit Hours

Credit Hours Min
3

Course Description
Individually designed to meet the needs of the graduate student, including research skills and study (faculty sponsor required).

Requisites

Simple Requisites

> **Prerequisite**: None

SVCL5150 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SVCL

Course Number
5150

Credit Hours

Credit Hours Min
0

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
This course will coordinate and supervise service learning opportunities for students. The specific service learning activity will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face service learning effort. Course objectives and

grading guidelines will be established by the faculty at the time each course is offered. Students in the 5000-level course will be required to complete additional coursework as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: None

SVCL5920 - Service Learning in Community

General

College/School
Education

Course Title
Service Learning in Community

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SVCL

Course Number
5920

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
This course provides students with the opportunity to use their professional skills to better their community through service learning. this course may be repeated for credit. Students in the 5000-level course will be required to complete additional work as stated in the syllabus.

SVCL6150 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
SVCL

Course Number
6150

Credit Hours

Credit Hours Min
0

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
This course will coordinate and supervise service learning opportunities for students. The specific service learning activity will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face service learning effort. Course objectives and grading guidelines will be established by the faculty at the time each course is offered. Students in the 7000-level course will be required to complete additional coursework as stated in the syllabus.

SVCL6920 - Service Learning in Community

General

College/School
Education

Course Title
Service Learning in Community

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
SVCL

Course Number
6920

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
This course provides students with the opportunity to use their professional skills to better their community through service learning. this course may be repeated for credit. Students in the 7000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** None

SVCL7150 - Topics

General

College/School
Education

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
SVCL

Course Number
7150

Credit Hours

Credit Hours Min
0

Credit Hours Max
9

Credit Hours Operator
TO

Course Description
This course will coordinate and supervise service learning opportunities for students. The specific service learning activity will be designated in the title at each offering. The number of hours of credit will be based on the magnitude of the topic and the clock hours of face-to-face service learning effort. Course objectives and grading guidelines will be established by the faculty at the time each course is offered. Students in the 7000-level course will be required to complete additional coursework as stated in the syllabus.

SVCL7920 - Service Learning in Community

General

College/School
Education

Course Title
Service Learning in Community

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
SVCL

Course Number
7920

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
This course provides students with the opportunity to use their professional skills to better their community through service learning. this course may be repeated for credit. Students in the 7000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** None

Decision Science/Management Department

The Tennessee Tech MBA is fully accredited by AACSB International–the highest attainable level of accreditation. The MBA degree may be obtained completely online or through a combined online/on-campus program of study.

The MBA program offers the option for 100% online completion, in as little as one year. The online learning environment is highly interactive and incorporates case discussions, teamwork, simulations, and other active-learning approaches. MBA courses make a strong connection between academic subjects and the practical issues facing managers in today's globally competitive, high tech, and analytically-focused business environment.

Courses

BMGT5120 - Compensation Administration

General

College/School
Business

Course Title
Compensation Administration

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BMGT

Course Number
5120

Credit Hours

Credit Hours Min

3

Course Description

Theory and practice of determining wages, salaries, and employee benefits. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BMGT3630 Human Resource Management.

BMGT5150 - Management & Organization

General

College/School

Business

Course Title

Management & Organization

Academic Level (Course Level)

Undergraduate

Course Subject Code

BMGT

Course Number

5150

Credit Hours

Credit Hours Min

3

Course Description

Fundamentals of management that permeate organizations, including studies of organizational environment, administrative structure, and organizational behavior.

BMGT5410 - Conflict Mgmt/Negotiation

General

College/School

Business

Course Title

Conflict Mgmt/Negotiation

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate

Course Subject Code

BMGT

Course Number

5410

Credit Hours

Credit Hours Min

3

Course Description

Development of interpersonal skills for managing conflict and negotiations in business. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** Junior standing.

BMGT5520 - Applied Management Skills

General

College/School

Business

Course Title

Applied Management Skills

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate

Course Subject Code

BMGT

Course Number

5520

Credit Hours

Credit Hours Min

3

Course Description

An examination of behavioral concepts required for effective leadership within business organizations.

Requisites

Simple Requisites

> **Prerequisite:** BMGT3510 Mgmt/Organizational Behavior and Junior standing.

BMGT5930 - Business Strategy

General

College/School

Business

Course Title

Business Strategy

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate

Course Subject Code

BMGT

Course Number

5930

Credit Hours

Credit Hours Min

3

Course Description

A capstone course stressing management problem analysis, problem solving, and decision making. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** BGMT3510, FIN 3210, MKT 3400, senior standing.
>
> **Corequisites:** DS3520

DS5050 - Quantitative Techniques-Bus

General

College/School

Business

Course Title
Quantitative Techniques-Bus

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
5050

Credit Hours

Credit Hours Min
3

Course Description
Classical and modern optimization techniques and concepts. Basic review and introduction to business application of probability, statistics, and management science methods.

Requisites

Simple Requisites

> **Prerequisites:** None

DS5125 - Comp Forensics/Investigations

General

College/School
Business

Course Title
Comp Forensics/Investigations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
DS

Course Number
5125

Credit Hours

Credit Hours Min
3

Course Description
Investigation, discovery, and analysis of digital computer evidence. Student work groups use computer hardware and forensic software to perform computer forensic investigations and solve sample cases. Students are introduced to and work with numerous computer forensic tools. Enrollment in junior- or senior-level DS courses requires junior standing. All business majors must have completed the Basic Business Program. Enrollment in DS 4125 course requires junior standing. Students may not receive credit for both DS 4125 and DS 5125.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

DS5330 - Mgmt Info System Analysis/Dsgn

General

College/School
Business

Course Title
Mgmt Info System Analysis/Dsgn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
5330

Credit Hours

Credit Hours Min
3

Course Description
An applications oriented study of the business systems development life cycle; current systems analysis and design methods are emphasized. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** DS3850 Business Applications Develop and DS3860 Business Database Mgmt.
>
> **Corequisite:** DS3865 Business Database Mgmt 2 and DS 3870

DS5630 - Adv Quantitative Analysis

General

College/School
Business

Course Title
Adv Quantitative Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
5630

Credit Hours

Credit Hours Min
3

Course Description
Advanced applications of quantitative methods including forecasting and management science concepts. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** DS3620 Bus Anyltcs:Data Drv Dec Makng.

DS5900 - Spec Top: Decision Science

General

College/School
Business

Course Title
Spec Top: Decision Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
DS

Course Number
5900

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description

Current Topics in Decision Sciences. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

DS6570 - Cyber Security Mgmt.

General

College/School
Business

Course Title
Cyber Security Mgmt.

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
DS

Course Number
6570

Credit Hours

Credit Hours Min
3

Course Description

The objective of this course is to provide students with a solid foundation and best practices for policy, governance, risk management and compliance with respect to an organization's information technology and resources.

Requisites

Simple Requisites

> **Prerequisites:** None

ENTR5500 - Innvtn/Entrprshp:Lean Lnchpad

General

College/School
Business

Course Title
Innvtn/Entrprshp:Lean Lnchpad

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENTR

Course Number
5500

Credit Hours

Credit Hours Min
3

Course Description

Lean Launchpad focuses on innovating and evolving a product or service into a viable business model. The curriculum is structured around the Lean Launchpad program where student teams organize and develop their "business canvas." Students may not receive credit for both ENTR 4500 and ENTR 5500.

Requisites

Simple Requisites

> **Prerequisites:** Students registering for ENTR 4500 must have junior or senior standing or approval of the instructor.

Earth Sciences Department

No graduate degree is offered in Earth Sciences, but courses may be used (with advisory committee approval) as electives in other fields of study.

Students majoring in Earth Sciences may "FastTrack" into the Professional Science Master's in Environmental Informatics program.

Courses

GEOG5150 - Geomorphology

General

College/School
Arts and Sciences

Course Title
Geomorphology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5150

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** GEOL 1040.

GEOG5210 - Cartography

General

College/School
Arts and Sciences

Course Title
Cartography

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5210

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Principles and practices of map construction and interpretation. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

GEOG5410 - Remote Sensing

General

College/School
Arts and Sciences

Course Title
Remote Sensing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5410

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Principles and applications of remote sensing. Provides a survey of the concepts and techniques of remote sensing and image analysis for natural resources, geomorphology and Earth surface processes.

Requisites

Simple Requisites

> **Prerequisite:** GEOL2500 Geologic Fundamentals.

GEOG5510 - Theory of GIS I

General

College/School
Arts and Sciences

Course Title
Theory of GIS I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5510

Credit Hours

Credit Hours Min
3

Course Description
Introduction to (1) the PC ARC/INFO GIS package, (2) the ArcView GIS package, and (3) the integration of Global Positioning Systems (GPS) with GIS. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor; computer literacy is assumed, GEOL 2300 and/or GEOL 4410 (5410) are recommended.

GEOG5511 - Theory of GIS II

General

College/School
Arts and Sciences

Course Title
Theory of GIS II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5511

Credit Hours

Credit Hours Min
3

Course Description
Intermediate principles of GIS using ArcGIS and ArcView packages. Advanced integration of GPS with GIS. Spatial analysis and modeling capabilities of GIS emphasized. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor and GEOG 4510 (GEOG5510 Theory of GIS I).

GEOG5520 - Adv Vector-Based Geog Info Sys

General

College/School
Arts and Sciences

Course Title
Adv Vector-Based Geog Info Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5520

Credit Hours

Credit Hours Min
3

Course Description

Selected topics from basic course will be covered in greater detail, and advanced topics will be introduced. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: GEOG 4510(GEOG5510 Theory of GIS I) and consent of instructor.

GEOG5620 - Principles of GIS

General

College/School
Arts and Sciences

Course Title
Principles of GIS

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5620

Credit Hours

Credit Hours Min
3

Course Description

Introduction to the fundamentals of GIS. Theoretical and technical principles of managing and processing geographic data, nature of geographic data, spatial data models of map projection systems, kriging, structures and spatial analytical and modeling techniques. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

GEOG5650 - Environmental Apps of GIS

General

College/School
Arts and Sciences

Course Title
Environmental Apps of GIS

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5650

Credit Hours

Credit Hours Min
3

Course Description

Applications of GIS in environmental sciences and engineering. Main emphasis is on approaches, scripting, and modeling exercises. Covers the scope of ecosystems, forestry, drainage basins, pollution modeling, and spatial analysis of contaminants in various environments using GIS as the main tool of analysis. Completion of a real-world GIS project is required.

Requisites

Simple Requisites

Prerequisite: GEOG 4510(GEOG5510 Theory of GIS I)

GEOG5711 - Hydrogeology

General

College/School
Arts and Sciences

Course Title
Hydrogeology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5711

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description

Occurrence and movement of ground water, well hydraulics, water quality, and pollution.

Requisites

Simple Requisites

Prerequisites: GEOL 1040 and GEOL 1045. GEOL 1040 or GEOL3210 Geology for Engineers; MATH 1710 or MATH 1730 or MATH 1910.

GEOG5850 - Advanced GIS

General

College/School
Arts and Sciences

Course Title
Advanced GIS

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOG

Course Number
5850

Credit Hours

Credit Hours Min
3

Course Description
Advanced topics in GIS, including writing of avenue scripts, writing and importing Visual Basic scripts, customization of the interface; customization of spatial, network and 3D extensions of ArcView and AML. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** GEOG 4510/4520. (GEOG5510 Theory of GIS I)

GEOL5150 - Geomorphology

General

College/School
Arts and Sciences

Course Title
Geomorphology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5150

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Analysis of landforms and processes that shape them.

Requisites
Simple Requisites

> **Prerequisite:** GEOL2500 Geologic Fundamentals GEOL 1040.

GEOL5300 - Envrnmntl Aqueous Geochemistry

General

College/School
Arts and Sciences

Course Title
Envrnmntl Aqueous Geochemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description
Principles of water quality, chemical thermodynamics and equilibrium; chemical reactions; modeling of aquatic systems and a survey of practical applications of equilibrium aqueous geochemistry.

Requisites
Simple Requisites

> **Prerequisite:** GEOL 1040, CHEM 1010 or CHEM 1110, or consent of instructor.

GEOL5320 - Petroleum Geology

General

College/School
Arts and Sciences

Course Title
Petroleum Geology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5320

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Origin and accumulation of petroleum and natural gas. Subsurface exploration techniques involving geophysical well-logs and seismic stratigraphy. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** GEOL 3230 and 4110.

GEOL5330 - Environmental Geology

General

College/School
Arts and Sciences

Course Title
Environmental Geology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5330

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Application of geologic knowledge to the solution of problems arising from the interaction of human activities and natural earth processes. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

GEOL5410 - Remote Sensing

General

College/School
Arts and Sciences

Course Title
Remote Sensing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5410

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Principles and applications of remote sensing. Provides a survey of the concepts and techniques of remote sensing and image analysis for natural resources, geomorphology and Earth surface processes.

Requisites

Simple Requisites

> **Prerequisite:** GEOL 2500.

GEOL5650 - Applied Geochemistry

General

College/School
Arts and Sciences

Course Title
Applied Geochemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5650

Credit Hours

Credit Hours Min
3

Course Description
Application of geochemistry to mineral exploration, environmental pollution, public health, and geologic hazards. Three field trips required.

Requisites

Simple Requisites

> **Prerequisites:** GEOL 1040 and CHEM 1110.

GEOL5710 - Hydrogeology

General

College/School
Arts and Sciences

Course Title
Hydrogeology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5710

Credit Hours

Credit Hours Min
3

Course Description
Occurrence and movement of groundwater, well hydraulics, water quality and pollution. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** GEOL 1010 and GEOL 1040 or GEOL 1060; CHEM 1120; MATH 1510 or MATH 1710 (MATH 1810 is recommended); or consent of instructor.

GEOL5711 - Hydrogeology

General

College/School
Arts and Sciences

Course Title
Hydrogeology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5711

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Occurrence and movement of ground water, well hydraulics, water quality, and pollution.

Requisites

Simple Requisites

> **Prerequisites:** GEOL 1040 and GEOL 1045. GEOL 1040 or GEOL3210 Geology for Engineers; MATH 1710 or MATH 1730 or MATH 1910.

GEOL5720 - Advanced Hydrogeology

General

College/School
Arts and Sciences

Course Title
Advanced Hydrogeology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5720

Credit Hours

Credit Hours Min
3

Course Description
Methods of aquifer remediation and groundwater modeling, case studies of groundwater contamination. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** GEOL4710 Hydrogeology(GEOL5710 Hydrogeology) and MATH 1810 (MATH 1820 is recommended) or consent of instructor.

GEOL5810 - Special Problems

General

College/School
Arts and Sciences

Course Title
Special Problems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5810

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Prerequisite: Major and consent of instructor. Advanced students may do independent investigations in some approved field. May be repeated for credit. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

GEOL5820 - Special Problems

General

College/School
Arts and Sciences

Course Title
Special Problems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GEOL

Course Number
5820

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Prerequisite: Major and consent of instructor. Advanced students may do independent investigations in some approved field. May be repeated for credit. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Economics/Finance/Marketing Department

The Tennessee Tech MBA is fully accredited by AACSB International–the highest attainable level of accreditation. The MBA degree may be obtained completely online or through a combined online/on-campus program of study.

The MBA program offers the option for 100% online completion, in as little as one year. The online learning environment is highly interactive and incorporates case discussions, teamwork, simulations, and other active-learning approaches. MBA courses make a strong connection between academic subjects and the practical issues facing managers in today's globally competitive, high tech, and analytically-focused business environment.

Courses

ECON5030 - Fundamentals of Economics

General

College/School
Business

Course Title
Fundamentals of Economics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
5030

Credit Hours

Credit Hours Min
3

Course Description
Production and distribution of wealth and income; basic principles of the American capitalistic economy.

Requisites

Simple Requisites

> **Prerequisites:** None

ECON5200 - Environmental Economics

General

College/School
Business

Course Title
Environmental Economics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECON

Course Number
5200

Credit Hours

Credit Hours Min
3

Course Description
A detailed study of the economic foundations of Environmental Policy and common tolls used by environmental economists to measure and analyze benefits and costs of environmental regulation and consider the characteristics of efficient regulation.

Requisites

Simple Requisites

> **Prerequisite:** AGBE2100 or ECON2010.

ECON5310 - Labor Economics

General

College/School
Business

Course Title
Labor Economics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
5310

Credit Hours

Credit Hours Min
3

Course Description
Current Topics in Decision Sciences. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor. ECON 2010, ECON 2020, and one of the following: ECON3320 Money and Banking, ECON 3810, or ECON 3820.

ECON5510 - International Trade/Finance

General

College/School
Business

Course Title
International Trade/Finance

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
5510

Credit Hours

Credit Hours Min
3

Course Description
International trade, monetary exchange, balance of payments, and foreign investments. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ECON 2010 andECON 2020.

ECON5520 - Comparative Econ Sys

General

College/School
Business

Course Title
Comparative Econ Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
5520

Credit Hours

Credit Hours Min
3

Course Description
Analysis of essential economic features of the economic systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ECON 2020.

ECON5530 - History of Economic Thought

General

College/School
Business

Course Title
History of Economic Thought

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
5530

Credit Hours

Credit Hours Min
3

Course Description
Development of economic doctrines and schools and economic thought from the mercantilist period to the present.

Requisites

Simple Requisites

> **Prerequisite:** ECON 2020.

ECON5600 - Econ Growth & Development

General

College/School
Business

Course Title
Econ Growth & Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
5600

Credit Hours

Credit Hours Min
3

Course Description
A critical survey of growth and strategies of economic development, including regional growth and development; historical evidence of development. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ECON 2020.

ECON5640 - Econometrics

General

College/School
Business

Course Title
Econometrics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
5640

Credit Hours

Credit Hours Min
3

Course Description
An advanced treatment of statistical models applied to economics, including the general linear model, heteroscedasticity, autocorrelation, multi-collinearity, simultaneous equations, and other violations of OLS assumptions. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ECON 3630, 3810, 3820, or consent of instructor.
>
> ECON 2010, ECON 2020, ECON 3610, and one of the following: ECON3320 Money and Banking, ECON 3810, or ECON 3820.

ECON5900 - Contemporary Econ Workshop

General

College/School
Business

Course Title
Contemporary Econ Workshop

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECON

Course Number
5900

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Thorough and intensive training of public school teachers in fundamental economic principles and current issues. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ECON 3810 and ECON 3820 or consent of instructor.

ECON5990 - Special Topics

General

College/School
Business

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECON

Course Number
5990

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours
Operator
TO

Course Description
Directed study and research on a selected topic in economics. Available to economics majors on an individual basis with consent of departmental chairperson. Course may be taken more than once as topics change.

ECON6000 - Managerial Economics

General

College/School
Business

Course Title
Managerial Economics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECON

Course Number
6000

Credit Hours

Credit Hours Min
3

Course Description
The study of fundamental principles of microeconomics most relevant to managers. Topics include marginal analysis, market equilibrium, pricing, market structures, incentive structures, and strategic interactions.

Requisites

Simple Requisites

> **Prerequisites:** None

FIN5020 - Basic Finance

General

College/School
Business

Course Title
Basic Finance

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
5020

Credit Hours

Credit Hours Min
3

Course Description
Introduction to the concepts and tools needed for basic financial decision-making in a corporate environment.

FIN6220 - Corporate Risk Management

General

College/School
Business

Course Title
Corporate Risk Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6220

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

FIN6470 - Investment Challenge I

General

College/School
Business

Course Title
Investment Challenge I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6470

Credit Hours

Credit Hours Min
3

Course Description
Advanced portfolio theory through actual management of a real investment portfolio.

Requisites

Simple Requisites

> **Prerequisites:** MBA 6020 and permission of instructor.

FIN6480 - Investment Challenge II

General

College/School
Business

Course Title
Investment Challenge II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6480

Credit Hours

Credit Hours Min
3

Course Description
Advanced portfolio theory through actual management of a real investment portfolio.

Requisites

Simple Requisites

> **Prerequisites:** MBA 6020 and permission of instructor.

FIN6710 - Perspectives/Risk & Insurance

General

College/School
Business

Course Title
Perspectives/Risk & Insurance

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6710

Credit Hours

Credit Hours Min
3

Course Description
FIN 6710 examines the economic principles underpinning risk and insurance and introduces key risk and insurance concepts and practices. The causes of change in risk management and insurance are examined through exploration of relevant physical, technological, cultural, regulatory, and other environmental perspectives.

Requisites

Simple Requisites

> **Prerequisites:** None

FIN6720 - Corporate Risk Management

General

College/School
Business

Course Title
Corporate Risk Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
FIN

Course Number
6720

Credit Hours

Credit Hours Min
3

Course Description
Application of the risk management process, including risk control and risk financing techniques, to risk management problems in business. Emphasizes risk identification and evaluation, together with alternative methods of risk control and risk financing techniques.

Requisites

Simple Requisites

> **Prerequisites:** None

FIN6920 - Banking and Financial Services

General

College/School
Business

Course Title
Banking and Financial Services

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FIN

Course Number
6920

Credit Hours

Credit Hours Min
3

Course Description
This course is an interactive seminar designed to study and discuss critical issues facing the financial services industry. Topics include the economic, regulatory competitive environment and the wide range of services provided by today's banking institutions. The course will address economic policy, globalization, investment and commercial banking, insurance, pension plans, risk management, and technology. financial analysis and leadership issues will also be addressed in course lectures, online discussions and within the context of the competitive and interactive Stanford Bank Simulation.

Requisites

Simple Requisites

> **Prerequisites:** None

MKT5200 - Basic Marketing

General

College/School
Business

Course Title
Basic Marketing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MKT

Course Number
5200

Credit Hours

Credit Hours Min
3

Course Description
The structure of markets, techniques, and tools available to the marketing manager; motivations of buyers.

Requisites

Simple Requisites

Prerequisite: None

MKT5620 - Marketing Research

General

College/School
Business

Course Title
Marketing Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MKT

Course Number
5620

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: MKT3400 and ECON 3610.

MKT5730 - Marketing Management

General

College/School
Business

Course Title
Marketing Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MKT

Course Number
5730

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: MKT3400, BMGT 3510, and senior standing.

Electrical and Computer Engr Department

The Department of Electrical and Computer Engineering offers advanced studies leading to the Master of Science degree in Electrical and Computer Engineering and the Doctor of Philosophy degree in Engineering with specialization in Electrical and Computer Engineering. The Ph.D. program is administered by the Associate Dean of Research and Innovation. The goals and the admission and degree requirements for the Ph.D. program are listed under the College of Engineering. The goals of the MS program are to prepare graduates with advanced engineering and research skills and state-of-the-art knowledge in selected areas for positions in industry and for advanced studies towards the Ph.D. The MS-ECE degree program can be pursued with either a thesis option or a non-thesis option.

The departmental faculty have expertise in the following areas of electrical engineering: circuits and signal processing; control, robotics and instrumentation, digital systems, computers, and VLSI circuit design; nuclear engineering; physical phenomenon and lasers; electric power; and telecommunications, wireless communications and networking. Graduate students may carry out their research for their thesis/dissertation in any one (1) of the above areas under the supervision of a faculty member having expertise in that area. Faculty advisors assist graduate students in developing individual programs of study depending on their career goals and thesis/dissertation research interests. The student's advisory committee assists the student in the development and execution of the program of study and monitors and evaluates the student's work towards the degree.

Many departmental faculty members actively participate in research related to the three Centers of Excellence operated within the University: two within the College of Engineering and one under the Office of Research & Economic Development. The resources and facilities of the Centers greatly enhance the graduate program of the Department.

Programs

ECE-MS - Electrical and Computer Engineering, M.S.

Program Overview

Program Long Title
Electrical and Computer Engineering, M.S.

College/School
Engineering

Department(s)
Electrical and Computer Engr

Catalog Full Description
The Department of Electrical and Computer Engineering offers advanced studies leading to the Master of Science degree in Electrical and Computer Engineering and the Doctor of Philosophy degree in Engineering with specialization in Electrical and Computer Engineering.

The goals of the MS program are to prepare graduates with advanced engineering and research skills and state-of-the-art knowledge in selected areas for positions in industry and for advanced studies towards the Ph.D. The MS-ECE degree program can be pursued with either a thesis option or a non-thesis option.

The departmental faculty have expertise in the following areas of electrical engineering: circuits and signal processing; control, robotics and instrumentation, digital systems, computers, and VLSI circuit design; nuclear engineering; physical phenomenon and lasers; electric power; and telecommunications, wireless communications and networking. Graduate students may carry out their research for their thesis/dissertation in any one (1) of the above areas under the supervision of a faculty member having expertise in that area. Faculty advisors assist graduate students in developing individual programs of study depending on their career

goals and thesis/dissertation research interests. The student's advisory committee assists the student in the development and execution of the program of study and monitors and evaluates the student's work towards the degree.

Many departmental faculty members actively participate in research related to the three Centers of Excellence operated within the University: two within the College of Engineering and one under the Office of Research & Economic Development. The resources and facilities of the Centers greatly enhance the graduate program of the Department.

Degree Requirements (Thesis)

- **Core Required Course,** ECE6910 Intro to Graduate Research**:** 1 hour
- **ECE Breadth Courses*:** 9 hours
- **Advisor Approved Electives (directed/independent study)*:** 6 hours
- **Advisor Approved Electives*:** 8 hours
- **Research and Thesis,** ECE6990 Research & Thesis**:** 6 hours
- **Total Degree Requirements:** 30 hours

Degree Requirements (Non-Thesis)

- **Core Required Course,** ECE6910 Intro to Graduate Research**:** 1 hour
- **ECE Breadth Courses*:** 9 hours
- **Advisor Approved Electives*:** 12 hours
- **Advisor Approved Electives*:** 9 hours
- **Non-Thesis Design Project,** ECE6990 Research & Thesis**:** 3 hours
- **Total Degree Requirements:** 34 hours

Admission Requirements

Admission Requirements

An applicant for admission to the College of Engineering is expected to have earned a BS degree from an approved program, or its equivalent.

Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department: *undergraduate GPA of at least 3.0 on a 4.0 scale,

*GRE® General Test (GRE) scores with Quantitative greater than or equal to 50%; Verbal greater than or equal to 33%; Analytical Writing greater than or equal to 33%. Students with BS degrees in related fields from TTU are not required to take the GRE.

*Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

*Availability of appropriate faculty to serve as research advisor(s).

*Participation in undergraduate research.

*Post-BS degree professional experience relevant to planned degree of study.

*Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission.

Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Note: The program is designed for graduates of approved undergraduate programs. Thus, a baccalaureate degree in electrical engineering is required for full standing. Applicants that have an undergraduate degree in a closely related field will be evaluated on a case-by-case basis and may be admitted to full standing upon completion of identified background courses.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Departmental Degree Requirements

To receive an MS degree in ECE the student should complete all the MS requirements specified by the University and the College of Engineering. Additionally, certain departmental requirements listed below shall also be satisfied:

Thesis Option

An MS-ECE program of study with thesis option requires a minimum of 24 credit hours of course work and a minimum of six (6) credit hours of thesis completed under the supervision of the graduate thesis advisor. The coursework shall include: ECE6910 Intro to Graduate Research - Introduction to Graduate Research, during the first semester of study; at least 15 hours of graduate ECE courses that must include 9 credit hours of ECE graduate level breadth courses from a list maintained by the ECE Department; no more than six (6) hours of directed/independent study courses to satisfy the required minimum of 24 hours of coursework. The thesis requirement includes research, the findings of which must be submitted in writing subject to the policies and satisfaction of the College of Graduate Studies and the advisory committee. In addition, each student must pass a comprehensive exam which includes a defense of his/her research work before the advisory committee. The advisory committee shall be chaired or co-chaired by and ECE faculty member and include and additional member from the ECE Department.

Degree Requirements

- **Core Required Course,** ECE6910 Intro to Graduate Research**:** 1 hour
- **ECE Breadth Courses*:** 9 hours
- **Advisor Approved Electives (directed/independent study)*:** 6 hours
- **Advisor Approved Electives*:** 8 hours
- **Research and Thesis,** ECE6990 Research & Thesis**:** 6 hours
- **Total Degree Requirements:** 30 hours

*Selection of appropriate courses (ECE 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Advisor Approved Electives

Advisor Approved Electives (within the department)

Selection of appropriate courses (ECE 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Advisor Approved Electives (outside of the department)

The student's advisory committee and/or the graduate coordinator may advise a student to take courses outside of the ECE discipline. Common prefixes appropriate for the ECE program of study include: ME, MATH, CSC, CHEM, CHE, PHYS, and CEE.

Non-thesis Option

An MS-ECE program of study with non-thesis option requires a minimum of 34 credit hours of course work and shall include: ECE6910 Intro to Graduate Research - Introduction to Graduate Research, during the first semester of study; 9 credit hours of graduate level breadth courses from a list maintained by the ECE department; a minimum of twelve (12) credit hours of graduate level ECE elective courses; a three (3) credit hours ECE6970 Non-Thesis Design Project - Non-Thesis Design Project course that will enhance independent learning skills and a maximum of nine (9) hours of graduate level elective courses from outside the department.

- **Core Required Course,** ECE6910 Intro to Graduate Research: 1 hour
- **ECE Breadth Courses*:** 9 hours
- **Advisor Approved Electives*:** 12 hours
- **Advisor Approved Electives*:** 9 hours
- **Non-Thesis Design Project,** ECE6970 Non-Thesis Design Project: 3 hours
- **Total Degree Requirements:** 34 hours

*Selection of appropriate courses (ECE 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Advisor Approved Electives

Advisor Approved Electives (within the department)

Selection of appropriate courses (ECE 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Advisor Approved Electives (outside of the department)

The student's advisory committee and/or the graduate coordinator may advise a student to take courses outside of the ECE discipline. Common prefixes appropriate for the ECE program of study include: ME, MATH, CSC, CHEM, CHE, PHYS, and CEE.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast Track program is designed to enable TTU ECE undergraduates to accumulate up to six (6) credit hours of graduate coursework while still pursuing their undergraduate degree and to transition to the graduate program smoothly, with accelerated completion. Up to six (6) hours of graduate coursework, exclusive of directed study, taken during the student's senior year can be used to satisfy both undergraduate and graduate degree requirements. These courses must be taken at Tennessee Tech University and must be approved as appropriate substitutions in the undergraduate curriculum for senior ECE electives. In order to remain in the Fast Track program, the student must demonstrate ongoing scholarship by continuing to meet the GPA admission requirements during the semester that the student enrolls in the first of their graduate courses. The student must earn a minimum grade of "B" in the graduate courses in order to apply them to their M.S. program of study and to continue in the Fast Track program. Additionally, Fast

Track students will be integrated into ECE research projects and/or capstone design projects while enrolled as seniors with the expectation that this research will directly coordinate with their M.S. thesis research. Either a thesis or non-thesis M.S. option may be pursued. ECE Fast Track students that graduate with their B.S. in the spring semester can be expected to complete their M.S. requirements in either the spring or summer term of the following calendar year.

Fast Track students are only eligible for graduate teaching or research assistantship during the fifth (graduate) year of their studies. Students who do not succeed in their first graduate course during their senior year (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

ENGR-ECE - Engineering, Electrical and Computer Engineering Concentration, Ph.D.

Program Overview

Program Long Title
Engineering, Electrical and Computer Engineering Concentration, Ph.D.

College/School	**Department(s)**
Engineering	Electrical and Computer Engr

Catalog Full Description
The Department of Electrical and Computer Engineering offers advanced studies leading to the Master of Science degree in Electrical and Computer Engineering and the Doctor of Philosophy degree in Engineering with specialization in Electrical and Computer Engineering. The Ph.D. program is administered by the Associate Dean of Research and Innovation. The goals and the admission and degree requirements for the Ph.D. program are listed under the College of Engineering.

The departmental faculty have expertise in the following areas of electrical engineering: circuits and signal processing; control, robotics and instrumentation; digital systems, computers, and VLSI circuit design; nuclear engineering; physical phenomenon and lasers; electric power; and telecommunications, wireless communications and networking. Graduate students may carry out their research for their thesis/dissertation in any one (1) of the above areas under the supervision of a faculty member having expertise in that area. Faculty advisors assist graduate students in developing individual programs of study depending on their career goals and thesis/dissertation research interests. The student's advisory committee assists the student in the development and execution of the program of study and monitors and evaluates the student's work towards the degree.

Many departmental faculty members actively participate in research related to the three Centers of Excellence operated within the University: two within the College of Engineering and one under the Office of Research & Economic Development. The resources and facilities of the Centers greatly enhance the graduate program of the Department.

Admission Requirements

Admission Requirements
The basic admission standards for the Ph.D. program are the same as for the Master of Science in Engineering (see requirement list below), in addition, an applicant is expected to have completed an MS degree in an academic area appropriate to the proposed area of study and to have earned an MS GPA of at least 3.5 on a 4.0 scale.

Though the general requirement for admission to the Ph.D. program is a master's degree in an appropriate discipline, students with a bachelor's degree may be admitted to the Ph.D. program directly on exceptional basis, provided the applicant has a record of excellent academic performance in an appropriate engineering program undergraduate program. The applicant's test scores, personal recommendations, and relevant work experience must indicate a high potential for success in doctoral studies and research. In addition, factors such as appropriateness of the applicant's research objectives to the research interests of

the program faculty, availability of faculty to supervise the applicant's research, and prior research accomplishments of the applicant will also influence the admission decision.

Fulfilling the minimum requirement does not guarantee admission; an applicant who does not meet the above minimum, but appears to have reasonable potential for success as a Ph.D. student, may be admitted to provisional standing. His/her status may be changed to full standing after satisfying requirements specified by the Associate Dean of Engineering for Graduate Studies and Research, in consultation with the appropriate departmental chairperson, at the time of admission.

If admitted in provisional standing at either the MS or Ph.D. level, the student must remove all deficiencies and apply for reclassification to full standing prior to the completion of 15 graduate hours.

Sometimes a master's-level student takes more graduate-level courses than are required for the degree because the student is expecting to continue on to the Ph.D. program and hopes to use the extra courses to satisfy the Ph.D. coursework requirement. When this is the case, the student can request when registering for the course(s) that the course(s) be "banked" for the Ph.D. program. If the student lacks no more than 12 semester hours on the master's degree, he/she may accumulate a maximum of nine (9) semester hours which may be applied toward the Ph.D. When this is the case, the student's advisory committee must initiate approval via memo with consensus of the departmental chairperson, dean of the college, and the Associate Dean of Graduate Studies. Banked courses then show up on the student's transcript as courses taken for the Ph.D. rather than being shown as a part of his/her M.S. program. Banking course does not guarantee admission to the Ph.D. program, or, if admitted, that the student's Ph.D. advisory committee will approve the course as part of the student's Ph.D. program of study.

MS Engineering Program Admission Requirements

An applicant for admission to any of the MS programs offered by the departments of the College of Engineering is expected to have earned a BS degree from an approved program, or its equivalent. Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department:

- undergraduate GPA of at least 3.0 on a 4.0 scale,

- GRE® General Test (GRE) scores with Quantitative greater than or equal to 150 (50%); Verbal greater than or equal to 147 (33%); Analytical Writing greater than or equal to 3.5 (33%). Students with BS degrees in related fields from Tennessee Tech are not required to take the GRE.

- Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

- Availability of appropriate faculty to serve as research advisor(s).

- Participation in undergraduate research.

- Post-BS degree professional experience relevant to planned degree of study.

- Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

- International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission. Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

To receive a Ph.D. degree with specialization in ECE, the student shall complete all the requirements for the Ph.D. specified under the College of Engineering section of the catalog. Additionally, the program of study for Ph.D. students majoring in ECE shall include ECE 6910 - Introduction to Graduate Research during the first semester of study except when the student has already taken ECE 6910 as a part of the MS program or when the student has prior research experience as demonstrated by the successful completion of a master's thesis; and no more than nine hours of independent/directed study courses such as ECE 6980/ECE 7980. The ECE departmental chairperson will assist the Associate Dean in deciding the appropriateness of each program of study.

The student's advisory committee must be chaired or co-chaired by an ECE faculty member, and additionally, the committee must include at least two members of the ECE faculty, a member from the engineering faculty outside the ECE Department and one member from the Mathematics Department. The Associate Dean for Research and Innovation is an ex-officio nonvoting member of every Ph.D. student's advisory committee.

Doctor of Philosophy Degree Requirements

The Ph.D. is a research degree. The minimum requirements for a Ph.D. degree in the College of Engineering stated below are the same for all departments. Each department may include additional degree requirements for students pursuing specialization in that department.

Students Admitted with a Master's Degree

1. A minimum of 48 credits of course work and doctoral research and dissertation as follows:

A. A minimum of eighteen (18) credit hours of course work beyond the master's degree, acceptable to the student's advisory committee. Additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department. No 5000-level courses are to be used to meet the minimum requirements of course work.

B. A minimum of twenty four (24) credit hours of doctoral research and dissertation built upon the student's course of study and making a significant contribution to the state of knowledge or to the art of the engineering profession, is required; not more than nine (9) credit hours may be earned in a particular semester.

2. Residence of four (4) semesters beyond the master's degree, with at least two (2) semesters in continuous residence, is required. All requirements, including the dissertation, must be completed within a period of eight (8) consecutive years.

3. Maintenance of a minimum quality point average of 3.0 and adherence to the general regulations of the College of Graduate Studies are expected. All students in the program must follow a plan of study and research developed in conjunction with an advisory committee, satisfactorily complete a comprehensive examination, achieve candidacy, and satisfactorily defend their dissertation.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Degree Program

A student admitted with a bachelor's degree on exceptional basis must successfully complete a qualifying examination based mostly on undergraduate materials before the end of the second semester of enrollment. Students with a Bachelor of Science (B.S.) degree from ABET-accredited programs are exempted from this examination. Other students without such a degree, or M.S. students without an ABET-accredited B.S. degree, switching to direct Ph.D. will have to take a qualifying exam through a formal process established by the department. The process should include at a minimum an examination of the student's fundamental knowledge managed by the Graduate Committee of the department.

Based on the student's performance on the qualifying examination, the student may be (i) permitted to continue in the doctoral program, or (ii) advised to transfer to an M.S. degree program in an appropriate discipline in the college, or (iii) recommended for termination from the graduate program of the college.

If permitted to continue in the doctoral program, the student, as described elsewhere in the catalog, will select a research advisor, form an advisory committee, and submit a program of study satisfying the following requirements.

The program of study should have a minimum total of seventy two (72) credit hours of academic work, consisting of course work and dissertation work, beyond baccalaureate work, subject to the following:

• The program of study should include a minimum of forty two (42) credit hours of appropriate graduate level course work consisting of a maximum of nine (9) credit hours at the 5000-level, acceptable to the student's advisory committee.

• It should also include an additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department.

• A minimum of 24 credit hours of doctoral research and dissertation, built upon the student's course of study and making significant contribution to the state of knowledge and the art of the engineering profession, is required; no more than nine (9) credit hours may be earned in a particular semester.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Program Earning a Non-thesis M.S. en route

All conditions stated above for the students admitted directly into the Ph.D. program apply. In addition: Nine (9) credit hours will count toward the non-thesis M.S. degree and toward the Ph.D. degree. If the departmental non-thesis M.S. requires a three (3) credit hour non-thesis project course, those three (3) credit hours can be counted as three (3) credit hours of dissertation research toward the Ph.D. degree. Six (6) credit hours of M.S. coursework can be counted toward the Ph.D. coursework. If no project course is required for the non-thesis M.S., then nine (9) credit hours of M.S. coursework can be counted toward the Ph.D.

Limitation on Graduate Assistantships

It is expected that a full-time, post master's Ph.D. Engineering student should be able to achieve candidacy within the first three (3) calendar years after enrollment, and a direct admit Ph.D. Engineering student after four (4) calendar years. If candidacy is not achieved within the aforementioned periods, a student must request and receive approval for an extension of assistantship following

the College of Engineering's established procedure. An extension may be granted by the Associate Dean of Engineering for Research and Innovation. This limitation is regardless of student funding or the source of support for the student.

Degree Requirements Admitted with Bachelor's Degree
Type
Completion Requirement

Admitted with Master's Degree (48 Credit Hours)

Advisor Approved Coursework: 18 hours
Concentration Coursework: 6 hours
Research and Dissertation (7990 Course): 24 hours
Total Degree Requirements: 48 hours

Earn at least 48 credits from the following:
These :

No selection provided

Additional Comments:

Direct admit from BS to PhD
Type
Completion Requirement

Direct Admit

Direct Admit (72 hours total)

42 hours of coursework (maximum of 9 hours at the 5000 level)
6 hours of coursework or research experience
24 hours of research and dissertation

Complete ALL of the following :

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program
Undergraduate Fast Track Program
Not Available.

Courses

ECE5010 - Analog Electronic Circuits

General
College/School
Engineering

Course Title
Analog Electronic Circuits

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5010

Credit Hours
Credit Hours Min
3

Course Description
Frequency response, multi-stage amplifiers, feedback, power output stages, circuit design.

Requisites
Simple Requisites

Prerequisite: C or better in either ECE3050 Circuits and Electronics II or ECE3300 Electronics I and C or better in either ECE3010 Signals and Systems or ECE3330 Signals and Systems.

ECE5020 - Digital Signal Processing

General
College/School
Engineering

Course Title	**Academic Level (Course Level)**
Digital Signal Processing	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5020

Credit Hours

Credit Hours Min
3

Course Description

Theory and practice of discrete-time signals and systems, A/D and D/A conversion, filter design, DSP Architecture and implementation, programming, DSP applications.

Requisites

Simple Requisites

> **Prerequisite:** C or better in CSC1310 Data Structures and Algorithms, C or better in either ECE2110 Intro to Digital Systems or ECE2140 Intro to Digital Systems, C or better in either ECE3020 Discrete-Time Signals/Systems or ECE3330 Signals and Systems, and C or better in ECE3130 Microcomputer Systems.

ECE5030 - Analog Signal Processing

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Analog Signal Processing	Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
5030

Credit Hours

Credit Hours Min
3

Course Description

Characteristics of operational amplifiers. Introduction to active filters including sensitivity analysis. Some nonlinear applications of operational amplifiers. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ECE 3010, ECE 3310, ECE 3360.

ECE5110 - Digital System Design

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Digital System Design	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5110

Credit Hours

Credit Hours Min	**Credit Hours Max**
0	3

Credit Hours Operator
OR

Course Description

Prerequisite: C or better in ECE 2110 and C or better in ECE 3160. Computer aided combinational and sequential digital logic analysis, design, and applications, utilizing both standard digital components and programmable logic devices. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ECE5120 - Fundamentals/Comp Design

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Fundamentals/Comp Design	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5120

Credit Hours

Credit Hours Min
3

Course Description

Continuation of digital system design concepts and applications with emphasis on computer hardware design: CPU sequencers, arithmetic/logic units, fixed and floating point arithmetic implementations, and computer peripheral interfacing, utilizing programmable logic. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in ECE3130 Microcomputer Systems and C or better in either ECE3140 Digital System Design or ECE4110 Digital System Design.

ECE5130 - Intro to Digital VLSI

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Intro to Digital VLSI	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5130

Credit Hours

Credit Hours Min
3

Course Description

Analysis, design and layout of complex digital integrated circuits in MOS technology. The course emphasizes design through projects and requires extensive use of simulation and layout VLSI CAD tools. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in either ECE2110 Intro to Digital Systems or ECE 2140; and C or better in either ECE3050 Circuits and Electronics II or ECE3300 Electronics I.

ECE5140 - Embedded System Design

General

College/School
Engineering

Course Title
Embedded System Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5140

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description

Prerequisite: C or better in CSC 1310, C or better in either ECE 2110 or ECE 2140, C or better in ECE 3130. Basic hardware and software concepts in the analysis and design of embedded systems, peripheral interfaces and performance analysis with hands-on design project.

ECE5150 - Cyber-Physical Hdwr Security

General

College/School
Engineering

Course Title
Cyber-Physical Hdwr Security

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5150

Credit Hours

Credit Hours Min
3

Course Description

Topics in Cyber-Physical System (CPS) hardware security, including Internet of Things (IoT), Smart Grid, Vehicular ad-hoc Network (VANet), Autonomous Vehicles, Artificial Intelligence of Things (AIoT).

Requisites

Simple Requisites

> **Prerequisite:** C or better in CSC1310 Data Structures and Algorithms; and C or better in ECE3150 Intro to Hardware Security.

ECE5210 - Control System Design I

General

College/School
Engineering

Course Title
Control System Design I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5210

Credit Hours

Credit Hours Min
3

Course Description

Design of compensators using frequency domain techniques; design projects with hardware implementation. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Grade of C or better in ECE3210 Control System Analysis and grade of C or better in ECE3260 Control System Lab.

ECE5220 - Control System Design II

General

College/School
Engineering

Course Title
Control System Design II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
5220

Credit Hours

Credit Hours Min
3

Course Description

Discrete-time systems theory; analysis and design of discrete-time control systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ECE 4210.

ECE5230 - Comp-Based Msrmt/Control Sys

General

College/School
Engineering

Course Title
Comp-Based Msrmt/Control Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5230

Credit Hours

Credit Hours Min
3

Course Description
Computer-based control systems, analysis and design of computer-based measurement and data acquisition systems, and virtual instrumentation. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ECE 4210 or consent of instructor.

ECE5240 - Computer-Based Control Sys

General

College/School
Engineering

Course Title
Computer-Based Control Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5240

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: C or better in in ECE 3020 and C or better in ECE 4210 (52 I 0). Z-transform; Sampling Theory, Stability of Discrete Time Systems, Analog to Digital Conversion, Digital to Analog Conversion, Implementation of Analog Control System in Discrete-time on a Microcomputer. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ECE5310 - Analog VLSI Design

General

College/School
Engineering

Course Title
Analog VLSI Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
5310

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: ECE 3310. Design, layout generation, simulation and verification of CMOS analog building blocks, such as operational amplifiers, operational transconductance amplifiers, current conveyors, and mixed signal circuits; system design using building blocks. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ECE5370 - Mechatronics/Intel Machine Eng

General

College/School
Engineering

Course Title
Mechatronics/Intel Machine Eng

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5370

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Mechatronics; number systems; microcontroller technology and architecture of 8-bit microcontrollers (e.g. Motorola MC68HC 11O); assembly language programming; AID and DIA conversion; parallel I/0; programmable timer operation; interfacing sensors and actuators; applications; and team project on design and implementation of a mechatronic system. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in ECE 3130.
>
> Cross-listing: ME 5370

ECE5510 - Electromagnetic Fields II

General

College/School
Engineering

Course Title
Electromagnetic Fields II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5510

Credit Hours

Credit Hours Min
3

Course Description

Polarization, Poynting's vector, transmission lines, waveguides, and radiation. Students enrolled in the 5000-level course will be required to complete additional work as required in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in ECE3510 Electromagnetic Fields I.

ECE5520 - Optoelectronic Engineering

General

College/School
Engineering

Course Title
Optoelectronic Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5520

Credit Hours

Credit Hours Min
3

Course Description

Device theory for optical communication and instrumentation systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in ECE3540 Physical Electronics.

ECE5540 - Semiconductor Devices

General

College/School
Engineering

Course Title
Semiconductor Devices

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
5540

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ECE5570 - Intro/Gaseous Electronics

General

College/School
Engineering

Course Title
Intro/Gaseous Electronics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
5570

Credit Hours

Credit Hours Min
3

Course Description

Physical and mathematical concepts of gas discharge devices like phototubes, gas lasers, switchgear and MHD. Discussion of different criteria for a self-sustaining electrical discharge in a gas. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ECE3540 Physical Electronics

ECE5610 - Power System Analysis

General

College/School
Engineering

Course Title
Power System Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5610

Credit Hours

Credit Hours Min
3

Course Description

Power system components modeling in steady state, per unit calculations, transmission line steady state operation, power flow analysis, applications of commercial software. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in ECE3610 Intro to Power Systems.

ECE5620 - Power Sys Oper & Control

General

College/School
Engineering

Course Title
Power Sys Oper & Control

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5620

Credit Hours

Credit Hours Min
3

Course Description
Symmetrical components, fault analysis, system protection, transient stability, power system controls including: automatic generation control, voltage regulation, and economic dispatch. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in ECE 4610 (ECE5610 Power System Analysis).

ECE5630 - Power Electronics

General

College/School
Engineering

Course Title
Power Electronics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5630

Credit Hours

Credit Hours Min
3

Course Description
Uncontrolled and controlled rectifiers, voltage controllers, chopper, de motor control, pulse-width modulation inverters, induction motor control, and power supplies. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in either ECE3050 Circuits and Electronics II or ECE3300 Electronics I; and C or better in ECE3610 Intro to Power Systems.

ECE5710 - Principles/Telecommunications

General

College/School
Engineering

Course Title
Principles/Telecommunications

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5710

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: C or better in ECE 3710 and C or better in MATH 3470. Performance of analog and digital communication systems in the presence of noise. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ECE5720 - Telecom Systems Design

General

College/School
Engineering

Course Title
Telecom Systems Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
5720

Credit Hours

Credit Hours Min
3

Course Description
Link budget, synchronization, frequency synthesis, receiver architecture, noise and distortion, error correction codes, spread-spectrum systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in ECE3710 Intro/Telecommunications and C or better in MATH3470 Intro/Prob & Stats.

ECE5810 - Alt Energy:Nuclear Energy

General

College/School
Engineering

Course Title
Alt Energy:Nuclear Energy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Prerequisites: MATH2120 and PHYS2120. Introduction to basic topics in the analysis and design of nuclear power plants. Students enrolled in the 5000-level course will be required to complete additional work as required in the syllabus.

ECE5820 - Alter Energy: Rnwble Enrgy Sys

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Alter Energy: Rnwble Enrgy Sys	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
ECE	5820

Credit Hours

Credit Hours Min
3

Course Description
Prerequisites: MATH2120 and PHYS2120, ECE 2020 or ECFE 3810 for non ECE majors. Introduction to the basics of economics, environmental issues, analysis and design of a selected set of renewable energy systems. Students enrolled in the 5000-level course will be required to complete additional work as required in the syllabus.

ECE5830 - Appl/Machine Learning in ECE

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Appl/Machine Learning in ECE	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
ECE	5830

Credit Hours

Credit Hours Min
3

Course Description
Fundamentals of machine learning with emphasis on practical applications to electrical and computer engineering problems. Supervised learning (linear and logistic regression, decision trees, and neural networks), unsupervised learning.

Requisites

Simple Requisites

> **Prerequisite:** C or better in either CSC1300 Intro/Prob Solving-Comp Prog or ENGR1120 Programming for Engineers; C or better in MATH2010 Introduction to Linear Algebra; and C or better in MATH3470 Intro/Prob & Stats.

ECE5950 - Intro/Microelec Mec Sys (MEMS)

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Intro/Microelec Mec Sys (MEMS)	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ECE	5950

Credit Hours

Credit Hours Min
3

Course Description
Introduce the design, fabrication and performance of MEMS devices. Topics include bulk and surface micromachining, photolithography, sensors, actuation systems, optical MEMS, microcantilever-based systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Senior standing in engineering or consent of instructor.

ECE5990 - Special Problems

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Special Problems	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ECE	5990

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	6
	Credit Hours Operator
	TO

Course Description
Current topics in electrical engineering in the form of a reading course or an experimental lecture course. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

ECE6010 - Advanced Circuit Analysis

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Advanced Circuit Analysis	Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Graph theoretic formulation of circuit equations. Modified nodal analysis. Solution of linear and nonlinear network equations. Sensitivity calculations. Dynamic response calculations.

Requisites

Simple Requisites

> **Prerequisite:** Graduate standing in EE.

ECE6030 - Active Filt:Analysis & Design

General

College/School
Engineering

Course Title
Active Filt:Analysis & Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6030

Credit Hours

Credit Hours Min
3

Course Description
Analysis and design of second and higher order active filters including switched capacitor filters.

Requisites

Simple Requisites

> **Prerequisite:** ECE6010 Advanced Circuit Analysis

ECE6040 - Signal Analysis

General

College/School
Engineering

Course Title
Signal Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6040

Credit Hours

Credit Hours Min
3

Course Description
Analysis of continuous and discrete signals; orthogonal expansion of signals; sampling and reconstruction; theory and application of Fourier and z-transforms, FFT algorithms and spectral analysis.

Requisites

Simple Requisites

> **Prerequisite:** Graduate standing.

ECE6050 - Digital Filters

General

College/School
Engineering

Course Title
Digital Filters

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6050

Credit Hours

Credit Hours Min
3

Course Description
Analysis, design, implementation, and applications of digital filters.

Requisites

Simple Requisites

> **Prerequisite:** ECE6040 Signal Analysis

ECE6060 - Theory/App of Neural Systems

General

College/School
Engineering

Course Title
Theory/App of Neural Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6060

Credit Hours

Credit Hours Min
3

Course Description
A study of special features and abilities of several major artificial neural network models, their learning algorithms and engineering applications.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

ECE6070 - Digital Image Processing

General

College/School
Engineering

Course Title
Digital Image Processing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6070

Credit Hours

Credit Hours Min
3

Course Description
Image processing fundamentals, image transforms, image enhancement, image restoration, image encoding, and image segmentation

Requisites

Simple Requisites

> **Prerequisite:** Graduate standing.

ECE6110 - Microprocessors Systems

General

College/School
Engineering

Course Title
Microprocessors Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6110

Credit Hours

Credit Hours Min
3

Course Description
Design of microprocessor-based controllers from sensor to output, including hardware and software for control, data acquisition, computation, and I/O.

Requisites

Simple Requisites

> **Prerequisite:** ECE3120 Microcomputer Systems and ECE 4110, or equivalent.

ECE6120 - Digital Design/Hdwr Descr Lang

General

College/School
Engineering

Course Title
Digital Design/Hdwr Descr Lang

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6120

Credit Hours

Credit Hours Min
3

Course Description
Hardware description languages. Synthesis, simulation, and design for testability. Study of complex digital structures such as: CPU, memory, FIFO, serial and parallel interfaces, and digital controllers.

Requisites

Simple Requisites

> **Prerequisite:** ECE3120 Microcomputer Systems and ECE 4110, or equivalent.

ECE6130 - Computer Architecture

General

College/School
Engineering

Course Title
Computer Architecture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6130

Credit Hours

Credit Hours Min
3

Course Description
Analysis and design of computing systems. Performance issues, cache and virtual memory structures, and pipelined CPUs.

Requisites

Simple Requisites

> **Prerequisite:** ECE 4120 or equivalent.

ECE6140 - Parallel Processing Systems

General

College/School
Engineering

Course Title
Parallel Processing Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6140

Credit Hours

Credit Hours Min
3

Course Description
Parallel processing hardware and software concepts. Distributed processing. Interconnection networks. RISC/CISC models. Computer arithmetic implementation.

Requisites
Simple Requisites

> **Prerequisite:** ECE 4120 or equivalent.

ECE6150 - Digital VLSI Design

General
College/School
Engineering

Course Title	**Academic Level (Course Level)**
Digital VLSI Design	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
ECE	6150

Credit Hours
Credit Hours Min
3

Course Description
Hierarchical design of NMOS and MOS ASICs, MOS technology and fabrication. Standard cell and full-custom chip layout. FPGAs, FSMs, and iterative networks. Use of CAD tools.

Requisites
Simple Requisites

> **Prerequisite:** ECE 4130 or equivalent.

ECE6160 - Advanced Computer Networks

General
College/School
Engineering

Course Title	**Academic Level (Course Level)**
Advanced Computer Networks	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ECE	6160

Credit Hours
Credit Hours Min
3

Course Description
Computer network layered architectures, networking hardware, high-speed networks, storage networks, multimedia networks, wireless networks, and computer network management.

Requisites
Simple Requisites

> **Prerequisite:** CSC 4200 or equivalent, or consent of instructor.

ECE6170 - High Perf Embedded Sys Design

General
College/School
Engineering

Course Title	**Academic Level (Course Level)**
High Perf Embedded Sys Design	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
ECE	6170

Credit Hours
Credit Hours Min
3

Course Description
Hardware and software concepts in the design and analysis of embedded systems. Memory types and peripheral interfaces used in embedded systems. Performance analysis of embedded systems designs.

Requisites
Simple Requisites

> **Prerequisites:** ECE 4140.

ECE6200 - Linear Systems Analysis

General
College/School
Engineering

Course Title	**Academic Level (Course Level)**
Linear Systems Analysis	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ECE	6200

Credit Hours
Credit Hours Min
3

Course Description
State space analysis of multiple-input/multiple-output continuous and discrete-time systems; linear spaces; time-varying systems, controllability, observability, and stability.

Requisites
Simple Requisites

> **Prerequisite:** ECE 3210 or ME4810 Automatic Control.

ECE6220 - Fuzzy Logic Control Systems

General

College/School
Engineering

Course Title
Fuzzy Logic Control Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6220

Credit Hours

Credit Hours Min
3

Course Description
Fuzzy set theory. Analysis of fuzzy systems. Design and implementation of fuzzy logic controllers.

Requisites

Simple Requisites

> **Prerequisite:** ECE 4210 or equivalent.

ECE6230 - Linear Multivariable Sys Dsgn

General

College/School
Engineering

Course Title
Linear Multivariable Sys Dsgn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6230

Credit Hours

Credit Hours Min
3

Course Description
Optimal control; robust stability; loop shaping design using singular values; loop transfer recovery; survey of other multivariable system designs.

Requisites

Simple Requisites

> **Prerequisites:** ECE6200 Linear Systems Analysis, ECE6250 Random Signals & Systems.

ECE6240 - Robot Control Theory

General

College/School
Engineering

Course Title
Robot Control Theory

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6240

Credit Hours

Credit Hours Min
3

Course Description
Overview of robot models; servo and task-level control methods, including model-based, force, and adaptive control; trajectory planning; programming.

Requisites

Simple Requisites

> **Prerequisite:** ECE6200 Linear Systems Analysis

ECE6250 - Random Signals & Systems

General

College/School
Engineering

Course Title
Random Signals & Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
6250

Credit Hours

Credit Hours Min
3

Course Description
Probability models used in engineering; transformations of random variables; stochastic processes for engineering applications; linear least-square estimation; spectral analysis; Markoff systems.

Requisites

Simple Requisites

> **Prerequisite:** ECE3910 Prob/Random Variables in ECE or equivalent.

ECE6260 - Estimation Theory/System ID

General

College/School
Engineering

Course Title
Estimation Theory/System ID

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6260

Credit Hours

Credit Hours Min
3

Course Description
Model structures of stochastic systems. State estimation and Kalman filtering. Parameter estimation and system identification. Estimator performance, optimization, and implementation.

Requisites
Simple Requisites

> **Prerequisites:** ECE6200 Linear Systems Analysis (or consent of instructor), ECE6250 Random Signals & Systems

ECE6280 - Nonlinear Auto Control

General
College/School
Engineering

Course Title
Nonlinear Auto Control

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6280

Credit Hours
Credit Hours Min
3

Course Description
Singular points; limit cycles; perturbation techniques; describing functions; stability.

Requisites
Simple Requisites

> **Prerequisite:** ECE6200 Linear Systems Analysis

ECE6310 - Integrated Circuit Design

General
College/School
Engineering

Course Title
Integrated Circuit Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6310

Credit Hours
Credit Hours Min
3

Course Description
CMOS technology, modelling of devices, design of integrated circuit amplifiers, comparators, A/D converters, operational amplifiers, and oscillators.

Requisites
Simple Requisites

> **Prerequisite:** Consent of instructor.

ECE6510 - Electromag Field Theory I

General
College/School
Engineering

Course Title
Electromag Field Theory I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
6510

Credit Hours
Credit Hours Min
3

Course Description
Boundary value problems in electrostatics and magnetostatics; electric and magnetic multipole interactions; Maxwell's stress tensor; Maxwell's equations; EM wave propagation in vacuum and dielectric media.

Requisites
Simple Requisites

> **Prerequisite:** Graduate standing in EE.

ECE6520 - Electromag Field Theory II

General
College/School
Engineering

Course Title
Electromag Field Theory II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6520

Credit Hours
Credit Hours Min
3

Course Description
Wave propagation in conducting media; cavity resonators; guided waves; scattering theory; special relativity; covariant formulation of field equations; radiation theory for accelerated charges.

Requisites
Simple Requisites

> **Prerequisite:** ECE 6510.

ECE6530 - Quantum Engineering Theory I

General

College/School
Engineering

Course Title
Quantum Engineering Theory I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6530

Credit Hours

Credit Hours Min
3

Course Description
Introduction to quantum principles, Schrodinger theory, Dirac theory, time-independent perturbation theory, variation method of approximation.

Requisites

Simple Requisites

> **Prerequisite:** Graduate standing in EE.

ECE6540 - Quantum Engr Theory II

General

College/School
Engineering

Course Title
Quantum Engr Theory II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6540

Credit Hours

Credit Hours Min
3

Course Description
Application of time-independent perturbation theory and the variation method to the solution of various atomic and molecular systems; time-dependent perturbation theory; atomic radiation theory; spontaneous and stimulated emission of radiation; quantization of EM fields.

Requisites

Simple Requisites

> **Prerequisite:** ECE6530 Quantum Engineering Theory I

ECE6550 - Microwave Engineering

General

College/School
Engineering

Course Title
Microwave Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6550

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ECE6560 - Antennas

General

College/School
Engineering

Course Title
Antennas

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6560

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ECE6570 - Semicond Device Theory

General

College/School
Engineering

Course Title
Semicond Device Theory

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6570

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ECE6580 - Instr/Transducer Technology

General

College/School
Engineering

Course Title
Instr/Transducer Technology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6580

Credit Hours

Credit Hours Min
3

Course Description
A study of applications of instrumentation systems, transducer and sensor devices, signal conditioning and recording considerations with emphasis on parameters as temperature, velocity, acceleration, pressure, and others. Calibration techniques, error consideration, and new and current instrument developments will be presented.

Requisites

Simple Requisites

> **Prerequisite:** ECE4230 Comp-Based Msrmt/Control Sys or equivalent.

ECE6590 - Sp Top/Physical Phenomena

General

College/School
Engineering

Course Title
Sp Top/Physical Phenomena

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6590

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ECE6600 - Computer Meth/Pwr Sys Analysis

General

College/School
Engineering

Course Title
Computer Meth/Pwr Sys Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6600

Credit Hours

Credit Hours Min
3

Course Description
Power system matrices; fault and contingency analyses, power flow and optimal dispatch methods, state estimation and stochastic methods, automatic generation control and transient stability analyses.

Requisites

Simple Requisites

> **Prerequisite:** ECE 4620.

ECE6610 - Electromagnetic Trans/Powr Sys

General

College/School
Engineering

Course Title
Electromagnetic Trans/Powr Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6610

Credit Hours

Credit Hours Min
3

Course Description
Lightning and switching surge phenomena; response of power system components to electromagnetic transients; protection of power systems against electromagnetic transients.

Requisites

Simple Requisites

> **Prerequisite:** ECE 4610.

ECE6620 - Adv Electric Machinery

General

College/School
Engineering

Course Title
Adv Electric Machinery

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
6620

Credit Hours

Credit Hours Min
3

Course Description
Basic principles of energy conversion; reference frame theory; induction machines; synchronous machines; permanent magnet machines and stability analysis.

Requisites

Simple Requisites

> **Prerequisite:** ECE 3610.

ECE6630 - Power Sys Protect-Fault Cur

General

College/School
Engineering

Course Title
Power Sys Protect-Fault Cur

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6630

Credit Hours

Credit Hours Min
3

Course Description
Fault currents; basic principles and applications of protective relays; theories of circuit interruption; theories and practices of circuit breakers; standards.

Requisites

Simple Requisites

> **Prerequisite:** ECE 4620.

ECE6640 - Rnwbl Energy/Distr Generation

General

College/School
Engineering

Course Title
Rnwbl Energy/Distr Generation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6640

Credit Hours

Credit Hours Min
3

Course Description
Principles of renewable energy and distributed generation; operation of distributed energy resources (DER) - photovoltaics, wind, fuel cells, etc; hybrid power generational technology; distributed generation control; economics of DER.

Requisites

Simple Requisites

> **Prerequisite:** ECE 4610.

ECE6650 - Design-Control/Power El Sys

General

College/School
Engineering

Course Title
Design-Control/Power El Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6650

Credit Hours

Credit Hours Min
3

Course Description
Phase controlled converter, voltage and current inverters; inverter design and analysis, electric motor control.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

ECE6660 - Electric Power Transmission

General

College/School
Engineering

Course Title
Electric Power Transmission

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6660

Credit Hours

Credit Hours Min
3

Course Description
Introduction to power transmission; effects of imperfect earth on electrical transmission parameters; conductor-surface voltage gradients; corona, radio and TV interferences; field effects of overhead lines; line compensation; insulation design criteria; high-voltage dc power transmission.

Requisites
Simple Requisites

> **Prerequisite:** ECE 4610.

ECE6670 - Pwr Flow Cntrl-Mdrn Pwr Sys

General

College/School
Engineering

Course Title
Pwr Flow Cntrl-Mdrn Pwr Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
6670

Credit Hours
Credit Hours Min
3

Course Description
Flexible AC transmission system, static VAR compensator, unified power flow controller, and enhancement of dynamic stability.

Requisites
Simple Requisites

> **Prerequisite:** ECE 4610 or equivalent.

ECE6710 - Communications Sys Theory

General

College/School
Engineering

Course Title
Communications Sys Theory

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6710

Credit Hours
Credit Hours Min
3

Course Description
Introduction to systems, theories and inherent problems of modern digital communication systems.

Requisites
Simple Requisites

> **Prerequisite:** ECE 4710 or consent of instructor.

ECE6730 - Info Theory & Reliable Comm

General

College/School
Engineering

Course Title
Info Theory & Reliable Comm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6730

Credit Hours
Credit Hours Min
3

Course Description
A measure of information, theory of source and channel coding, rate distortion, and channel capacity.

Requisites
Simple Requisites

> **Prerequisites:** ECE6250 Random Signals & Systems, ECE 6710.

ECE6740 - Telecommunications Networks

General

College/School
Engineering

Course Title
Telecommunications Networks

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6740

Credit Hours
Credit Hours Min
3

Course Description
Packet, circuit and cell switching, network protocols, network topologies, traffic control and routing, source characteristics, quality of service, network modeling and design.

Requisites
Simple Requisites

> **Prerequisites:** ECE 3710, ECE3910 Prob/Random Variables in ECE or consent of instructor.

ECE6750 - Wireless Communication Sys

General

College/School
Engineering

Course Title
Wireless Communication Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
6750

Credit Hours

Credit Hours Min
3

Course Description
Modern wireless systems, including cellular design, propagation modeling, multiple access, and signal process techniques.

Requisites

Simple Requisites

> **Prerequisite:** ECE 4710 or equivalent.

ECE6760 - Optical Networks

General

College/School
Engineering

Course Title
Optical Networks

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6760

Credit Hours

Credit Hours Min
3

Course Description
Optical enabling technologies, optical network architectures, long-haul core switching networks, optical network provisioning algorithms, optical network survivability.

Requisites

Simple Requisites

> **Prerequisite:** CSC 4200 or equivalent and consent of instructor.

ECE6900 - Special Problems in EE

General

College/School
Engineering

Course Title
Special Problems in EE

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6900

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Investigation of a topic pertaining to the area of electrical engineering which is compatible with the student's prerequisites, interest, and ability.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

ECE6910 - Intro to Graduate Research

General

College/School
Engineering

Course Title
Intro to Graduate Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6910

Credit Hours

Credit Hours Min
1

Course Description
Research tools and written and oral presentations in electrical and computer engineering area; graduate thesis; ethics in research.

Requisites

Simple Requisites

> **Prerequisite:** Graduate student standing.

ECE6970 - Non-Thesis Design Project

General

College/School
Engineering

Course Title
Non-Thesis Design Project

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
6970

Credit Hours

Credit Hours Min
3

Course Description
An independent design project that may be implemented either in software or/and hardware. A formal written project report and oral presentation will be given to the student's advisory committee.

Requisites
Simple Requisites

Prerequisite: Consent of instructor, enrolled in Non-thesis MS option.

ECE6980 - Directed Study

General
College/School
Engineering

Course Title
Directed Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6980

Credit Hours
Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

ECE6990 - Research & Thesis

General
College/School
Engineering

Course Title
Research & Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
6990

Credit Hours
Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

ECE7010 - Multidim Digital Sig Process

General
College/School
Engineering

Course Title
Multidim Digital Sig Process

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7010

Credit Hours
Credit Hours Min
3

Course Description
Multidimensional signals, transforms. Design and implementation of multidimensional digital filters. Applications.

Requisites
Simple Requisites

Prerequisite: ECE6050 Digital Filters or equivalent.

ECE7040 - Modern Spectral Estimation

General
College/School
Engineering

Course Title
Modern Spectral Estimation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
7040

Credit Hours
Credit Hours Min
3

Course Description
Prerequisites: ECE 6040, ECE 6250. Introduction to modern spectral estimation methods and their applications to speech processing and others. Also various least squared error estimation techniques are included.

ECE7110 - Advanced Digital Design

General
College/School
Engineering

Course Title
Advanced Digital Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ECE

Course Number
7110

Credit Hours
Credit Hours Min
3

Course Description
Advanced design techniques for digital systems including computer-aided design and VLSI.

Requisites
Simple Requisites

Prerequisite: Consent of instructor.

ECE7130 - Adv Computer Architecture

General

College/School
Engineering

Course Title
Adv Computer Architecture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7130

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: ECE 6130. Modern high-performance computer structures, memory hierarchy, networked storage systems, multiprocessors and thread-level parallelism, Reliability, Availability and Scalability (RAS) considerations for computer designs.

ECE7170 - Adv Embedded Systems

General

College/School
Engineering

Course Title
Adv Embedded Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7170

Credit Hours

Credit Hours Min
3

Course Description
Advanced topics in the design of FPGA-based embedded systems including data stream management, embedded systems for multi-media, real-time embedded systems, and embedded system security.

Requisites

Simple Requisites

> **Prerequisite:** ECE 6170.

ECE7240 - Nonlinear Filtering

General

College/School
Engineering

Course Title
Nonlinear Filtering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7240

Credit Hours

Credit Hours Min
3

Course Description
Stochastic processes. Convergence of random sequences. Mean square calculus. Stochastic differential equations. Stochastic calculus. Kolmogorov's equations. Nonlinear filtering. Approximate nonlinear filters.

Requisites

Simple Requisites

> **Prerequisite:** ECE6260 Estimation Theory/System ID

ECE7250 - Advanced Systems Theory I

General

College/School
Engineering

Course Title
Advanced Systems Theory I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7250

Credit Hours

Credit Hours Min
3

Course Description
Review of mathematical and dynamic programming; decomposition and coordination; hierarchical control of large scale systems; decentralized control; decentralized estimation.

Requisites

Simple Requisites

> **Prerequisites:** ECE6230 Linear Multivariable Sys Dsgn, ECE6260 Estimation Theory/System ID.

ECE7260 - Advanced Systems Theory II

General

College/School
Engineering

Course Title
Advanced Systems Theory II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7260

Credit Hours

Credit Hours Min
3

Course Description
H-infinity control; robust stability; robust performance; computing H-infinity norm; H-infinity controller structure; linear fractional transformation.

Requisites

Simple Requisites

> **Prerequisites:** ECE6230 Linear Multivariable Sys Dsgn, MATH6010 Functional Analysis I, MATH6020 Functional Analysis II.

ECE7270 - Adaptive Control

General

College/School
Engineering

Course Title
Adaptive Control

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7270

Credit Hours

Credit Hours Min
3

Course Description
Model reference adaptive control, model-following, self-tuning controllers, adaptive control of nonlinear systems, adaptive state observers, parametric identification via model-reference adaptive systems.

Requisites

Simple Requisites

> **Prerequisites:** ECE6200 Linear Systems Analysis, ECE6260 Estimation Theory/System ID.

ECE7280 - Digital Control

General

College/School
Engineering

Course Title
Digital Control

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7280

Credit Hours

Credit Hours Min
3

Course Description
Sampled data systems with random inputs, multirate sampling, system response between sampling points, choice of sampling interval, quantization effects, implementation via microprocessors and distributed computer networks, real-time operating system.

Requisites

Simple Requisites

> **Prerequisites:** ECE6200 Linear Systems Analysis, ECE6250 Random Signals & Systems.

ECE7290 - Stochastic Optimal Control

General

College/School
Engineering

Course Title
Stochastic Optimal Control

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7290

Credit Hours

Credit Hours Min
3

Course Description
Controlled Markoff chains; separation theorem; the linear-quadratic-Gaussian problem; dual control; computational methods.

Requisites

Simple Requisites

> **Prerequisites:** ECE6230 Linear Multivariable Sys Dsgn, ECE6260 Estimation Theory/System ID.

ECE7510 - Plasma Engineering

General

College/School
Engineering

Course Title
Plasma Engineering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7510

Credit Hours

Credit Hours Min
3

Course Description
Advanced treatment of the principles governing plasma ensembles, from weakly ionized plasmas to fully ionized plasmas.

Requisites

Simple Requisites

> **Prerequisite:** ECE 6510 or equivalent.

ECE7520 - Plasma Engineering II

General

College/School
Engineering

Course Title
Plasma Engineering II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7520

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to explore current topics of interest in the theory, design, and operation of plasma devices, and the analysis of plasma phenomena.

Requisites

Simple Requisites

> **Prerequisite:** ECE7510 Plasma Engineering.

ECE7530 - Quantum Electronics I

General

College/School
Engineering

Course Title
Quantum Electronics I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7530

Credit Hours

Credit Hours Min
3

Course Description
Review of quantum principles; interaction of radiation with atomic systems; laser theory.

Requisites

Simple Requisites

> **Prerequisite:** ECE6540 Quantum Engr Theory II

ECE7540 - Quantum Electronics II

General

College/School
Engineering

Course Title
Quantum Electronics II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7540

Credit Hours

Credit Hours Min
3

Course Description
Laser systems and pumping mechanisms; nonlinear optics; stimulated Raman emission; stimulated Brillouin scattering.

Requisites

Simple Requisites

> **Prerequisite:** ECE7530 Quantum Electronics I

ECE7600 - Power System Control

General

College/School
Engineering

Course Title
Power System Control

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7600

Credit Hours

Credit Hours Min
3

Course Description
Machine voltage control; system voltage control; automatic generation control and inter-area power transfer; stability analysis; analysis and design of power system stabilizers and energy control centers.

Requisites

Simple Requisites

> **Prerequisite:** ECE6600 Computer Meth/Pwr Sys Analysis or equivalent.

ECE7610 - Des/HIgh-Volt Pwer Trans Sys

General

College/School
Engineering

Course Title
Des/HIgh-Volt Pwer Trans Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7610

Credit Hours

Credit Hours Min
3

Course Description
Design of transmission lines; selection of voltage level, insulation design criteria; design of high voltage dc transmission lines; bulk power transmission by underground cables; socioeconomic issues of high voltage power transmission.

Requisites

Simple Requisites

> Prerequisite: ECE6660 Electric Power Transmission or equivalent.

ECE7620 - Adjustable Speed Drives

General

College/School
Engineering

Course Title
Adjustable Speed Drives

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7620

Credit Hours

Credit Hours Min
3

Course Description
Principles of adjustable speed motor drives; direct current motor drives; induction motor drives, field orientation control; adjustable speed synchronous motor drives.

Requisites

Simple Requisites

> Prerequisites: ECE 6620, ECE6650 Design-Control/Power El Sys

ECE7630 - High Voltage Techniques

General

College/School
Engineering

Course Title
High Voltage Techniques

Academic Level (Course Level)
Doctoral

Course Subject Code
ECE

Course Number
7630

Credit Hours

Credit Hours Min
3

Course Description
Generation and Measurement of AC, DC, and Impluse Voltages; Understanding of and prevention of Electrical Breakdown of an Insulating Media.

ECE7640 - Distributed Energy Systems

General

College/School
Engineering

Course Title
Distributed Energy Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7640

Credit Hours

Credit Hours Min
3

Course Description
Instantaneous power theory, active and passive filters, distributed energy resources, modeling and control, interfaces, protection and economics of distributed generation systems.

Requisites

Simple Requisites

> Prerequisite: ECE 6640.

ECE7650 - Design and Finite Element Analysis of Electric Machines

General

College/School
Engineering

Course Title
Dsgn/Fnte Elmnt Anlys/Elc Mch

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7650

Credit Hours

Credit Hours Min
3

Course Description
Dynamic electromagnetic circuit analysis, calculation of inductances, methods for designing and optimization of electric machines, finite element analysis methods.

Requisites

Simple Requisites

> Prerequisite: ECE 6620 .

ECE7660 - Electrical Pwr Distr Sys

General

College/School
Engineering

Course Title
Electrical Pwr Distr Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ECE

Course Number
7660

Credit Hours

Credit Hours Min
3

Course Description

Design of electrical distribution system protection and control. Reconfiguration, capacitor placement, and load management strategies. Analysis and compensation of harmonic loads. Economic decisions.

Requisites

Simple Requisites

> **Prerequisite:** ECE6600 Computer Meth/Pwr Sys Analysis

ECE7750 - Advanced Wireless Systems

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Advanced Wireless Systems	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ECE	7750

Credit Hours

Credit Hours Min
3

Course Description

Advanced modulations for fading channels, multiple-input multiple out (MIMO), space-time coding, ultra-wideband communications, cognitive radio, and wireless sensor networking.

Requisites

Simple Requisites

> **Prerequisite:** ECE6750 or equivalent.

ECE7970 - Selected Topics

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Selected Topics	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ECE	7970

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	4

Credit Hours Operator
TO

ECE7980 - Directed Study

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Directed Study	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ECE	7980

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	4

Credit Hours Operator
TO

ECE7990 - Research & Dissertation

General

College/School
Engineering

Course Title	**Academic Level (Course Level)**
Research & Dissertation	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ECE	7990

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	9

Credit Hours Operator
TO

English Department

The Master of Arts degree program in the Department of English prepares graduates for success in any further graduate and professional education which might require superior analytical and communication skills. It prepares them for Ph.D. programs in English by increasing their knowledge of literary history and improving their skills in writing, literary analysis, and research. Graduates can become effective high-school or college-level teachers by improving their knowledge of writing pedagogy and theory. They will also be prepared for careers outside the academic world wherever superior analytical and communication skills and knowledge of literary and cultural traditions are essential.

Concentrations

Literature: This concentration is designed for graduate students wishing to further develop their abilities as literary scholars and critics, in preparation for graduate school and/or careers requiring high-level interpretive and written communication skills.

Creative Writing: This concentration is a great option for graduate students wishing to develop their abilities as creative writers in poetry, fiction, and/or essay/memoir. Graduates in this degree concentration will develop exceptional creative and communication skills, applicable to a variety of career uses, as well as for artistic development.

Professional and Technical Communication: This concentration was created for graduate students who are preparing for careers within the field of Professional and Technical Communication. Students will have opportunities to work with other disciplines (such as Engineering, Business, Nursing, and Law), both on campus and off campus, that require facility with technical writing and effective communication skills in business environments. Additionally, this concentration provides opportunities for students with various backgrounds who are seeking advanced skills in grant writing, technical writing, or other advanced Professional and Technical Communication proficiency's.

Fast Track

The Fast Track program is designed to enable TTU undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University. (Students who reach the number of credits required for their undergraduate degrees can also take additional courses for graduate credit before graduation, thus potentially accelerating their M.A. program even more.) To find out more visit the concentration pages under Programs.

Programs

ENG-CW - English, Creative Writing Concentration, M.A.

Program Overview

Program Long Title
English, Creative Writing Concentration, M.A.

College/School   **Department(s)**
Arts and Sciences   English

Catalog Full Description
The Master of Arts degree program in the Department of English prepares graduates for success in any further graduate and professional education which might require superior analytical and communication skills. It prepares them for Ph.D. programs in English by increasing their knowledge of literary history and improving their skills in writing, literary analysis, and research. Graduates can become effective high-school or college-level teachers by improving their knowledge of writing pedagogy and theory. They will also be prepared for careers outside the academic world wherever superior analytical and communication skills and knowledge of literary and cultural traditions are essential.

Creative Writing: This concentration is a great option for graduate students wishing to develop their abilities as creative writers in poetry, fiction, and/or essay/memoir. Graduates in this degree concentration will develop exceptional creative and communication skills, applicable to a variety of career uses, as well as for artistic development. The Creative Writing concentration is only offered as a thesis option.

Thesis Option

- **Core Required Courses:** 12 hours
- **Concentration Content Courses:** 12 hours
- **Research and Thesis Requirement:** 6 hours
- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

Departmental Admission Requirements

1. All applicants submit a statement of purpose. The statement of purpose should be no longer than two pages and include the following information:

   - Description of the skills and qualities the candidate brings to the program
   - Candidates motivation for obtaining an MA in English
   - Candidates long-term goals in seeking an MA in English and how the MA in English contributes to the achievement of those goals

- If the applicant is applying for a Teaching Assistantship, the candidate should us this statement to address the candidate's teaching interests and how the teaching assistantship contributes to the applicant's overall goals.

2. Provide a Creative Writing Sample, 10 pages of poetry or 15 pages of prose.

Evaluation Criteria

The Graduate Committee will evaluate each application using the following criteria:

Transcript; QPA in all English 2000+ level courses	
2.7 - 2.999	10 Pts.
3.0 - 3.499	20 Pts.
3.5 - 4.0	30 Pts.
Statement of Purpose	
7-8	5 Pts.
9-10	10 Pts.
11-12	20 Pts.
13-15	30 Pts.
Writing Sample Score	
7-8	5 Pts.
9-10	10 Pts.
11-12	20 Pts.
13-15	30 Pts.

The Graduate Committee shall admit to the program those students whose applications (based on the Evaluation Criteria above) either:

- earn a minimum of 10 points each in the Transcript, Writing Sample, and statement of purpose
- OR have a total score of 35 points or higher regardless of their distribution.

For full consideration, applicants for fall admission must submit all application materials by May 1 and applicants for spring admission must submit all materials by November 1. We encourage early application: graduate teaching assistantships are limited in number and will be awarded on a competitive basis.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The Creative Writing concentration is only offered as a thesis option. An oral defense is required for all concentrations.

Thesis Option

- **Core Required Courses:** 12 hours

- **Concentration Content Courses:** 12 hours

- **Research and Thesis Requirement:** 6 hours

- **Total Degree Requirements:** 30 hours

Thesis Option
Type
Completion Requirement

Core Required Courses (12 hours)

Complete all the following requirements:

- ENGL6000 Intro-Graduate Studies Intro-Graduate Studies

- PC6060 Digital Design Digital Design

- ENGL6740 Publishing Theory and Practice Publishing Theory and Practice

- One 6000-level Literature course

  When necessary, a committee of the instructor of record, the department chair, and the graduate advisor will determine how a course fits into the existing curriculum.

Concentration Content Courses (12 hours)

Complete three courses from among the following (must take 5000-level in dual-listed courses).

- ENGL6710 Creative Writing Workshop Creative Writing Workshop 3 credit hours

- ENGL6720 Writing Craft Writing Craft 3 credit hours

- ENGL6850 English Internship Internship 3 credit hours OR any PC/ENGL 5000/6000-level course 3credit hours

- Students with assistantships take ENGL6010 Teaching Composition as part of the concentration courses. Students who do not have an assistantship take 3 hours of any PC/ENGL 5000/6000-level courses.

Research and Thesis Requirement (6 hours):

Student may choose to complete 6 hours of ENGL6990 Research & Thesis OR complete ENGL6005 L3kfjnv3gLNyzjVMIAOi - Missing course, 3 hours, and ENGL6990 Research & Thesis, 3 hours.

Additional Comments:

Course Repeatability Options
Type
Completion Requirement

Previously Taken as an Undergraduate

The following courses may be taken at the 5000 level by a graduate student who has previously taken the course as an undergraduate, provided the content is different. Applicable courses include:

Complete ANY of the following Courses:
- ENGL5210 - 18th Century British Lit
- ENGL5250 - Post-Modern Literatures/Engl
- ENGL5310 - Early American Literature
- ENGL5330 - Modern American Literature
- ENGL5430 - Creative Writing: Fiction
- ENGL5440 - Creative Writing: Essay
- ENGL5450 - Creative Writing: Poetry
- ENGL5610 - Novel
- ENGL5630 - Literary Criticism and Theory
- ENGL5650 - The Graphic Novel
- ENGL5712 - African American Literature
- ENGL5713 - Native American Literature
- ENGL5931 - Lit and the Environment
- ENGL5970 - Professional Comm II
- PC5850 - Internship
- PC5940 - Technical Editing
- PC5970 - Professional Comm II
- PC5990 - Bus/Grant Proposal Writing

Repeatable by Graduate Student

Courses may be repeated one time by a graduate student, provided the content is different. Applicable courses include:

Complete ANY of the following Courses:
- ENGL6020 - Seminar in Early British Lit
- ENGL6080 - Sem in British Lit/1500-1650
- ENGL6150 - Sem in British Lit/1650-1800
- ENGL6400 - Special Topics
- ENGL6520 - Sem in Early American Lit
- ENGL6590 - Sem in 19th Cent American Lit
- ENGL6640 - Sem/20th & 21st Cent Amer Lit
- PC6030 - Core Iss/Rsrch-Prof Tech Comm
- PC6050 - The Rhetoric of STEM Prof

Additional Comments:

No Requirement Level

Additional Information

Information And Additional Notes

The English Master of Art program offers a limited number of assistantships on a competitive basis. Assistantship provides tuition waiver and a stipend of $10,400 paid over 9 months (Fall and Spring semester). The required responsibilities if you were granted the assistantship include 20hrs of work each week on campus in-person (observing, teaching, writing center tutoring, etc) and attendance of classes in-person (unless extenuating circumstances or ADA accommodations). Three references are required during the application process.

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast Track program is designed to enable undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech

University. (Students who reach the number of credits required for their undergraduate degrees can also take additional courses for graduate credit before graduation, thus potentially accelerating their M.A. program even more.)

The minimum admission requirements for participating in the English Fast Track Program are:

- Enrollment as a TTU undergraduate English major with at least 90 hours of completed courses within their program of study;

- Completion of ENGL 3000;

- Overall GPA of 3.25 or better; GPA in 3000-level and above English coursework of 3.5 or better;

- Recommendation from the students undergraduate advisor;

- Course approval from course professor and graduate faculty advisor;

- In addition to the requirements for admission to the Fast Track BA/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

ENG-LITT - English, Literature Concentration, M.A.

Program Overview

Program Long Title
English, Literature Concentration, M.A.

College/School
Arts and Sciences

Department(s)
English

Catalog Full Description
The Master of Arts degree program in the Department of English prepares graduates for success in any further graduate and professional education which might require superior analytical and communication skills. It prepares them for Ph.D. programs in English by increasing their knowledge of literary history and improving their skills in writing, literary analysis, and research. Graduates can become effective high-school or college-level teachers by improving their knowledge of writing pedagogy and theory. They will also be prepared for careers outside the academic world wherever superior analytical and communication skills and knowledge of literary and cultural traditions are essential.

Literature: This concentration is designed for graduate students wishing to further develop their abilities as literary scholars and critics, in preparation for graduate school and/or careers requiring high-level interpretive and written communication skills.

The Literature concentration provides both a Thesis and Non-Thesis option for our students. The program consists of core courses, concentration content courses, and a research component as summarized below:

Thesis Option

- **Core Coursework:** 12 hours

- **Concentration Content Coursework:** 12 hours

- **Research and Thesis:** 6 hours

- **Total Degree Requirements:** 30 hours

Non-Thesis Option

- **Core Coursework:** 12 hours

- **Concentration Content Coursework:** 15 hours

- **Non-Thesis Requirement:** 3 hours

- **Total Degree Requirements:** 30 hours

Admission Requirements

Admission Requirements

- All applicants submit a statement of purpose. The statement of purpose should be no longer than two pages and include the following information:

    ◦ Description of the skills and qualities the candidate brings to the program

    ◦ Candidate's motivation for obtaining an MA in English

    ◦ Candidate's long-term goals in seeking an MA in English and how the MA in English contributes to the achievement of those goals

    If the applicant is applying for a Teaching Assistantship, the candidate should us this statement to address the candidate's teaching interests and how the teaching assistantship contributes to the applicant's overall goals.

- Provide a writing sample (8 page minimum); a critical essay appropriate for submission in an upper-division undergraduate class.

Evaluation Criteria

The Graduate Committee will evaluate each application using the following criteria:

Transcript; QPA in all English2000+ level courses	
2.7 - 2.999	10 Pts.
3.0 - 3.499	20 Pts.
3.5 - 4.0	30 Pts.
Statement of Purpose	
7-8	5 Pts.
9-10	10 Pts.
11-12	20 Pts.
13-15	30 Pts.
Writing Sample Score:	
7-8	5 Pts.
9-10	10 Pts.
11-12	20 Pts.
13-15	30 Pts.

The Graduate Committee shall admit to the program those students whose applications (based on the Evaluation Criteria above) either:

- earn a minimum of 10 points each in the Transcript, Writing Sample, and statement of purpose

- OR have a total score of 35 points or higher regardless of their distribution.

For full consideration, applicants for fall admission must submit all application materials by May 1 and applicants for spring admission must submit all materials by November 1. We encourage early application: graduate teaching assistantships are limited in number and will be awarded on a competitive basis.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Literature concentration provides both a Thesis and Non-Thesis option for our students. An oral defense is required for all concentrations. The program consists of core courses, concentration content courses, and a research component as summarized below:

Thesis Option

- **Core Coursework:** 12 hours
- **Concentration Content Coursework:** 12 hours
- **Research and Thesis:** 6 hours
- **Total Degree Requirements:** 30 hours

Non-Thesis Option

- **Core Coursework:** 12 hours
- **Concentration Content Coursework:** 15 hours
- **Non-Thesis Requirement:** 3 hours
- **Total Degree Requirements:** 30 hours

Core Requirements

Type
Completion Requirement

Core Courses (12 hours)

Complete ALL the following:

- ENGL6000 Intro-Graduate Studies Introduction to Graduate Studies
- ENGL6740 Publishing Theory and Practice Publishing Theory and Practice
- PC6060 Digital Design Digital Design
- One 6000-level ENGL literature course

Additional Comments:

Non-Thesis Degree Requirements

Type
Completion Requirement

Non-Thesis Option

Concentration Content is to consist of 15 credit hours of 6000-level ENGL literature courses. Students in the Literature Concentration can take no more than one (1) literature course at the 5000 level.

Students with assistantships take ENGL6010 Teaching Composition as part of the concentration courses.

Complete ALL of the following Courses:
- ENGL6890 - Directed Research

*When necessary, a committee of the instructor of record, the department chair, and the graduate advisor will determine how a course fits into the existing curriculum.

Non-Thesis Non-Course Requirement

Portfolio

The student will be responsible for compiling a three-part portfolio, to be designed in conjunction with and reviewed by their faculty committee. Students will orally defend their portfolios to their committee, and faculty committee members will then evaluate the questions and defense on a pass/fail basis. A "pass" for the defense requires a simple majority of the committee.

Portfolio Components

1. Project Proposal/Prospectus which provides background on the projects, theoretical influences [drawn from courses] on their proposed redevelopment, a description of the specific projects included, and a timeline for completion.

2. Three projects chosen from a list provided from other graduate courses that have been redeveloped.

3. A Critical Reflection. This reflection integrates sources/theoretical background from previous courses as well as additional sources.

Additional Comments:

Thesis Degree Requirement

Type
Completion Requirement

Thesis Option

Concentration Content is to consist of 12 credit hours of 6000-level ENGL literature courses. Students in the Literature Concentration can take no more than one (1) literature course at the 5000 level.

Students with assistantships take ENGL6010 Teaching Composition as part of the concentration courses.

Student may choose to complete 6 hours of ENGL6990 OR complete ENGL6005, 3 hours, and ENGL6990, 3 hours

Additional Comments:

Course Repeatability Options

Type
Completion Requirement

Previously Taken as an Undergraduate

Courses may be repeated one time by a graduate student who has previously taken it as an undergraduate, provided the content is different. Applicable courses include:

Complete ANY of the following Courses:
- ENGL5210 - 18th Century British Lit
- ENGL5250 - Post-Modern Literatures/Engl
- ENGL5310 - Early American Literature
- ENGL5320 - 19th Century American Lit
- ENGL5330 - Modern American Literature
- ENGL5610 - Novel
- ENGL5630 - Literary Criticism and Theory
- ENGL5650 - The Graphic Novel
- ENGL5712 - African American Literature
- ENGL5713 - Native American Literature
- ENGL5931 - Lit and the Environment
- ENGL5970 - Professional Comm II
- PC5850 - Internship
- PC5940 - Technical Editing

- PC5970 - Professional Comm II
- PC5990 - Bus/Grant Proposal Writing

Repeatable by Graduate Student

Courses may be repeated one time by a graduate student, provided the content is different. Applicable courses include:

Complete ANY of the following Courses:
- ENGL6020 - Seminar in Early British Lit
- ENGL6080 - Sem in British Lit/1500-1650
- ENGL6150 - Sem in British Lit/1650-1800
- ENGL6400 - Special Topics
- ENGL6520 - Sem in Early American Lit
- ENGL6590 - Sem in 19th Cent American Lit
- ENGL6640 - Sem/20th & 21st Cent Amer Lit
- PC6030 - Core Iss/Rsrch-Prof Tech Comm
- PC6050 - The Rhetoric of STEM Prof

Additional Comments:

No Requirement Level

Additional Information

Information And Additional Notes

The English Master of Arts program offers a limited number of assistantships on a competitive basis. Assistantship provides tuition waiver and a stipend of $10,400 paid over 9 months (Fall and Spring semester). The required responsibilities if you were granted the assistantship include 20hrs of work each week on campus in-person (observing, teaching, writing center tutoring, etc.) and attendance of classes in-person (unless extenuating circumstances or ADA accommodations). Three references are required during the application process.

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The Fast Track program is designed to enable undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University. (Students who reach the number of credits required for their undergraduate degrees can also take additional courses for graduate credit before graduation, thus potentially accelerating their M.A. program even more.)

The minimum admission requirements for participating in the English Fast Track Program are:

- Enrollment as a TTU undergraduate English major with at least 90 hours of completed courses within their program of study;

- Completion of ENGL 3000;

- Overall GPA of 3.25 or better; GPA in 3000-level and above English coursework of 3.5 or better;

- Recommendation from the students undergraduate advisor;

- Course approval from course professor and graduate faculty advisor;

- In addition to the requirements for admission to the Fast Track BA/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

ENG-PTC - English, Professional and Technical Communication Concentration, M.A.

Program Overview

Program Long Title
English, Professional and Technical Communication Concentration, M.A.

College/School
Arts and Sciences

Department(s)
English

Catalog Full Description

Departmental Overview

The Master of Arts degree program in the Department of English prepares graduates for success in any further graduate and professional education which might require superior analytical and communication skills. It prepares them for Ph.D. programs in English by increasing their knowledge of literary history and improving their skills in writing, literary analysis, and research. Graduates can become effective high-school or college-level teachers by improving their knowledge of writing pedagogy and theory. They will also be prepared for careers outside the academic world wherever superior analytical and communication skills and knowledge of literary and cultural traditions are essential.

Professional and Technical Communication: This concentration was created for graduate students who are preparing for careers within the field of Professional and Technical Communication. Students will have opportunities to work with other disciplines (such as Engineering, Business, Nursing, and Law), both on campus and off campus, that require facility with technical writing and effective communication skills in business environments. Additionally, this concentration provides opportunities for students with various backgrounds who are seeking advanced skills in grant writing, technical writing, or other advanced Professional and Technical Communication proficiencies.

The Professional and Technical Communication concentration is comprised of three components: core courses, concentration courses, and a research component. The program is available only as Non-Thesis (30 hours).

- Core Course Requirements: 12 hours
- Concentration Course Requirements: 12 hours
- Non-Thesis Research Requirement: 6 hours
- Total Degree Requirements: 30 hours

Admission Requirements

Admission Requirements

- All applicants submit a writing sample. The writing sample should be a critical essay appropriate for submission in an upper-division undergraduate class and a minimum of 8 pages

- All applicants submit a statement of purpose. The statement of purpose should be no longer than two pages and include the following information:

  ◦ Description of the skills and qualities the candidate brings to the program

  ◦ Candidates motivation for obtaining an MA in English

  ◦ Candidates long-term goals in seeking an MA in English and how the MA in English contributes to the achievement of those goals

- If the applicant is applying for a Teaching Assistantship, the candidate should us this statement to address the candidate's teaching interests and how the teaching assistantship contributes to the applicant's overall goals.

Evaluation Criteria

The Graduate Committee will evaluate each application using the following criteria:

Transcript; QPA in all English 2000+level courses OR QPA in major	
2.7 - 2.999	10 Pts.
3.0 - 3.499	20 Pts.
3.5 - 4.0	30 Pts.
Statement of Purpose	
7-8	5 Pts.
9-10	10 Pts.
11-12	20 Pts.
13-15	30 Pts.
Writing Sample Score:	
7-8	5 Pts.
9-10	10 Pts.
11-12	20 Pts.
13-15	30 Pts.

The Graduate Committee shall admit to the program those students whose applications (based on the Evaluation Criteria above) either:

- earn a minimum of 10 points each in the Transcript, Writing Sample, and statement of purpose
- OR have a total score of 35 points or higher regardless of their distribution.

For full consideration, applicants for fall admission must submit all application materials by May 1 and applicants for spring admission must submit all materials by November 1. We encourage early application: graduate teaching assistantships are limited in number and will be awarded on a competitive basis.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The Professional and Technical Communication concentration is comprised of three components: core courses, concentration courses, and a research component. The program is available only as Non-Thesis (30 hours).

- Core Course Requirements: 12 hours
- Concentration Course Requirements: 12 hours
- Non-Thesis Research Requirement: 6 hours
- Total Degree Requirements: 30 hours

Course Requirements
Type
Completion Requirement

Core Courses (12 hours)

Complete all of the following:

- PC6060 Digital Design Digital Design
- ENGL6000 Intro-Graduate Studies Intro-Graduate Studies
- ENGL6740 Publishing Theory and Practice Publishing Theory and Practice
- One 6000-level Literature course

Concentration Content Courses (12 hours)

Complete ALL of the following Courses:
- PC6030 - Core Iss/Rsrch-Prof Tech Comm
- PC6040 - Sp Top: PTC and Industry
- PC6050 - The Rhetoric of STEM Prof
- ENGL6010 Teaching Composition will be taken if on assistantship; otherwise, one graduate-level elective, 3 credit hours, to be selected by student and advisor. (PC/ENGL5XXX-6XXX)

*PC6040 and PC6050 may be taken twice, provided the content is different.

For students who have taken any of the PC courses at the 4000-level, two 5000-level ENGL courses from the list below may be substituted for two 5000-level PC courses listed.

- ENGL5411 Writing in the Professions Writing in the Professions
- ENGL5421 Forms of Arg-Pers/Theo-Prac Forms of Arg-Pers/Theo-Prac
- ENGL5511 Intro/Descriptive Linguistics Intro/Descriptive Linguistics
- ENGL5521 History-English Language History-English Language
- ENGL5531 Grammar and Language Grammar and Language
- ENGL5541 Topics in Linguistics/Language Topics in Linguistics/Language
- ENGL5551 Intro-Rhetoric/Theo-Prac Intro-Rhetoric/Theo-Prac
- ENGL5561 American English American English

Non-Thesis Course Requirements (6 hours):

Complete the following:

- ENGL6890 Directed Research Directed Research
- PC6850 Internship in PTC Internship

Additional Comments:
In addition to the specific course requirements for their respective concentrations, an oral defense of their portfolio is required for all concentrations.

Portfolio
Type
Completion Requirement

Additional Comments:

The student will be responsible for compiling a four-part portfolio, to be designed in conjunction with and reviewed by their faculty committee. Students will orally defend their portfolios to their committee, and faculty committee members will then evaluate the questions and defense on a pass/fail basis. A "pass" for the defense requires a simple majority of the committee.

Portfolio Components

1. Project Proposal/Prospectus which provides background on the projects, theoretical influences [drawn from courses] on their proposed redevelopment, a description of the specific projects included, and a timeline for completion.

2. Two digital artifacts from other graduate courses that have been redeveloped and expanded (Examples include but are not limited to podcasts, videos, social media creation and curation accounts, websites, technical reports, and grants.)

3. A Client Project (This would be completed while a student is enrolled in a graduate-level internship. Because the portfolio option requires an additional course, that course would be PC 5850 - Internship.

4. A Critical Reflection (This reflection integrates sources/theoretical background from previous courses as well as additional sources.)

NOTE: While students within the Professional and Technical Communication concentration of the English M.A. will have opportunities for teaching assistantships, graduate students will not teach PC 2500 - Communicating in the Professions.

No Requirement Level

Additional Information

Information And Additional Notes
The English Master of Arts program offers a limited number of assistantships on a competitive basis. Assistantship provides tuition waiver and a stipend of $10,400 paid over 9 months (Fall and Spring semester). The required responsibilities if you were granted the assistantship include 20hrs of work each week on campus in-person (observing, teaching, writing center tutoring, etc.) and attendance of classes in-person (unless extenuating circumstances or ADA accommodations). Three references are required during the application process.

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University. (Students who reach the number of credits required for their undergraduate degrees can also take additional courses for graduate credit before graduation, thus potentially accelerating their M.A. program even more.)

The minimum admission requirements for participating in the English Fast Track Program are:

- Enrollment as a TTU undergraduate English major with at least 90 hours of completed courses within their program of study;

- Completion of ENGL 3000;

- Overall GPA of 3.25 or better; GPA in 3000-level and above English coursework of 3.5 or better;

- Recommendation from the students undergraduate advisor;

- Course approval from course professor and graduate faculty advisor;

- In addition to the requirements for admission to the Fast Track BA/MA program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Courses

ENGL5111 - Chaucer

General

College/School
Arts and Sciences

Course Title
Chaucer

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5111

Credit Hours

Credit Hours Min
3

Course Description
Selected works of Geoffrey Chaucer. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5121 - Shakespeare

General

College/School
Arts and Sciences

Course Title
Shakespeare

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5121

Credit Hours

Credit Hours Min
3

Course Description
Historical, thematic, and other approaches in the study of Shakespeare. (May be repeated once as an elective, provided the course content is different.) Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5130 - Milton

General
College/School
Arts and Sciences

Course Title
Milton

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5130

Credit Hours
Credit Hours Min
3

Course Description
Selected works of John Milton. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5140 - Topics in British Lit to 1667

General
College/School
Arts and Sciences

Course Title
Topics in British Lit to 1667

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5140

Credit Hours
Credit Hours Min
3

Course Description
Topics in Medieval and/or Early Modern British literature. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. Course may be repeated, provided the content is different each time.

ENGL5210 - 18th Century British Lit

General
College/School
Arts and Sciences

Course Title
18th Century British Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5210

Credit Hours
Credit Hours Min
3

Course Description
Studies in eighteenth-century British literature. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5221 - Romantic Literature

General
College/School
Arts and Sciences

Course Title
Romantic Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5221

Credit Hours
Credit Hours Min
3

Course Description
Studies in Romantic literature. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5231 - Victorian Literature

General

College/School
Arts and Sciences

Course Title
Victorian Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5231

Credit Hours

Credit Hours Min
3

Course Description
Studies in Victorian literature. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5240 - Topics:British Lit After 1667

General

College/School
Arts and Sciences

Course Title
Topics:British Lit After 1667

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5240

Credit Hours

Credit Hours Min
3

Course Description
Studies in Modern British literature. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. Course may be repeated, provided the content is different each time.

ENGL5310 - Early American Literature

General

College/School
Arts and Sciences

Course Title
Early American Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5310

Credit Hours

Credit Hours Min
3

Course Description
Study of American literature from colonial period through early nationalist period. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL5320 - 19th Century American Lit

General

College/School
Arts and Sciences

Course Title
19th Century American Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5320

Credit Hours

Credit Hours Min
3

Course Description
Study of the literature and literary movements of the period, with emphasis on romanticism and/or realism. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL5330 - Modern American Literature

General

College/School
Arts and Sciences

Course Title
Modern American Literature

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
ENGL

Course Number
5330

Credit Hours

Credit Hours Min
3

Course Description
Study of the literature and literary movements of the period, with emphasis on the twentieth century and/or contemporary period. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5340 - Topics in American Literature

General

College/School
Arts and Sciences

Course Title
Topics in American Literature

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5340

Credit Hours

Credit Hours Min
3

Course Description
Thematic, interdisciplinary, or genre-based approaches to American literary study beyond the usual scope of ENGL 4310 (5310), ENGL 4320 (5320), or ENGL 4330 (5330). Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. Course may be repeated, provided the content is different each time.

ENGL5411 - Writing in the Professions

General

College/School
Arts and Sciences

Course Title
Writing in the Professions

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
ENGL

Course Number
5411

Credit Hours

Credit Hours Min
3

Course Description
This course builds on students¿ present writing competency and focuses on writing in their particular majors and/or professions. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5421 - Forms of Arg-Pers/Theo-Prac

General

College/School
Arts and Sciences

Course Title
Forms of Arg-Pers/Theo-Prac

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
ENGL

Course Number
5421

Credit Hours

Credit Hours Min
3

Course Description
Introduces students to various models of argumentation through theory (readings) and practice (analysis and production). Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5430 - Creative Writing: Fiction

General

College/School
Arts and Sciences

Course Title
Creative Writing: Fiction

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5430

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Prior consent of instructor (for graduate students not in the Creative Writing concentration). Guided practice in the craft and art of writing short fiction. Course may be repeated, provided the content is different each time. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5440 - Creative Writing: Essay

General

College/School
Arts and Sciences

Course Title
Creative Writing: Essay

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5440

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Prior consent of instructor (for graduate students not in the Creative Writing concentration). Guided practice in the craft and art of writing personal essays. Course may be repeated, provided the content is different each time. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5450 - Creative Writing: Poetry

General

College/School
Arts and Sciences

Course Title
Creative Writing: Poetry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5450

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Grade of C or better in ENGL 3400 or prior consent of instructor. Guided practice in the craft and art of writing poems. Course may be repeated, provided the content is different each time. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5451 - Intro-Rhetoric/Theo-Prac

General

College/School
Arts and Sciences

Course Title
Intro-Rhetoric/Theo-Prac

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5451

Credit Hours

Credit Hours Min
3

Course Description
The course introduces students to rhetoric--history and special topics.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5460 - Lit/Mag Editing/Iris Review

General

College/School
Arts and Sciences

Course Title
Lit/Mag Editing/Iris Review

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5460

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Enrolment in the English MA. Creation of a literary magazine annual edition from initial call for submissions through publication. Course may not be repeated at the graduate level.

ENGL5470 - Topics in Adv Creative Writing

General

College/School
Arts and Sciences

Course Title
Topics in Adv Creative Writing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5470

Credit Hours

Credit Hours Min
3

Course Description
Thematic, genre-based, or research-inflected creative writing workshop, at a level of advanced practice. Course may be repeated provided the content is different each time. Possible topics include Creative Research, Witness Writing, Social Issues, Identity, and Multimedia.

Requisites

Simple Requisites

Prerequisite: ENGL4430 Creative Writing: Fiction(ENGL5430 Creative Writing: Fiction) or ENGL4440 Creative Writing: Essay(ENGL5440 Creative Writing: Essay) or ENGL4450 Creative Writing: Poetry(ENGL5450 Creative Writing: Poetry), or prior consent of the instructor.

ENGL5511 - Intro/Descriptive Linguistics

General

College/School
Arts and Sciences

Course Title
Intro/Descriptive Linguistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5511

Credit Hours

Credit Hours Min
3

Course Description
Introduction to descriptive analysis of language: phonology, morphology, lexicon, and syntax. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5521 - History-English Language

General

College/School
Arts and Sciences

Course Title
History-English Language

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5521

Credit Hours

Credit Hours Min
3

Course Description
History of the language from its origins to the present, emphasis upon historical development of English sounds, word structure, and syntax. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5531 - Grammar and Language

General

College/School
Arts and Sciences

Course Title
Grammar and Language

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5531

Credit Hours

Credit Hours Min
3

Course Description
Grammatical structure of English in relation to dialect and register with some emphasis on historical and potential changes in grammar. Course may be repeated provided the content is different each time.

ENGL5541 - Topics in Linguistics/Language

General

College/School
Arts and Sciences

Course Title
Topics in Linguistics/Language

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5541

Credit Hours

Credit Hours Min
3

Course Description
Examination of specific aspects of language and/or linguistic study, such as Old and Middle English, the language of dialect literature, or American English dialects. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. Course may be repeated provided the content is different each time.

ENGL5551 - Intro-Rhetoric/Theo-Prac

General

College/School
Arts and Sciences

Course Title
Intro-Rhetoric/Theo-Prac

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5551

Credit Hours

Credit Hours Min
3

Course Description
Grammatical structure of English in relation to dialect and register with some emphasis on historical and potential changes in grammar. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5561 - American English

General

College/School
Arts and Sciences

Course Title
American English

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5561

Credit Hours

Credit Hours Min
3

Course Description
This class will examine American English from multiple cultural and linguistic angles and allow the students to develop their own understanding of how the language around them shapes their lives. Students enrolled in the 5000-level course will e required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5610 - Novel

General

College/School
Arts and Sciences

Course Title
Novel

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5610

Credit Hours

Credit Hours Min
3

Course Description
Theory of the novel and a study of selected novels. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5620 - Poetry: Form, Genre, Theory

General

College/School
Arts and Sciences

Course Title
Poetry: Form, Genre, Theory

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5620

Credit Hours

Credit Hours Min
3

Course Description
The study of poetry written in English and translated from other languages, with attention to such topics as poetic movements, styles, trends, the evolution and development of forms. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5630 - Literary Criticism and Theory

General

College/School
Arts and Sciences

Course Title
Literary Criticism and Theory

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5630

Credit Hours

Credit Hours Min
3

Course Description
Historical and thematic studies of critical and theoretical trends and issues. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5640 - Modern & Contemporary Drama

General

College/School
Arts and Sciences

Course Title
Modern & Contemporary Drama

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5640

Credit Hours

Credit Hours Min
3

Course Description
Study of dramatic texts and performance issues from the late 19th century to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5712 - African American Literature

General

College/School
Arts and Sciences

Course Title
African American Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5712

Credit Hours

Credit Hours Min
3

Course Description
Studies of African American literature and culture, both oral and printed. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5713 - Native American Literature

General

College/School
Arts and Sciences

Course Title
Native American Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5713

Credit Hours

Credit Hours Min
3

Course Description
Studies of Native American literature and culture, both oral and printed. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5720 - Continental Literature

General

College/School
Arts and Sciences

Course Title
Continental Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5720

Credit Hours

Credit Hours Min
3

Course Description
Study of major works and writers from the European continent. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5731 - Approaches to Women & Lit

General

College/School
Arts and Sciences

Course Title
Approaches to Women & Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5731

Credit Hours

Credit Hours Min
3

Course Description
Studies of major women writers or images of women in literature. Course may be repeated, provided course content is different each time. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5741 - Science and Culture

General

College/School
Arts and Sciences

Course Title
Science and Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5741

Credit Hours

Credit Hours Min
3

Course Description
Cultural influences on scientific discourse and literature about science. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235, or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5751 - Topics in Non-Western Lit

General

College/School
Arts and Sciences

Course Title
Topics in Non-Western Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5751

Credit Hours

Credit Hours Min
3

Course Description
Focuses on literature written outside of European literary traditions, either written or translated into English. (Course may be repeated, provided the content is different each time.) Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. Course may be repeated, provided the content is different each time.

ENGL5810 - Introduction to Folklore

General

College/School
Arts and Sciences

Course Title
Introduction to Folklore

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Generic survey of folklore; possible definitions, varieties, meanings, and methods of study. Stress on verbal traditions (tales, songs, and beliefs). Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5820 - Upper Cumberland Folklore

General

College/School
Arts and Sciences

Course Title
Upper Cumberland Folklore

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5820

Credit Hours

Credit Hours Min
3

Course Description
Folklore of the Upper Cumberland with emphasis on relationships between regional material and the broad perspective of the humanities. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL5830 - Southern Literature

General

College/School
Arts and Sciences

Course Title
Southern Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5830

Credit Hours

Credit Hours Min
3

Course Description
Major writers of the South, with emphasis on regional themes and on the Southern literary renaissance. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5840 - The Gothic Tale of Terror

General

College/School
Arts and Sciences

Course Title
The Gothic Tale of Terror

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5840

Credit Hours

Credit Hours Min
3

Course Description
Readings in Gothic poetry and prose. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5910 - The Literature of Science

General

College/School
Arts and Sciences

Course Title
The Literature of Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5910

Credit Hours

Credit Hours Min
2

Course Description
Topics in literary nonfiction written by scientists. Note: Students will not receive credit for both ENGL 4910 (5910) and ENGL 4911 (5911). Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5911 - The Literature of Science

General

College/School
Arts and Sciences

Course Title
The Literature of Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5911

Credit Hours

Credit Hours Min

3

Course Description

Topics in literary non-fiction written by scientists. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5920 - Literature and Technology

General

College/School
Arts and Sciences

Course Title
Literature and Technology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5920

Credit Hours

Credit Hours Min

2

Course Description

Study of British and American literature which deals with the impact of technology on society. Note: Students will not receive credit for both ENGL 4920 (5920) and ENGL 4921 (5921). Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5921 - Literature and Technology

General

College/School
Arts and Sciences

Course Title
Literature and Technology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5921

Credit Hours

Credit Hours Min

3

Course Description

Study of literature which deals with the impact of technology on society. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5930 - Lit and the Environment

General

College/School
Arts and Sciences

Course Title
Lit and the Environment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5930

Credit Hours

Credit Hours Min

2

Course Description

A study, through literature, of the relationship between humans and the environment. Note: Students will not receive credit for both ENGL 4930 (5930) and ENGL 4931 (5931). Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5931 - Lit and the Environment

General

College/School
Arts and Sciences

Course Title
Lit and the Environment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5931

Credit Hours

Credit Hours Min

3

Course Description

A study, through literature, of the relationship between humans and the environment. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all upper division courses. The prerequisite for upper-division courses of ENGL 2130 or ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5950 - Topics in Prof/Tech Comm

General

College/School
Arts and Sciences

Course Title
Topics in Prof/Tech Comm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5950

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: ENGL 3250 or PC 3250. In-depth study of topics relevant to the field of Professional and Technical communication. Course may be repeated provided the content is different.

ENGL5970 - Professional Comm II

General

College/School
Arts and Sciences

Course Title
Professional Comm II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5970

Credit Hours

Credit Hours Min
3

Course Description
Continuation of PC 3250 with emphasis on more complex documents. (Same as PC 4970 (5970)). Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ENGL 1010 and ENGL 1020 and one course from among ENGL 2130, ENGL 2235, and ENGL 2330 are prerequisites for all Upper Division courses. The prerequisite for Upper Division courses of ENGL 2130, ENGL 2235 or ENGL 2330 is waived for ENGL and SEEN majors.

ENGL5981 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5981

Credit Hours

Credit Hours Min
1

Course Description
Course work or directed individual research in any area where there is no other course offering. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5982 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5982

Credit Hours

Credit Hours Min
2

Course Description
Course work or directed individual research in any area where there is no other course offering. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5983 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
5983

Credit Hours

Credit Hours Min
3

Course Description
Course work or directed individual research in any area where there is no other course offering. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ENGL5990 - Internship

General

College/School
Arts and Sciences

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
5990

Credit Hours

Credit Hours Min
3

Credit Hours Max
12

Credit Hours Operator
TO

Course Description
Part-time or full-time employment in a business or institutional setting related to a student¿ academic and career goals and cannot be taken in place of required or elective English courses, undergraduate or graduate. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** graduate status, ENGL 5350, and consent of instructor. Junior or Senior status, at least two ENGL courses at the 3000-level or above, and consent of chair or internship coordinator.

ENGL6000 - Intro-Graduate Studies

General

College/School
Arts and Sciences

Course Title
Intro-Graduate Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6000

Credit Hours

Credit Hours Min
3

Course Description
Bibliography, research methods, current theories, scholarly writing, professional issues and practices, and creation of professional portfolios.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6005 - Writing Seminar in English

General

College/School
Arts and Sciences

Course Title
Writing Seminar in English

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6005

Credit Hours

Credit Hours Min
3

Course Description
An in-depth examination of long form writing techniques and best practices in English to support MA students creating theses in literature and creative writing.

ENGL6010 - Teaching Composition

General

College/School
Arts and Sciences

Course Title
Teaching Composition

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Theories and pedagogies of teaching writing in the middle schools, secondary schools, and on the college level.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6020 - Seminar in Early British Lit

General

College/School
Arts and Sciences

Course Title
Seminar in Early British Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6020

Credit Hours

Credit Hours Min
3

Course Description
A study of selected topics and authors of the period.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6080 - Sem in British Lit/1500-1650

General

College/School
Arts and Sciences

Course Title
Sem in British Lit/1500-1650

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6080

Credit Hours

Credit Hours Min
3

Course Description
A study of selected topics and authors of the period.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6150 - Sem in British Lit/1650-1800

General

College/School
Arts and Sciences

Course Title
Sem in British Lit/1650-1800

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6150

Credit Hours

Credit Hours Min
3

Course Description
A study of selected topics and authors of the period.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6290 - Sem in 19th Cent British Lit

General

College/School
Arts and Sciences

Course Title
Sem in 19th Cent British Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6290

Credit Hours

Credit Hours Min
3

Course Description
A study of selected topics and authors of the period.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6350 - Sem/20th & 21st Cent Brit Lit

General

College/School
Arts and Sciences

Course Title
Sem/20th & 21st Cent Brit Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6350

Credit Hours

Credit Hours Min
3

Course Description
A study of selected topics and authors of the period.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6400 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6400

Credit Hours

Credit Hours Min
3

Course Description
Intensive course work or directed individual research of a selected author, movement, or genre.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6520 - Sem in Early American Lit

General

College/School
Arts and Sciences

Course Title
Sem in Early American Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6520

Credit Hours

Credit Hours Min
3

Course Description
A study of selected topics and authors of the period.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6590 - Sem in 19th Cent American Lit

General

College/School
Arts and Sciences

Course Title
Sem in 19th Cent American Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6590

Credit Hours

Credit Hours Min
3

Course Description
A study of selected topics and authors of the period.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6640 - Sem/20th & 21st Cent Amer Lit

General

College/School
Arts and Sciences

Course Title
Sem/20th & 21st Cent Amer Lit

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ENGL

Course Number
6640

Credit Hours

Credit Hours Min
3

Course Description
A study of selected topics and authors of the period.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6710 - Creative Writing Workshop

General

College/School
Arts and Sciences

Course Title
Creative Writing Workshop

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
6710

Credit Hours

Credit Hours Min
3

Course Description
Guided practice in the craft and art of writing creative texts in prose, poetry, and hybrid genres, contextualized by the study of work from a variety of sources, selected by the instructor. Course may be repeated provided the content is different each time.

Requisites

Simple Requisites

> **Prerequisite:** Prior consent of instructor (for graduate students not in the Creative Writing concentration).

ENGL6720 - Writing Craft

General

College/School
Arts and Sciences

Course Title
Writing Craft

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ENGL

Course Number
6720

Credit Hours

Credit Hours Min
3

Course Description

Exploration of authors, practices, and/or formal techniques associated with a writing craft element (s) or forms defined by the instructor, either within a single genre or across genres. Course may be repeated provided the content is different each time.

Requisites

Simple Requisites

> **Prerequisite:** Prior consent of instructor (for graduate students not in the Creative Writing concentration).

ENGL6740 - Publishing Theory and Practice

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Publishing Theory and Practice	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ENGL	6740

Credit Hours

Credit Hours Min
3

Course Description

This course introduces publishing in concept and a profession in relationship to students' broader work in English studies, covering theories of the authorship and audience and the historical eras of literary and information production that have led to the modern book. Students will investigate intersections between publishing and their concentration and explore possible applications of their acquired knowledge.

ENGL6850 - English Internship

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
English Internship	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ENGL	6850

Credit Hours

Credit Hours Min
3

Course Description

Part-time employment or experiential, project-based learning in a professional setting, related to student academic and career goals. Students enrolled in the 6000-level course will be required to complete all work in the syllabus, including a research paper or other final project in consultation with the instructor applying theories learned in their graduate coursework to the completed internship.

ENGL6890 - Directed Research

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Directed Research	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ENGL	6890

Credit Hours

Credit Hours Min
3

Course Description

Project paper for students in the nonthesis option.

Requisites

Simple Requisites

> **Prerequisites:** None

ENGL6990 - Research & Thesis

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Research & Thesis	Graduate

Course Subject Code	**Course Number**
ENGL	6990

Credit Hours

Credit Hours Min	**Credit Hours Max**
3	9
	Credit Hours Operator
	TO

LING5511 - Intro to Descriptive Ling

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Intro to Descriptive Ling	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
LING	5511

Credit Hours

Credit Hours Min
3

Course Description
Introduction to descriptive analysis of language: phonology, morphology, lexicon, and syntax. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. Cross-listed with ENGL 5511.

Requisites

Simple Requisites

> **Prerequisites:** None

LING5521 - Hist-English Language

General

College/School
Arts and Sciences

Course Title
Hist-English Language

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LING

Course Number
5521

Credit Hours

Credit Hours Min
3

Course Description
History of English from its origins to the present, emphasis upon historical development of English sounds, word structure, and syntax. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

LING5531 - Grammar and Language

General

College/School
Arts and Sciences

Course Title
Grammar and Language

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LING

Course Number
5531

Credit Hours

Credit Hours Min
3

Course Description
Grammatical structure of English in relation to dialect and register with some emphasis on historical and potential changes in grammar. Course may be repeated provided the content is different each time.

LING5541 - Topics in Linguistics/Language

General

College/School
Arts and Sciences

Course Title
Topics in Linguistics/Language

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LING

Course Number
5541

Credit Hours

Credit Hours Min
3

Course Description
Examination of specific aspects of language and/or linguistic study, such as Old and Middle English, the language of dialect literature, or American English dialects. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. Course may be repeated provided the conent is different each time.

LING5561 - American English

General

College/School
Arts and Sciences

Course Title
American English

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
LING

Course Number
5561

Credit Hours

Credit Hours Min
3

Course Description
This class will examine American English from multiple cultural and linguistic angles and allow the students to develop their own understanding of how the language around them shapes their lives.

Requisites

Simple Requisites

> **Prerequisites:** None

PC5850 - Internship

General

College/School
Arts and Sciences

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
PC

Course Number
5850

Credit Hours

Credit Hours Min
3

Credit Hours Max
12

**Credit Hours
Operator**
TO

Course Description
Part-time or full-time employment in a business, industrial, or institutional communications setting related to student academic and career goals. Course may be repeated for up to a total of nine credit hours. Undergraduate students may not take more than nine credit hours of the internship during their degree programs. Graduate students may take no more than six credit hours of PC 5850 during their degree programs.

Requisites
Simple Requisites

> **Prerequisites:** PC4940 Technical Editing(PC5940 Technical Editing) or PC4970 Professional Comm II(PC5970 Professional Comm II).

PC5940 - Technical Editing

General

College/School
Arts and Sciences

Course Title
Technical Editing

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
PC

Course Number
5940

Credit Hours

Credit Hours Min
3

Course Description
Principles and practices of technical editing. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** ENGL4970 Professional Comm II(ENGL5970 Professional Comm II)/PC4970 Professional Comm II(PC5970 Professional Comm II). PC3250 Professional Comm I(ENGL3250 Professional Comm I).

PC5950 - Topics in Prof/Tech Comm

General

College/School
Arts and Sciences

Course Title
Topics in Prof/Tech Comm

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
PC

Course Number
5950

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: ENGL 3250 or PC 3250. In-depth study of topics relevant to the field of Professional and Technical Communication. Course may be repeated provided the content is different.

PC5970 - Professional Comm II

General

College/School
Arts and Sciences

Course Title
Professional Comm II

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
PC

Course Number
5970

Credit Hours

Credit Hours Min
3

Course Description
A continuation of PC 3250 with emphasis on more complex reports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** ENGL3250 Professional Comm I or PC3250 Professional Comm I.

PC5990 - Bus/Grant Proposal Writing

General

College/School
Interdisciplinary Studies

Course Title
Bus/Grant Proposal Writing

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
PC

Course Number
5990

Credit Hours

Credit Hours Min
3

Course Description
Theory and practical experience developing business and grant proposals.

Requisites

Simple Requisites

> **Prerequisite:** None

PC6030 - Core Iss/Rsrch-Prof Tech Comm

General

College/School
Arts and Sciences

Course Title
Core Iss/Rsrch-Prof Tech Comm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PC

Course Number
6030

Credit Hours

Credit Hours Min
3

Course Description
Focuses on ways social action, political contexts, and participants within workplace environments produce successful communication genres in the fields of Professional and Technical Communication. The course also provides perspectives on current research methodologies and practices.

Requisites

Simple Requisites

> **Prerequisites:** None

PC6040 - Sp Top: PTC and Industry

General

College/School
Arts and Sciences

Course Title
Sp Top: PTC and Industry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PC

Course Number
6040

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Completed B.A. in English and admission to the English M.A. Program, or permission of the graduate advisor. Focuses on theories, principles, and practices relevant to professional and technical communication industries. Includes research components as well as workplace applications. Course may be repeated twice provided the topic is different.

PC6050 - The Rhetoric of STEM Prof

General

College/School
Arts and Sciences

Course Title
The Rhetoric of STEM Prof

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PC

Course Number
6050

Credit Hours

Credit Hours Min
3

Course Description
Highlights the production of scientific writing, such as engineering, legal, and medical discourses, including social contexts that produce them. Includes instruction in field-specific technical writing documents, formats, and styles, including documentation styles and presentation of research.

Requisites

Simple Requisites

> **Prerequisites:** None

PC6060 - Digital Design

General

College/School
Arts and Sciences

Course Title
Digital Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PC

Course Number
6060

Credit Hours

Credit Hours Min
3

Course Description
This course introduces students from a variety of backgrounds to the theory and practice of digital design, including creating content for professional, technical, and scientific settings; design strategies and application; and methods of usability. Projects include analysis of current documents, prototyping a set of instructions or training modules, usability testing, and presenting recommendations for improvement.

PC6850 - Internship in Professional and Technical Communication

General

College/School
Arts and Sciences

Course Title
Internship in PTC

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PC

Course Number
6850

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Part-time employment or experiential, project-based learning in a business, industrial, or institutional communications setting, related to student academic and career goals. Students identify a client project as a focus of their work and write both a progress report and a recommendation report as a way to contextualize their project within the internship setting. Students complete a research paper applying research and theories learned in their graduate coursework to the communication practices developed in the internship.

POPC5010 - Topics

General

College/School
Arts and Sciences

Course Title
Topics

Academic Level (Course Level)
Undergraduate

Course Subject Code
POPC

Course Number
5010

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Special topics in popular culture. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

POPC5050 - Sci Fiction and Fantasy

General

College/School
Arts and Sciences

Course Title
Sci Fiction and Fantasy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
POPC

Course Number
5050

Credit Hours

Credit Hours Min
3

Course Description
Analysis and discussion of themes, conventions, and stereotypes in short stories, novels, and films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

POPC5060 - Detective Fiction

General

College/School
Arts and Sciences

Course Title
Detective Fiction

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
POPC

Course Number
5060

Credit Hours

Credit Hours Min
3

Course Description
Private detectives, policemen, spies in fiction. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

Environmental Studies Department

Environmental Sciences, Ph.D.

The Doctor of Philosophy degree program in Environmental Sciences offers concentrations in biology, chemistry, agriculture, geosciences, and integrated research but emphasizes the solution of complex environmental problems using an interdisciplinary approach. Course work is required in biology, chemistry, geology, agriculture, and sociology. This interdisciplinary approach insures that students become aware of a wide range of environmental concerns and that their research includes a breadth of environmental understanding beyond the boundaries of a particular discipline. The goal of the program is to prepare students for careers in research, management, government service, teaching, and other areas where they can make productive contributions to the solution of environmental problems.

The program of study for a doctoral degree requires a minimum of 61 semester credits beyond the bachelor's level, including 13 credits in "core courses," 12 credits at the 7000 level, and at least 18 credits in doctoral research and dissertation. Graduate assistantships are available.

Professional Science Master's, P.S.M.

The Professional Science Master's (PSM) degree is a unique professional degree grounded in natural science, technology, engineering, mathematics and/or computational sciences and is designed to prepare students for direct entry into a variety of career options in industry, business, government, or non-profit organizations. It is a distinctive advanced degree for those intending to pursue a career in the practice of science. PSM programs prepare graduates for high-level careers in science that have a strong emphasis on such skill areas as management, policy, and entrepreneurship. PSM recognition provides assurance that the program conforms to nationally accepted criteria.

Programs

ENV-AGRI - Environmental Sciences, Agriculture Concentration, Ph.D.

Program Overview

Program Long Title
Environmental Sciences, Agriculture Concentration, Ph.D.

College/School	Department(s)
Interdisciplinary Studies	Environmental Studies

Catalog Full Description
Agriculture has many connections with Environmental Sciences, including study areas of sustainable and organic farming, applications of technology and engineering, and effects of pesticides and fertilizers on plants, animals, and ecosystems, to name a few. Tennessee Tech has the Shipley Farm and other operations that provide a venue for dissertation research projects in Environmental Agriculture and the faculty in the School of Agriculture offer coursework and advise graduate students in this area.

The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours
- **Research and Dissertation Requirement:** 18 hours
- **Advisor Guided Concentration Coursework:** 30 hours
- **Total Degree Requirement:** 61 hours

Admission Requirements

Admission Requirements
Applicants for admission to the doctoral program in Environmental Sciences must have:

- a bachelor's or master's degree in science, mathematics, engineering, or environmental science;
- a grade point average of 3.0 or above on a 4.0 scale;
- international students must have a score of 525 or above on the TOEFL;

Application materials may be obtained from the Graduate School Office.

Applicants seeking admission with Full Standing in the program must satisfy the departmental requirements.

Applicants who do not fully meet the following requirements may be admitted in Provisional Standing on the basis of a favorable recommendation to the Associate Dean of Graduate Studies by the appropriate departmental chairperson and the Director of the Environmental Sciences doctoral program. If admitted in Provisional Standing, the student must remove all deficiencies and apply for reclassification to Full Standing prior to the completion of 15 hours of graduate work.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours
- **Research and Dissertation Requirement:** 18 hours
- **Advisor Guided Concentration Coursework:** 30 hours
- **Total Degree Requirement:** 61 hours

- A minimum of 61 semester credits of course work and doctoral research and dissertation as follows:
    - A minimum of 43 semester credits of course work beyond the bachelor's degree:
        - This must include 13 semester credits of core coursework
        - This must include 30 hours of concentration coursework
        - Must include at least 12 semester credits at the 7000 level
    - A minimum of 18 semester credits of research and dissertation, resulting in the satisfactory completion of a doctoral dissertation.
- Residence of four (4) semesters beyond the bachelor's level, with at least two (2) semesters in continuous residence.
- Completion of all requirements for the degree, including the dissertation within a period of eight (8) consecutive years.
- Maintenance of a general grade point average of 3.0.
- Satisfactory completion of a comprehensive examination.
- Satisfactory presentation and defense of a doctoral dissertation.

In addition, a student must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Degree Requirements
Type
Completion Requirement

Concentration Core Coursework (1 Credit Hours)

Complete ALL of the following Courses:
- EVSA6010 - Environmental Agriculture
- EVSB6010 - Environmental Biology
- EVSS6010 - Environmental Social Policy
- EVSC6010 - Environmental Chemistry
- EVS7910 - Environmental Science Seminar

Research and Dissertation Requirement (18 hours)

Complete ALL of the following Courses:
- EVSA7990 - Research and Dissertation

Advisor Guided Concentration Coursework (30 hours)

The advisor and/or committee may define 30 hours from any EVSA, EVSB, EVSC, EVSI, EVSS, EVS, BIOL, or CHEM 6000-7000 level courses.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information

Information And Additional Notes

Guidelines for Committee and Comprehensive Exam

Guidelines for Graduate Committee Composition

The organization and appointment of advisory committees to supervise graduate study for the degree of Doctor of Philosophy in Environmental Sciences shall be the same, generally, as in the master's program, except that the advisory committee shall consist of at least five (5) members of the Graduate Faculty, plus the Director of Environmental Sciences Ph.D. program who serves as an ex officio, nonvoting member. For students concentrating in Agriculture, Biology, Chemistry, and Geosciences, three (3) members of the advisory committee shall be from the student's area of concentration, at least one (1) member shall be from a separate department of the environmental science core outside the student's area of concentration, and one (1) member may be from any department within the university. For the Integrated Research concentration, at least two (2) members shall be from departments participating in the environmental science core, one (1) member shall be from any STEM department, and two (2) members may be from any department within the university. For all concentrations, no more than three (3) committee members may be from the same department. Changes in a Ph.D. advisory committee must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Guidelines for the Comprehensive Examination

Prerequisites. Before requesting that his or her major professor schedule a Comprehensive Examination, a student must:

- have achieved Full Standing in the program

- completed approximately 80% of the course work in his/her Program of Study

Descriptions

The test will consist of written and/or oral portions. The student's advisory portion will consist of four (4) sections. Total time for each section should not exceed eight (8) hours. Three (3) sections will contain material from the student's area of concentration and one (1) section will integrate material from the Environmental Sciences Core Curriculum. It is the graduate advisory committee chair's responsibility to ensure that all committee members will be involved in the administration and evaluation of the written and oral exams, per University Policy 282.

If an oral exam is to be included as part of the comprehensive exam it will be administered by the student's advisory committee within three (3) weeks of the successful completion of the written portion of the exam. A question will be included in the oral exam that tests the student's understanding of the interdisciplinary nature of Environmental Sciences.

If an oral exam is included as part of the comprehensive exam, both portions of the Comprehensive Examination will be completed during one (1) academic semester.

Results

Four-fifths of the voting members of the committee must agree that the student has successfully completed the comprehensive exam.

The student will be given one (1) additional opportunity to pass each portion of the Comprehensive Examination. Failure to pass either portion on the second try will result in the student's dismissal from the Ph.D. program.

A written evaluation of the student's performance on the Comprehensive Examination will be prepared by the student's advisory committee and kept on file in the office of the Director of the Environmental Sciences Ph.D. program.

Time Constraints

Successful completion of the Comprehensive Examination must be achieved in a timely fashion. The complete Comprehensive Examination must be scheduled and taken within a year following the completion of 80% of the course work in the student's Program of Study, including successful completion of all core courses. It shall be the student's responsibility, in consultation with his/her advisor, to schedule this examination at a date agreeable to the whole examining committee. The committee shall be given at least two (2) months advance notice of the Examination date in order to make preparations. Any second attempts to pass portions of the Comprehensive Examination must be scheduled in the subsequent (Fall/Spring) semester. Failure to follow these procedures shall result in the student's dismissal from the program. Any appeal by the student for exceptions to this policy shall be made in writing and submitted to the Executive Committee of the Ph.D. program.

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

ENV-BIOL - Environmental Sciences, Biology Concentration, Ph.D.

Program Overview

Program Long Title
Environmental Sciences, Biology Concentration, Ph.D.

College/School	Department(s)
Interdisciplinary Studies	Environmental Studies

Catalog Full Description
The Doctor of Philosophy degree program in Environmental Sciences offers concentrations in biology, chemistry, agriculture, geosciences, and integrated research but emphasizes the solution of complex environmental problems using an interdisciplinary approach. Course work is required in biology, chemistry, geology, agriculture, and sociology. This interdisciplinary approach insures that students become aware of a wide range of environmental concerns and that their research includes a breadth of environmental understanding beyond the boundaries of a particular discipline. The goal of the program is to prepare students for careers in research, management, government service, teaching, and other areas where they can make productive contributions to the solution of environmental problems.

The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours

- **Research and Dissertation Requirement:** 18 hours

- **Advisor Guided Concentration Coursework:** 30 hours

- **Total Degree Requirement:** 61 hours

Admission Requirements

Admission Requirements

Applicants for admission to the doctoral program in Environmental Sciences must have:

- a bachelor's or master's degree in science, mathematics, engineering, or environmental science;
- a grade point average of 3.0 or above on a 4.0 scale;
- international students must have a score of 525 or above on the TOEFL;

Application materials may be obtained from the Graduate School Office.

Applicants seeking admission with Full Standing in the program must satisfy the departmental requirements.

Applicants who do not fully meet the following requirements may be admitted in Provisional Standing on the basis of a favorable recommendation to the Associate Dean of Graduate Studies by the appropriate departmental chairperson and the Director of the Environmental Sciences doctoral program. If admitted in Provisional Standing, the student must remove all deficiencies and apply for reclassification to Full Standing prior to the completion of 15 hours of graduate work.

EVS Biology Concentration Additional Admissions Requirement

- applicants must have a bachelor's or master's degree in a biological science
- a grade point average of 3.5 or above for the highest degree earned
- In addition, a graduate faculty member must have agreed to direct the student's doctoral program and financial support must have been identified for a stipend and for research needs.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours
- **Research and Dissertation Requirement:** 18 hours
- **Advisor Guided Concentration Coursework:** 30 hours
- **Total Degree Requirement:** 61 hours

- A minimum of 61 semester credits of course work and doctoral research and dissertation as follows:
  - A minimum of 43 semester credits of course work beyond the bachelor's degree:
    - This must include 13 semester credits of core coursework
    - This must include 30 hours of concentration coursework
    - Must include at least 12 semester credits at the 7000 level

- A minimum of 18 semester credits of research and dissertation, resulting in the satisfactory completion of a doctoral dissertation.
- Residence of four (4) semesters beyond the bachelor's level, with at least two (2) semesters in continuous residence.
- Completion of all requirements for the degree, including the dissertation within a period of eight (8) consecutive years.
- Maintenance of a general grade point average of 3.0.
- Satisfactory completion of a comprehensive examination.
- Satisfactory presentation and defense of a doctoral dissertation.

In addition, a student must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Degree Requirements

Type

Completion Requirement

Concentration Core Coursework (1 Credit Hours)

Complete ALL of the following Courses:
- EVSA6010 - Environmental Agriculture
- EVSB6010 - Environmental Biology
- EVSS6010 - Environmental Social Policy
- EVSC6010 - Environmental Chemistry
- EVS7910 - Environmental Science Seminar

Research and Dissertation Requirement (18 hours)

Complete ALL of the following Courses:
- EVSB7990 - Research & Dissertation

Advisor Guided Concentration Coursework (30 hours)

The advisor and/or committee may define 30 hours from any EVSA, EVSB, EVSC, EVSI, EVSS, EVS, BIOL, or CHEM 6000-7000 level courses.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information

Information And Additional Notes

Guidelines for Committee and Comprehensive Exam

Guidelines for Graduate Committee Composition

The organization and appointment of advisory committees to supervise graduate study for the degree of Doctor of Philosophy in Environmental Sciences shall be the same, generally, as in the master's program, except that the advisory committee shall consist of at least five (5) members of the Graduate Faculty, plus the Director of Environmental Sciences Ph.D. program who serves as an ex officio, nonvoting member. For students concentrating in Agriculture, Biology, Chemistry, and

Geosciences, three (3) members of the advisory committee shall be from the student's area of concentration, at least one (1) member shall be from a separate department of the environmental science core outside the student's area of concentration, and one (1) member may be from any department within the university. For the Integrated Research concentration, at least two (2) members shall be from departments participating in the environmental science core, one (1) member shall be from any STEM department, and two (2) members may be from any department within the university. For all concentrations, no more than three (3) committee members may be from the same department. Changes in a Ph.D. advisory committee must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Guidelines for the Comprehensive Examination

Prerequisites. Before requesting that his or her major professor schedule a Comprehensive Examination, a student must:

- have achieved Full Standing in the program

- completed approximately 80% of the course work in his/her Program of Study

Descriptions

The test will consist of written and/or oral portions. The students advisory portion will consist of four (4) sections. Total time for each section should not exceed eight (8) hours. Three (3) sections will contain material from the students area of concentration and one (1) section will integrate material from the Environmental Sciences Core Curriculum. It is the graduate advisory committee chair's responsibility to ensure that all committee members will be involved in the administration and evaluation of the written and oral exams, per University Policy 282.

If an oral exam is to be included as part of the comprehensive exam it will be administered by the students advisory committee within three (3) weeks of the successful completion of the written portion of the exam. A question will be included in the oral exam that tests the students understanding of the interdisciplinary nature of Environmental Sciences.

If an oral exam is included as part of the comprehensive exam, both portions of the Comprehensive Examination will be completed during one (1) academic semester.

Results

Four-fifths of the voting members of the committee must agree that the student has successfully completed the comprehensive exam.

The student will be given one (1) additional opportunity to pass each portion of the Comprehensive Examination. Failure to pass either portion on the second try will result in the students dismissal from the Ph.D. program.

A written evaluation of the students performance on the Comprehensive Examination will be prepared by the students advisory committee and kept on file in the office of the Director of the Environmental Sciences Ph.D. program.

Time Constraints

Successful completion of the Comprehensive Examination must be achieved in a timely fashion. The complete Comprehensive Examination must be scheduled and taken within a year following the completion of 80% of the course work in the students Program of Study, including successful completion of all core courses. It shall be the students responsibility, in consultation with his/her advisor, to schedule this examination at a date agreeable to the whole examining committee. The committee shall be given at least two (2) months advance notice of the Examination date in order to make preparations. Any second attempts to pass portions of the Comprehensive Examination must be scheduled in the subsequent (Fall/Spring) semester. Failure to follow these procedures shall result in the students dismissal from the program. Any appeal by the student for exceptions to this policy shall be made in writing and submitted to the Executive Committee of the Ph.D. program.

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

ENV-CHEM - Environmental Sciences, Chemistry Concentration, Ph.D.

Program Overview

Program Long Title
Environmental Sciences, Chemistry Concentration, Ph.D.

College/School
Interdisciplinary Studies

Department(s)
Environmental Studies

Catalog Full Description
The Doctor of Philosophy degree program in Environmental Sciences offers concentrations in biology, chemistry, agriculture, geosciences, and integrated research but emphasizes the solution of complex environmental problems using an interdisciplinary approach. Course work is required in biology, chemistry, geology, agriculture, and sociology. This interdisciplinary approach ensures that students become aware of a wide range of environmental concerns and that their research includes a breadth of environmental understanding beyond the boundaries of a particular discipline. The goal of the program is to prepare students for careers in research, management, government service, teaching, and other areas where they can make productive contributions to the solution of environmental problems.

The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours

- **Research and Dissertation Requirement:** 18 hours

- **Advisor Guided Concentration Coursework:** 30 hours

- **Total Degree Requirement:** 61 hours

Admission Requirements

Admission Requirements
Applicants for admission to the doctoral program in Environmental Sciences must have:

- a bachelor's or master's degree in science, mathematics, engineering, or environmental science;

- a grade point average of 3.0 or above on a 4.0 scale;

- international students must have a score of 525 or above on the TOEFL;

  Application materials may be obtained from the Graduate School Office.

Applicants seeking admission with Full Standing in the program must satisfy the departmental requirements.

EVS Chemistry Concentration Additional Admissions Requirements

- applicants must have a bachelor's degree in chemistry that has been certified by the American Chemical Society or course work equivalent to this degree;

- applicants must have one (1) year each of general, organic, and physical chemistry;

- applicants must have one (1) semester of analytical and inorganic chemistry, one (1) semester of instrumental analysis.

Applicants who do not fully meet the above requirements may be admitted in Provisional Standing on the basis of a favorable recommendation to the Associate Dean of Graduate Studies by the appropriate departmental chairperson and the

Director of the Environmental Sciences doctoral program. If admitted in Provisional Standing, the student must remove all deficiencies and apply for reclassification to Full Standing prior to the completion of 15 hours of graduate work.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours
- **Research and Dissertation Requirement:** 18 hours
- **Advisor Guided Concentration Coursework:** 30 hours
- **Total Degree Requirement:** 61 hours

- A minimum of 61 semester credits of course work and doctoral research and dissertation as follows:
  - A minimum of 43 semester credits of course work beyond the bachelor's degree:
    - This must include 13 semester credits of core coursework
    - This must include 30 hours of concentration coursework
    - Must include at least 12 semester credits at the 7000 level
  - A minimum of 18 semester credits of research and dissertation, resulting in the satisfactory completion of a doctoral dissertation.
- Residence of four (4) semesters beyond the bachelor's level, with at least two (2) semesters in continuous residence.
- Completion of all requirements for the degree, including the dissertation within a period of eight (8) consecutive years.
- Maintenance of a general grade point average of 3.0.
- Satisfactory completion of a comprehensive examination.
- Satisfactory presentation and defense of a doctoral dissertation.

In addition, a student must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Degree Requirements Type
Completion Requirement

Concentration Core Coursework (1 Credit Hours)

Complete ALL of the following Courses:
- EVSA6010 - Environmental Agriculture
- EVSB6010 - Environmental Biology
- EVSS6010 - Environmental Social Policy
- EVSC6010 - Environmental Chemistry
- EVS7910 - Environmental Science Seminar

Research and Dissertation Requirement (18 hours)

Complete ALL of the following Courses:
- EVSC7990 - Research & Dissertation

Advisor Guided Concentration Coursework (30 hours)

The advisor and/or committee may define 30 hours from any EVSA, EVSB, EVSC, EVSI, EVSS, EVS, BIOL, or CHEM 6000-7000 level courses.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information

Information And Additional Notes

Guidelines for Committee and Comprehensive Exam

Guidelines for Graduate Committee Composition

The organization and appointment of advisory committees to supervise graduate study for the degree of Doctor of Philosophy in Environmental Sciences shall be the same, generally, as in the master's program, except that the advisory committee shall consist of at least five (5) members of the Graduate Faculty, plus the Director of Environmental Sciences Ph.D. program who serves as an ex officio, nonvoting member. For students concentrating in Agriculture, Biology, Chemistry, and Geosciences, three (3) members of the advisory committee shall be from the student's area of concentration, at least one (1) member shall be from a separate department of the environmental science core outside the student's area of concentration, and one (1) member may be from any department within the university. For the Integrated Research concentration, at least two (2) members shall be from departments participating in the environmental science core, one (1) member shall be from any STEM department, and two (2) members may be from any department within the university. For all concentrations, no more than three (3) committee members may be from the same department. Changes in a Ph.D. advisory committee must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Guidelines for the Comprehensive Examination

Prerequisites. Before requesting that his or her major professor schedule a Comprehensive Examination, a student must:

- have achieved Full Standing in the program
- completed approximately 80% of the course work in his/her Program of Study

Descriptions

The test will consist of written and/or oral portions. The student's advisory portion will consist of four (4) sections. Total time for each section should not exceed eight (8) hours. Three (3) sections will contain material from the student's area of concentration and one (1) section will integrate material from the Environmental Sciences Core Curriculum. It is the graduate advisory committee chair's

responsibility to ensure that all committee members will be involved in the administration and evaluation of the written and oral exams, per University Policy 282.

If an oral exam is to be included as part of the comprehensive exam it will be administered by the student's advisory committee within three (3) weeks of the successful completion of the written portion of the exam. A question will be included in the oral exam that tests the student's understanding of the interdisciplinary nature of Environmental Sciences.

If an oral exam is included as part of the comprehensive exam, both portions of the Comprehensive Examination will be completed during one (1) academic semester.

Results

Four-fifths of the voting members of the committee must agree that the student has successfully completed the comprehensive exam.

The student will be given one (1) additional opportunity to pass each portion of the Comprehensive Examination. Failure to pass either portion on the second try will result in the student's dismissal from the Ph.D. program.

A written evaluation of the student's performance on the Comprehensive Examination will be prepared by the student's advisory committee and kept on file in the office of the Director of the Environmental Sciences Ph.D. program.

Time Constraints

Successful completion of the Comprehensive Examination must be achieved in a timely fashion. The complete Comprehensive Examination must be scheduled and taken within a year following the completion of 80% of the course work in the student's Program of Study, including successful completion of all core courses. It shall be the student's responsibility, in consultation with his/her advisor, to schedule this examination at a date agreeable to the whole examining committee. The committee shall be given at least two (2) months advance notice of the Examination date in order to make preparations. Any second attempts to pass portions of the Comprehensive Examination must be scheduled in the subsequent (Fall/Spring) semester. Failure to follow these procedures shall result in the student's dismissal from the program. Any appeal by the student for exceptions to this policy shall be made in writing and submitted to the Executive Committee of the Ph.D. program.

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

ENV-GEOS - Environmental Sciences, Geosciences Concentration, Ph.D.

Program Overview

Program Long Title
Environmental Sciences, Geosciences Concentration, Ph.D.

College/School
Interdisciplinary Studies

Department(s)
Environmental Studies

Catalog Full Description
Geosciences has many connections with Environmental Sciences, including study areas of climate change, depletion of sand, soils, and other terrestrial resources, hydrology and groundwater contamination, fracking and other oil/gas/coal exploration, geographic patterns in land use, geospatial analyses and remote sensing, just to name a few. Tennessee Tech has existing laboratory space to provide a venue for dissertation research projects in environmental geology, geography, and related earth sciences topic areas.

The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours

- **Research and Dissertation Requirement:** 18 hours

- **Advisor Guided Concentration Coursework:** 30 hours

- **Total Degree Requirement:** 61 hours

Admission Requirements

Admission Requirements
Applicants for admission to the doctoral program in Environmental Sciences must have:

- a bachelor's or master's degree in science, mathematics, engineering, or environmental science;

- a grade point average of 3.0 or above on a 4.0 scale;

- international students must have a score of 525 or above on the TOEFL;

  Application materials may be obtained from the Graduate School Office.

Applicants seeking admission with Full Standing in the program must satisfy the departmental requirements.

Applicants who do not fully meet the following requirements may be admitted in Provisional Standing on the basis of a favorable recommendation to the Associate Dean of Graduate Studies by the appropriate departmental chairperson and the Director of the Environmental Sciences doctoral program. If admitted in Provisional Standing, the student must remove all deficiencies and apply for reclassification to Full Standing prior to the completion of 15 hours of graduate work.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours

- **Research and Dissertation Requirement:** 18 hours

- **Advisor Guided Concentration Coursework:** 30 hours

- **Total Degree Requirement:** 61 hours

- A minimum of 61 semester credits of course work and doctoral research and dissertation as follows:
    - A minimum of 43 semester credits of course work beyond the bachelor's degree:
        - This must include 13 semester credits of core coursework
        - This must include 30 hours of concentration coursework
        - Must include at least 12 semester credits at the 7000 level
    - A minimum of 18 semester credits of research and dissertation, resulting in the satisfactory completion of a doctoral dissertation.

- Residence of four (4) semesters beyond the bachelor's level, with at least two (2) semesters in continuous residence.

- Completion of all requirements for the degree, including the dissertation within a period of eight (8) consecutive years.

- Maintenance of a general grade point average of 3.0.

- Satisfactory completion of a comprehensive examination.

- Satisfactory presentation and defense of a doctoral dissertation.

In addition, a student must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Degree Requirements
Type
Completion Requirement

Concentration Core Coursework (1 Credit Hours)

Complete ALL of the following Courses:
- EVSA6010 - Environmental Agriculture
- EVSB6010 - Environmental Biology
- EVSS6010 - Environmental Social Policy
- EVSC6010 - Environmental Chemistry
- EVS7910 - Environmental Science Seminar

Research and Dissertation Requirement (18 hours)

Complete ALL of the following Courses:
- EVSG7990 - Research and Dissertation

Advisor Guided Concentration Coursework (30 hours)

The advisor and/or committee may define 30 hours from any EVSA, EVSB, EVSC, EVSI, EVSS, EVS, BIOL, or CHEM 6000-7000 level courses.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information
Information And Additional Notes

Guidelines for Committee and Comprehensive Exam

Guidelines for Graduate Committee Composition

The organization and appointment of advisory committees to supervise graduate study for the degree of Doctor of Philosophy in Environmental Sciences shall be the same, generally, as in the master's program, except that the advisory committee shall consist of at least five (5) members of the Graduate Faculty, plus the Director of Environmental Sciences Ph.D. program who serves as an ex officio, nonvoting member. For students concentrating in Agriculture, Biology, Chemistry, and Geosciences, three (3) members of the advisory committee shall be from the student's area of concentration, at least one (1) member shall be from a separate department of the environmental science core outside the student's area of concentration, and one (1) member may be from any department within the university. For the Integrated Research concentration, at least two (2) members shall be from departments participating in the environmental science core, one (1) member shall be from any STEM department, and two (2) members may be from any department within the university. For all concentrations, no more than three (3) committee members may be from the same department. Changes in a Ph.D. advisory committee must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Guidelines for the Comprehensive Examination

Prerequisites. Before requesting that his or her major professor schedule a Comprehensive Examination, a student must:

- have achieved Full Standing in the program

- completed approximately 80% of the course work in his/her Program of Study

Descriptions

The test will consist of written and/or oral portions. The student's advisory portion will consist of four (4) sections. Total time for each section should not exceed eight (8) hours. Three (3) sections will contain material from the student's area of concentration and one (1) section will integrate material from the Environmental Sciences Core Curriculum. It is the graduate advisory committee chair's responsibility to ensure that all committee members will be involved in the administration and evaluation of the written and oral exams, per University Policy 282.

If an oral exam is to be included as part of the comprehensive exam it will be administered by the student's advisory committee within three (3) weeks of the successful completion of the written portion of the exam. A question will be included in the oral exam that tests the student's understanding of the interdisciplinary nature of Environmental Sciences.

If an oral exam is included as part of the comprehensive exam, both portions of the Comprehensive Examination will be completed during one (1) academic semester.

Results

Four-fifths of the voting members of the committee must agree that the student has successfully completed the comprehensive exam.

The student will be given one (1) additional opportunity to pass each portion of the Comprehensive Examination. Failure to pass either portion on the second try will result in the student's dismissal from the Ph.D. program.

A written evaluation of the student's performance on the Comprehensive Examination will be prepared by the student's advisory committee and kept on file in the office of the Director of the Environmental Sciences Ph.D. program.

Time Constraints

Successful completion of the Comprehensive Examination must be achieved in a timely fashion. The complete Comprehensive Examination must be scheduled and taken within a year following the completion of 80% of the course work in the student's Program of Study, including successful completion of all core courses. It shall be the student's responsibility, in consultation with his/her advisor, to schedule this examination at a date agreeable to the whole examining committee. The committee shall be given at least two (2) months advance notice of the Examination date in order to make preparations. Any second attempts to pass portions of the Comprehensive Examination must be scheduled in the subsequent (Fall/Spring) semester. Failure to follow these procedures shall result in the student's dismissal from the program. Any appeal by the student for exceptions to this policy shall be made in writing and submitted to the Executive Committee of the Ph.D. program.

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

ENV-IR - Environmental Sciences, Integrated Research, Ph.D.

Program Overview

Program Long Title
Environmental Sciences, Integrated Research, Ph.D.

College/School	Department(s)
Interdisciplinary Studies	Environmental Studies

Catalog Full Description
Advances in the field of Environmental Sciences are often dependent on collaboration and interdisciplinary research to answer difficult questions in the environmental arena. Integrating expertise from other fields such as engineering, education, mathematics, sociology and political science, computer sciences, nursing, economics, history, philosophy and ethics, among others, can provide a powerful platform for addressing problems in the environmental sciences in a more effective manner.

The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours
- **Research and Dissertation Requirement:** 18 hours
- **Advisor Guided Concentration Coursework:** 30 hours
- **Total Degree Requirement:** 61 hours

Admission Requirements

Admission Requirements
Applicants for admission to the doctoral program in Environmental Sciences must have:

- a bachelor's or master's degree in science, mathematics, engineering, or environmental science;

- a grade point average of 3.0 or above on a 4.0 scale;

- international students must have a score of 525 or above on the TOEFL;

Application materials may be obtained from the Graduate School Office.

Applicants seeking admission with Full Standing in the program must satisfy the departmental requirements.

Applicants who do not fully meet the following requirements may be admitted in Provisional Standing on the basis of a favorable recommendation to the Associate Dean of Graduate Studies by the appropriate departmental chairperson and the Director of the Environmental Sciences doctoral program. If admitted in Provisional Standing, the student must remove all deficiencies and apply for reclassification to Full Standing prior to the completion of 15 hours of graduate work.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The general requirements for the Ph.D. degree in Environmental Sciences are:

- **Concentration Core Coursework:** 13 hours
- **Research and Dissertation Requirement:** 18 hours
- **Advisor Guided Concentration Coursework:** 30 hours
- **Total Degree Requirement:** 61 hours

- A minimum of 61 semester credits of course work and doctoral research and dissertation as follows:
  - A minimum of 43 semester credits of course work beyond the bachelor's degree:
    - This must include 13 semester credits of core coursework
    - This must include 30 hours of concentration coursework
    - Must include at least 12 semester credits at the 7000 level
  - A minimum of 18 semester credits of research and dissertation, resulting in the satisfactory completion of a doctoral dissertation.
- Residence of four (4) semesters beyond the bachelor's level, with at least two (2) semesters in continuous residence.
- Completion of all requirements for the degree, including the dissertation within a period of eight (8) consecutive years.
- Maintenance of a general grade point average of 3.0.
- Satisfactory completion of a comprehensive examination.
- Satisfactory presentation and defense of a doctoral dissertation.

In addition, a student must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Degree Requirements
Type
Completion Requirement

Concentration Core Coursework (1 Credit Hours)

Complete ALL of the following Courses:
- EVS7910 - Environmental Science Seminar

Concentration Core Coursework (12 hours)

Complete at least 4 of the following courses:
- EVSA6010 - Environmental Agriculture
- EVSG6010 - Environmental Geology
- EVSS6010 - Environmental Social Policy
- EVSC6010 - Environmental Chemistry
- EVSB6010 - Environmental Biology

Research and Dissertation Requirement (18 hours)

Complete ALL of the following Courses:
- EVSI7990 - Research and Dissertation

Advisor Guided Concentration Coursework (30 hours)

The advisor and/or committee may define 30 hours from any EVSA, EVSB, EVSC, EVSI, EVSS, EVS, BIOL, or CHEM 6000-7000 level courses.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Additional Information

Information And Additional Notes

Guidelines for Committee and Comprehensive Exam

Guidelines for Graduate Committee Composition

The organization and appointment of advisory committees to supervise graduate study for the degree of Doctor of Philosophy in Environmental Sciences shall be the same, generally, as in the master's program, except that the advisory committee shall consist of at least five (5) members of the Graduate Faculty, plus the Director of Environmental Sciences Ph.D. program who serves as an ex officio, nonvoting member. For students concentrating in Agriculture, Biology, Chemistry, and Geosciences, three (3) members of the advisory committee shall be from the student's area of concentration, at least one (1) member shall be from a separate department of the environmental science core outside the student's area of concentration, and one (1) member may be from any department within the university. For the Integrated Research concentration, at least two (2) members shall be from departments participating in the environmental science core, one (1) member shall be from any STEM department, and two (2) members may be from any department within the university. For all concentrations, no more than three (3) committee members may be from the same department. Changes in a Ph.D. advisory committee must adhere to all policies and procedures governing graduate study at the University, as contained in the Graduate Catalog and administered by the Director of Graduate Studies.

Guidelines for the Comprehensive Examination

Prerequisites. Before requesting that his or her major professor schedule a Comprehensive Examination, a student must:

- have achieved Full Standing in the program
- completed approximately 80% of the course work in his/her Program of Study

Descriptions

The test will consist of written and/or oral portions. The student's advisory portion will consist of four (4) sections. Total time for each section should not exceed eight (8) hours. Three (3) sections will contain material from the student's area of concentration and one (1) section will integrate material from the Environmental Sciences Core Curriculum. It is the graduate advisory committee chair's responsibility to ensure that all committee members will be involved in the administration and evaluation of the written and oral exams, per University Policy 282.

If an oral exam is to be included as part of the comprehensive exam it will be administered by the student's advisory committee within three (3) weeks of the successful completion of the written portion of the exam. A question will be included in the oral exam that tests the student's understanding of the interdisciplinary nature of Environmental Sciences.

If an oral exam is included as part of the comprehensive exam, both portions of the Comprehensive Examination will be completed during one (1) academic semester.

Results

Four-fifths of the voting members of the committee must agree that the student has successfully completed the comprehensive exam.

The student will be given one (1) additional opportunity to pass each portion of the Comprehensive Examination. Failure to pass either portion on the second try will result in the student's dismissal from the Ph.D. program.

A written evaluation of the student's performance on the Comprehensive Examination will be prepared by the student's advisory committee and kept on file in the office of the Director of the Environmental Sciences Ph.D. program.

Time Constraints

Successful completion of the Comprehensive Examination must be achieved in a timely fashion. The complete Comprehensive Examination must be scheduled and taken within a year following the completion of 80% of the course work in the student's Program of Study, including successful completion of all core courses. It shall be the student's responsibility, in consultation with his/her advisor, to schedule this examination at a date agreeable to the whole examining committee. The committee shall be given at least two (2) months advance notice of the Examination date in order to make preparations. Any second attempts to pass portions of the Comprehensive Examination must be scheduled in the subsequent (Fall/Spring) semester. Failure to follow these procedures shall result in the student's dismissal from the program. Any appeal by the student for exceptions to this policy shall be made in writing and submitted to the Executive Committee of the Ph.D. program.

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

MGEI-CER - Managerial Environmental Informatics Certificate, Environmental Studies

Program Overview

Program Long Title
Managerial Environmental Informatics Certificate, Environmental Studies

College/School	**Department(s)**
Interdisciplinary Studies	Environmental Studies

Catalog Full Description

There are two 15-credit hour graduate certificates in the Professional Science Master's degree program within the Environmental Informatics concentration: (a) Managerial Environmental Informatics and (b) Technical Environmental Informatics.

Students may earn one or both certificates as stand-alone graduate certificates, or as embedded within the 33-credit hour PSM degree program.

Total Credit Hours for Certificate: 15

Admission Requirements

Admission Requirements

Requirements for Admission

- Undergraduate degree in science, technology, engineering, or mathematics discipline* with GPA of at least 3.0 on a 4.0 scale **OR** a total score of at least 300 on verbal and quantitative portions of the GRE General Test along with a score of at least 3.5 on the analytical writing portion of the test.

- Official transcripts from all previously-attended colleges or universities

- Three (3) letters of recommendation from faculty familiar with the academic ability of the applicant.

- International applicants must also meet the English Language Requirement by providing test results on **one** (**1**) of the following:

  ◦ TOEFL--550 minimum (213 computer-based or 79 internet-based)

  ◦ IELTS--minimum base score of 6.0

*Applicants that have baccalaureate degrees in a closely related field will be evaluated on a case-by-case basis and may be admitted to full standing upon completion of identified background courses.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The School of Environmental Studies offers a 15 credit-hour graduate certificate in the field of Managerial Environmental Informatics. This certificate will appeal to working professionals in government agencies and industry. Students may receive the certificate as part of their 33 credit-hour PSM degree or may receive the certificate as a standalone program. All students apply and are admitted to the PSM Environmental Informatics degree program.

Managerial Environmental Informatics 15 credit hours
Type
Completion Requirement

Complete ALL of the following Courses:
- GEOG5410 - Remote Sensing
  OR GEOG5650 - Environmental Apps of GIS
- EVSS6010 - Environmental Social Policy
  OR ESS6000 - Environmental Law
- BMGT6200 - Organizational Leadership
  OR PRST6110 - Leadership and Communication
  OR PRST6310 - Leadership in Organization
  OR PRST6500 - Foundations of Leadership

Directed Elective Approved List

Complete at least 1 of the following courses:

- ACCT6010 - Acct Info for Mgmt Decisions
- ECON5200 - Environmental Economics
- EVS7900 - Sci Writing/Grantsmanship
- MKT6100 - Strategic Marketing
- PRST6040 - Human Resources Mgmt
- PRST6100 - Prof Environmntl Issues/Ethics
- PRST6700 - Conflict Management and Negotiation
- PRST6920 - Diversity in the Workplace

Graduate-level statistics course from Approved List

Complete at least 1 of the following courses:
- AGBE5210 - Ag & Biological Statistics
- BIOL5220 - Biostatistics
- BIOL6140 - Fish & Wildlife Biometrics
- PSY6310 - Educational Statistics
- MATH6070 - App Linear Stat Meth I
- MATH6080 - App Linear Stat Meth II
- MATH6170 - Experimental Design I
- MATH6180 - Experimental Design II
- MATH6470 - Environmental Statistics
- PRST6600 - Statistical Analysis
- SOC5920 - Data Analysis & Mgmt

Additional Comments:

Total Credit Hours for Certificate: 15

No Requirement Level

PSM-ENIN - Professional Science, Environmental Informatics Concentration, P.S.M.

Program Overview

Program Long Title
Professional Science, Environmental Informatics Concentration, P.S.M.

College/School
Interdisciplinary Studies

Department(s)
Environmental Studies

Catalog Full Description
Population growth, pollution, and limited natural resources, result in increasingly topical environmental issues. The Professional Science Master's with a concentration in Environmental Informatics degree program effectively prepares you for a career dedicated to sustaining Earth's resources for future generations.

Environmental Informatics combines existing courses in the Colleges of Business, Arts and Sciences, Agricultural and Human Sciences, and Engineering to effectively produce a new and essential degree. Currently, the business core courses are offered online and on campus through TTU's MBA program.

Environmental Informatics will also use an interdisciplinary approach of course delivery by incorporating faculty from the Colleges of Business, Arts and Sciences, and Engineering.

There are increasing numbers of career opportunities for professionals with this degree. Environmental scientists and technicians are required to meet increasing demands placed on companies as worldwide awareness of environmentalism increases. Statistics show many professionals in this field will soon be retiring, leaving space for the next generation of environmentalists.

The program is designed for graduates of approved natural resources undergraduate programs (e.g., environmental biology, environmental chemistry, environmental engineering, water resources engineering, geology, environmental agriculture, environmental management, etc.).

The Professional Science Master's degree in Environmental Informatics is a 33 hour degree program. The degree requirements include:

- **Required Business and Statistics Courses:** 9 hours
- **Concentration Course Requirements:** 18 hours
- **Advisor Guided Electives:** 6 hours
- **Total Degree Requirements:** 33 hours

Admission Requirements

Admission Requirements

- Undergraduate degree in science, technology, engineering, or mathematics discipline* with GPA of at least 3.0 on a 4.0 scale; [OR] a total score of at least 300 on verbal and quantitative portions of the GRE General Test along with a score of at least 3.5 score on the analytical writing portion of the test.
- Official transcripts from all previously-attended colleges or universities
- Three (3) letters of recommendation from faculty or supervisors familiar with the academic ability of the applicant.
- International applicants must also meet the English Language Requirement by providing test results on one (1)of the following:
  - TOEFL -550 minimum (213 computer-based or 79 internet-based)
  - IELTS - minimum base score of 6.0

*Applicants that have baccalaureate degrees in a closely related field will be evaluated on a case-by-case basis and may be admitted to full standing upon completion of identified background courses.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Professional Science Master's degree in Environmental Informatics is a 33 hour degree program. The degree requirements include:

- **Required Business and Statistics Courses:** 9 hours
- **Concentration Course Requirements:** 18 hours
- **Advisor Guided Electives:** 6 hours
- **Total Degree Requirements:** 33 hours

Curriculum Type
Completion Requirement

Required Business and Statistics Courses (9 hours)

Complete ALL of the following Courses:
- MATH6070 - App Linear Stat Meth I
  OR PRST6600 - Statistical Analysis
  OR PSY6310 - Educational Statistics
  OR BIOL5220 - Biostatistics
- BMGT6200 - Organizational Leadership
  OR PRST6110 - Leadership and Communication
- MKT6100 - Strategic Marketing

Concentration Course Requirements (18 hours)

Complete ALL of the following Courses:
- ESS6000 - Environmental Law
  OR EVSS6010 - Environmental Social Policy
- ESS6510 - Programming GIS
- ESS6520 - Env Informatics Python Apps
- ESS6910 - Capstone Experience/Internship
- GEOG5410 - Remote Sensing
- GEOG5650 - Environmental Apps of GIS

Advisor Guided Electives (6 hours)

Earn at least 6 credits from the following:
- ACCT6010 - Acct Info for Mgmt Decisions
- CSC6220 - Data Mining
- CSC6300 - Advanced Database Systems
- DS6550 - Database Management
- ESS6970 - Special Topics
- EVS7900 - Sci Writing/Grantsmanship
- MATH6080 - App Linear Stat Meth II
- MATH6470 - Environmental Statistics
- PSY7310 - Adv Educational Statistics
- ESS5300 - Environmental Mgmt System
- GEOG5850 - Advanced GIS

Background Courses

Students may be advised to take background courses as preparation for the GIS portion of the degree program. The advisor will determine, with the GIS faculty, if a student should complete a competency test or enroll in the background coursework.

Enroll in the following Courses:
- GEOG5510 - Theory of GIS I
- GEOG5511 - Theory of GIS II

Additional Comments:

Total Credit Hours: 33

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

Fast-Track in Environmental Informatics

This will allow selected undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the P.S.M., Environmental Informatics program. The courses taken during the students junior/senior year can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change the requirements for either the undergraduate or graduate program in Environmental Informatics. Once admitted to this program, the student will be allowed to enroll in appropriate courses in the junior or senior year with the consent of the students undergraduate advisor and the Director of the P.S.M. program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the P.S.M. Environmental Informatics program.

Admission to Fast-Track

Minimum requirements for admission are:

- Applicant must be earning a baccalaureate degree in a related field, which will be evaluated on a case-by-case basis

- Recommendation of a faculty member in the students major

- Overall GPA of 3.0

- Program participants should consult with their future P.S.M. advisor regarding appropriate graduate courses to take during their junior/senior year.

- The student must earn a minimum grade of B in the graduate courses in order to apply them to their P.S.M program of study.

- All requirements for full admission to Graduate School must be met upon undergraduate graduation. Students in the Fast-Track program must still apply for admission to the Graduate School and meeting Fast-Track requirements does not necessarily guarantee admission to the PSM-Environmental Informatics degree program.

- Students who do not succeed in their first graduate course (B grade or better) will be advised to withdraw from the Fast Track program and complete their B.S. degree in a normal manner.

Fulfilling the above minimum requirements does not guarantee acceptance into the Professional Science Masters, Environmental Informatics Fast Track program. Students who meet the above minimum requirements must consult with the College of Interdisciplinary Studies and the School of Environmental Studies for eligibility and acceptance.

TENI-CER - Technical Environmental Informatics Certificate, Environmental Studies

Program Overview

Program Long Title
Technical Environmental Informatics Certificate, Environmental Studies

College/School
Interdisciplinary Studies

Department(s)
Environmental Studies

Catalog Full Description
There are two 15-credit hour graduate certificates in the Professional Science Master's degree program within the Environmental Informatics concentration: (a) Managerial Environmental Informatics and (b) Technical Environmental Informatics.

Students may earn one or both certificates as stand-alone graduate certificates, or as embedded within the 33-credit hour PSM degree program.

Technical Environmental Informatics is a 15 credit hour graduate certificate program that brings together information systems, GIS application and programming, statistics and social policy/law.

Students may earn the certificate as a stand-alone graduate certificate, or as embedded within the 33-credit hour PSM degree program.

Total Certificate Requirements: 15 credit hours

Admission Requirements

Admission Requirements
- Undergraduate degree in science, technology, engineering, or mathematics discipline* with GPA of at least 3.0 on a 4.0 scale **OR** a total score of at least 300 on verbal and quantitative portions of the GRE General Test along with a score of at least 3.5 on the analytical writing portion of the test.

- Official transcripts from all previously-attended colleges or universities

- Three (3) letters of recommendation from faculty familiar with the academic ability of the applicant.

- International applicants must also meet the English Language Requirement by providing test results on **one** (**1**) of the following:
  - TOEFL--550 minimum (213 computer-based or 79 internet-based)
  - IELTS--minimum base score of 6.0

*Applicants that have baccalaureate degrees in a closely related field will be evaluated on a case-by-case basis and may be admitted to full standing upon completion of identified background courses.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Technical Environmental Informatics is a 15 credit hour graduate certificate program that brings together information systems, GIS application and programming, statistics and social policy/law.

Students may earn the certificate as a stand-alone graduate certificate, or as embedded within the 33-credit hour PSM degree program.

Certificate Requirements (15 hours)
Type
Completion Requirement

Certificate Requirements

Complete ALL of the following Courses:
- GEOG5410 - Remote Sensing
  OR GEOG5650 - Environmental Apps of GIS
- EVSS6010 - Environmental Social Policy
  OR ESS6000 - Environmental Law
- CSC6200 - Secure E-Commerce
  OR CSC6230 - Machine Learning
  OR ESS6520 - Env Informatics Python Apps
- ESS6510 - Programming GIS

Select 1 Statistics Course from the Following List

Complete at least 1 of the following courses:
- AGBE5210 - Ag & Biological Statistics
- BIOL5220 - Biostatistics
- BIOL6140 - Fish & Wildlife Biometrics
- MATH6070 - App Linear Stat Meth I
- MATH6080 - App Linear Stat Meth II
- MATH6170 - Experimental Design I
- MATH6180 - Experimental Design II
- MATH6180 - Experimental Design II
- MATH6470 - Environmental Statistics
- PRST6600 - Statistical Analysis
- PSY6310 - Educational Statistics
- SOC5920 - Data Analysis & Mgmt

Total Certificate Hours: 15

Additional Comments:

No Requirement Level

Courses

ESS5300 - Environmental Mgmt System

General

College/School
Interdisciplinary Studies

Course Title
Environmental Mgmt System

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ESS

Course Number
5300

Credit Hours

Credit Hours Min
3

Course Description
The course is a case study that presents the student witrh the techniques, technologies, regulations and strategies that define industrial pollution prevention.

Requisites

Simple Requisites

> **Prerequisites:** None

ESS6000 - Environmental Law

General

College/School
Interdisciplinary Studies

Course Title
Environmental Law

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ESS

Course Number
6000

Credit Hours

Credit Hours Min
3

Course Description
An introductory graduate-level course on the development, purposes, and major tenets of environmental law, with particular focus on implementation and enforcement of the Clean Air Act, Clean Water Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Endangered Species Act (ESA), National Environmental Policy Act (NEPA), and Resources Conservation and Recovery Act (RCRA).

Requisites

Simple Requisites

> **Prerequisites:** None

ESS6510 - Programming GIS

General

College/School
Interdisciplinary Studies

Course Title
Programming GIS

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ESS

Course Number
6510

Credit Hours

Credit Hours Min
3

Course Description
Python is a free and easy to learn language, tightly integrated into ArcGIS 10. This course introduces students to Python scripting to increase productivity and management of GIS data and adding more functions to the projects.

Requisites

Simple Requisites

> **Prerequisites:** None

ESS6520 - Env Informatics Python Apps

General

College/School
Interdisciplinary Studies

Course Title
Env Informatics Python Apps

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ESS

Course Number
6520

Credit Hours

Credit Hours Min
3

Course Description
Programming GIS, or consent from instructor. Data analysis pre-processing, visualization, classification, and statistical functions from Python packages and machine learning algorithms applied to environmental data. Students will gain professional experience working with real-world environmental data.

Requisites

Simple Requisites

> **Prerequisite:** ESS6510 Programming GIS.

ESS6910 - Capstone Experience/Internship

General

College/School
Interdisciplinary Studies

Course Title
Capstone Experience/Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ESS

Course Number
6910

Credit Hours

Credit Hours Min
3

Course Description

The capstone experience is the experiential component for the Professional Science Master's designation. It will include a capstone project supervised by faculty and employers, evaluated or graded by faculty, and typically developed with an employer, which integrates the practical application of scientific and professional knowledge, behavior and skills. The internship provides an opportunity for students to demonstrate proficiency in written and oral communication.

Requisites

Simple Requisites

> **Prerequisites:** None

ESS6970 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ESS

Course Number
6970

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description

Prerequisite: Consent of instructor. Special study in an approved field under the supervision of a member of the graduate faculty as approved by the director of the school. May be taken more than once for a maximum total of credit hours.

EVS7800 - Prof Dev for Doctoral Students

General

College/School
Interdisciplinary Studies

Course Title
Prof Dev for Doctoral Students

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVS

Course Number
7800

Credit Hours

Credit Hours Min
3

Course Description

Prerequisite: Graduate classification and consent of instructor. Practical skills for professional development such as networking, resumés and interviews, career options, stress management, work productivity, ethical conduct, peer review, written and oral communication, leadership and group dynamics, and public outreach. Additional doctoral-level topics such as comprehensive exams, dissertation defenses, teaching/research philosophies, and faculty interviews will also be covered.

Requisites

Simple Requisites

> **Prerequisite:** Graduate classification and consent of instructor.

EVS7810 - Inst Methods for Adults

General

College/School
Interdisciplinary Studies

Course Title
Inst Methods for Adults

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVS

Course Number
7810

Credit Hours

Credit Hours Min
3

Course Description

Theory and practice of adult education with an emphasis on subject areas of agriculture, natural resources and environmental sciences. The course will address teaching-learning methods in formal and non-formal instructional programs for adult learners.

Requisites

Simple Requisites

> **Prerequisite:** Graduate classification and consent of instructor.

EVS7900 - Sci Writing/Grantsmanship

General

College/School
Interdisciplinary Studies

Course Title
Sci Writing/Grantsmanship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVS

Course Number
7900

Credit Hours

Credit Hours Min
3

Course Description
The overall goal of this course is to help students acquire writing skills and Gransmanship skills that will help them be competitive for research funds and be successful in publishing research papers.

Requisites
Simple Requisites

Prerequisite: Full standing in Environmental Sciences Ph.D. program or consent of instructor.

EVS7910 - Environmental Science Seminar

General

College/School
Interdisciplinary Studies

Course Title
Environmental Science Seminar

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVS

Course Number
7910

Credit Hours
Credit Hours Min
1

Course Description
Discussions and reports on the current literature and research in environmental science.

Requisites
Simple Requisites

Prerequisites: None

EVSA7010 - Crop Environmental Interaction

General

College/School
Interdisciplinary Studies

Course Title
Crop Environmental Interaction

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EVSA

Course Number
7010

Credit Hours
Credit Hours Min
3

Course Description
Understanding of how crops interact with the major environmental factors.

Requisites
Simple Requisites

Prerequisites: None

EVSA7990 - Research and Dissertation

General

College/School
Interdisciplinary Studies

Course Title
Research and Dissertation

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
EVSA

Course Number
7990

Credit Hours
Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

EVSB6010 - Environmental Biology

General

College/School
Interdisciplinary Studies

Course Title
Environmental Biology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
6010

Credit Hours
Credit Hours Min
3

Course Description
Biological concepts, community and ecosystem structure and function, population biology, water pollution, land and wildlife resources, endangered and threatened species, resource management, human impact, and environmental economics. This course cannot be taken for credit toward graduation by students with a degree or concentration in biology or wildlife and fisheries sciences.

EVSB7050 - Ecological Risk Assessment

General

College/School
Interdisciplinary Studies

Course Title
Ecological Risk Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7050

Credit Hours
Credit Hours Min
3

Course Description
Prerequisite: BIOL 6060 and EVSC 6010. Assessment of ecological risk associated with new chemicals and effluents, existing chemicals and mixtures of chemicals, and human actions.

EVSB7060 - Ecological Toxicology

General

College/School
Interdisciplinary Studies

Course Title
Ecological Toxicology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7060

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Prerequisite: BIOL 6060, EVSC 6010, or consent of instructor. A study of the mechanisms of toxicity in terrestrial and aquatic ecosystems, including the measurement of response, uptake, metabolism, and excretion of toxicants; design and interpretation of toxicity tests, hazard evaluation, risk assessment, and toxics reduction plans; fate and transport processes and advanced approaches in automated computer-assisted monitoring will be evaluated.

EVSB7110 - Env Approaches/Fisheries Mgmt

General

College/School
Interdisciplinary Studies

Course Title
Env Approaches/Fisheries Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7110

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Prerequisite: WFS 5710 or BIOL 6630. An in-depth analysis of current fisheries management practices assessed from the ecosystem perspective.

EVSB7120 - Endangered Species Biology

General

College/School
Interdisciplinary Studies

Course Title
Endangered Species Biology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7120

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
The biology, ecology, management, and recovery of threatened and endangered species.

Requisites

Simple Requisites

Prerequisites: None

EVSB7130 - Wetlands Ecology

General

College/School
Interdisciplinary Studies

Course Title
Wetlands Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7130

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Ecology and legal issues concerning the management of wetland habitats and species.

EVSB7140 - Wildlife-Fisheries Nutrition

General

College/School
Interdisciplinary Studies

Course Title
Wildlife-Fisheries Nutrition

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7140

Credit Hours

Credit Hours Min
3

Course Description
The nutritional and foraging ecology of wild fish, amphibians, reptiles, birds, and mammals.

EVSB7150 - Population-Community Ecology

General

College/School
Interdisciplinary Studies

Course Title
Population-Community Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7150

Credit Hours

Credit Hours Min
3

Course Description
Prerequisites: BIOL 3130 or WFS 3130. Empirical and theoretical concepts in ecology at the population and community levels, including population growth and regulation, species interactions, community assembly and dynamics, metapopulation ecology, and landscape ecology.

EVSB7210 - New/Re-emer Env Hum Pathogens

General

College/School
Interdisciplinary Studies

Course Title
New/Re-emer Env Hum Pathogens

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7210

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: 7 hours of microbiology courses or equivalent. Aspects of emerging human pathogens, including case histories of outbreaks, methods of detection in food and water, and techniques for enumeration and identification.

EVSB7220 - Molecular Ecology/Evolutn Sem

General

College/School
Interdisciplinary Studies

Course Title
Molecular Ecology/Evolutn Sem

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7220

Credit Hours

Credit Hours Min
1

Course Description
Prerequisites: BIOL 3130 and BIOL 4150. Review of current literature concerning application of modern molecular techniques to solve ecological and evolutionary questions. Course may be taken up to 3 times for credit.

EVSB7230 - Molecular Ecology & Evolution

General

College/School
Interdisciplinary Studies

Course Title
Molecular Ecology & Evolution

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7230

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
OR

Course Description
Role of molecular techniques in the study of ecology and evolution, including techniques used to study phylogeny, microorganism detection, population structure, gene flow, and kinship.

EVSB7240 - Computers & Molecular Ecology

General

College/School
Interdisciplinary Studies

Course Title
Computers & Molecular Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7240

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: EVSB 7230 (Molecular Ecology and Evolution). The use and application of computer programs and Internet databases for studying molecular ecology and evolution.

EVSB7310 - Plant Ecology

General

College/School
Interdisciplinary Studies

Course Title
Plant Ecology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7310

Credit Hours

Credit Hours Min
4

Course Description
Interrelationships between plants and their environment and evaluation of community structure.

EVSB7320 - Aquatic Botany

General

College/School
Interdisciplinary Studies

Course Title
Aquatic Botany

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7320

Credit Hours

Credit Hours Min
4

Course Description
Anatomy, ecology, morphology, physiology, reproductive biology, evolution, and taxonomy/systematics of aquatic plants.

EVSB7900 - Research Design/Env Bio

General

College/School
Interdisciplinary Studies

Course Title
Research Design/Env Bio

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7900

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Consent of instructor. Literature investigation and development of an original research proposal outside the student's doctoral dissertation research.

EVSB7970 - Topics/Environmental Biology

General

College/School
Interdisciplinary Studies

Course Title
Topics/Environmental Biology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7970

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Prerequisite: Consent of instructor. Special study in an approved field under the supervision of a member of the graduate faculty. Course may be taken for credit more than once for a maximum of 6 hours of credit.

EVSB7990 - Research & Dissertation

General

College/School
Interdisciplinary Studies

Course Title
Research & Dissertation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSB

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

EVSC6010 - Environmental Chemistry

General

College/School
Interdisciplinary Studies

Course Title
Environmental Chemistry

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EVSC

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
This is a broad-based course applying the fundamentals of chemistry to the environment. This course cannot be taken for credit toward graduation by students with a concentration in chemistry.

Requisites

Simple Requisites

> **Prerequisite:** Graduate standing in environmental sciences; one year of chemistry.

EVSC7110 - Water,Soil & Air Chem-Part I

General

College/School
Interdisciplinary Studies

Course Title
Water,Soil & Air Chem-Part I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSC

Course Number
7110

Credit Hours

Credit Hours Min
3

Course Description

Composition of waters and soils; kinetics and thermodynamics of environmental chemical and physical processes in waters and soils. Equilibrium modeling exercises are employed to prepare students for professional activities, and to reinforce course material.

Requisites

Simple Requisites

Prerequisite: CHEM5520 Instrumental Analysis I, CHEM5710 Environmental Chemistry, or consent of instructor.

EVSC7120 - Water, Soil & Air Chem-Part II

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Water, Soil & Air Chem-Part II	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
EVSC	7120

Credit Hours

Credit Hours Min
3

Course Description

Electrochemistry and solubility of soil minerals. Kinetics, reaction dynamics, photochemistry, and heterogeneous phase chemistry of the troposphere and stratosphere. Students will become familiar with watershed modeling and the use of geographical information systems in environmental chemistry.

Requisites

Simple Requisites

Prerequisite: EVSC7110 Water,Soil & Air Chem-Part I or consent of instructor.

EVSC7210 - Organic Chem/Env

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Organic Chem/Env	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
EVSC	7210

Credit Hours

Credit Hours Min
3

Course Description

Introduction to specific organic compounds, their physical and chemical properties, chemical and photochemical transformation reactions and mechanisms in the environment, and literature case studies effectively used in their decontamination.

Requisites

Simple Requisites

Prerequisite: CHEM3520 Physical Chemistry II and 6210 or consent of instructor.

EVSC7310 - Environmental Forensics

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Environmental Forensics	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
EVSC	7310

Credit Hours

Credit Hours Min
3

Course Description

Principles of environmental forensic science, including transport and fate of chemicals, changes in pollutants as they interact with the environment, linkages between pollutants and their sources, and legal considerations. Faculty lectures along with student presentations and discussion of primary literature will be the primary instructional approaches.

Requisites

Simple Requisites

Prerequisites: None

EVSC7970 - Special Topics/Env Chem

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Special Topics/Env Chem	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
EVSC	7970

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	4
	Credit Hours Operator
	TO

Course Description

Prerequisite: Full Standing in Ph.D. program in environmental sciences or consent of instructor. Timely topics in environmental chemistry. Course may be taken for credit more than once.

EVSC7990 - Research & Dissertation

General

College/School
Interdisciplinary Studies

Course Title
Research & Dissertation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EVSC

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

EVSG6010 - Environmental Geology

General

College/School
Interdisciplinary Studies

Course Title
Environmental Geology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EVSG

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Introduction to geology and the application of geologic knowledge to issues and potential solutions of problems arising from the interaction of human activities and natural earth processes.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

EVSG7970 - Topics in Environmental Geos

General

College/School
Interdisciplinary Studies

Course Title
Topics in Environmental Geos

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
EVSG

Course Number
7970

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Timely topics in environmental geosciences. Course may be taken for credit more than once for a maximum of eight (8) credit hours.

Requisites

Simple Requisites

> **Prerequisite:** Full standing in the Environmental Sciences Ph.D. program or consent of instructor.

EVSG7990 - Research and Dissertation

General

College/School
Interdisciplinary Studies

Course Title
Research and Dissertation

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
EVSG

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

EVSI7970 - Topics in Environ Integr Rsrch

General

College/School
Interdisciplinary Studies

Course Title
Topics in Environ Integr Rsrch

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
EVSI

Course Number
7970

Credit Hours

Credit Hours Min
0

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Timely topics in environmental integrated research. Course may be taken for credit more than once for a maximum of eight (8) credit hours.

Requisites

Simple Requisites

> **Prerequisite:** Full standing in the Environmental Sciences Ph.D. program or consent of instructor.

EVSI7990 - Research and Dissertation

General

College/School
Interdisciplinary Studies

Course Title
Research and Dissertation

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
EVSI

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

EVSS6010 - Environmental Social Policy

General

College/School
Interdisciplinary Studies

Course Title
Environmental Social Policy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EVSS

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Social, political, legal and scientific issues that influence environmental policy decisions.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

Exercise Science Department

The department offers an online Master of Arts degree in Exercise Science with areas of concentration in elementary/middle school physical education, fitness and lifetime wellness, adapted physical education, and sport management. Additionally, candidates may choose to take 20 directed hours in conjunction with the elementary/middle school concentration in pursuit of a Tennessee teaching license in k-12 physical education and health. The elementary/middle school concentration and the teacher licensure program are accredited by the Council for the Accreditation of Educator Preparation (CAEP). Field experience, internships and practicum work can be performed at the student's location and monitored through the online platform. Candidates complete comprehensive exams online through the required Tk20 student account, eliminating the need for any Master of Arts student to ever have to come to campus.

The following are brief descriptions of each of the concentrations:

- **Adapted Physical Education** - Typically, this concentration provides current practitioners with coursework, theory and practice to effectively lead physical education programs for individuals with special needs.
- **Elementary and Middle School Physical Education** - This concentration is designed for students who have a current Tennessee teaching license who either want to enhance their pedagogical knowledge and/or gain background knowledge in physical education in preparation to sit for the physical education PRAXIS exam in seeking the physical education endorsement on the Tennessee teaching license.
- **Lifetime Wellness** - Students who are interested in health, wellness and/or performance aspects of physical activity and training will be interested in this concentration. The main focus is on practical application rather than clinical rehabilitation.
- **Sport Management** - Anyone wanting to work as an administrator in various positions within the sports industry will be interested in this concentration.
- **Teacher Licensure Option** - Students who wish to pursue obtaining an initial Tennessee teaching license in physical education and health will declare elementary and middle school physical education in the Master of Arts program but must also consult with the Office of Teacher Education for admission to the teacher education program and addition 20 hours of directed coursework. Any candidate wanting to pursue the teaching license must communicate directly with the Office of Teacher Education during the first semester as a Master of Arts student to be on track for timely completion of the teacher licensure option.

Fast Track

The Fast Track program is designed to enable TTU College of Education undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University. To find out more including admissions requirements, visit the concentration program page.

Programs

EXSC-ADPE - Exercise Science, Adapted Physical Education Concentration, M.A.

Program Overview

Program Long Title
Exercise Science, Adapted Physical Education Concentration, M.A.

College/School
Education

Department(s)
Exercise Science

Catalog Full Description
The department offers an online Master of Arts degree in Exercise Science with areas of concentration in elementary/middle school physical education, fitness and lifetime wellness, adapted physical education, and sport management. Additionally, candidates may choose to take 20 directed hours in conjunction with the elementary/middle school concentration in pursuit of a Tennessee teaching license in k-12 physical education and health. The elementary/middle school concentration and the teacher licensure program are accredited by the Council for the Accreditation of Educator Preparation (CAEP). Field experience, internships and practicum work can be performed at the student's location and monitored

through the online platform. Candidates complete comprehensive exams online through the required Tk20 student account, eliminating the need for any Master of Arts student to ever have to come to campus.

Degree Requirements

The Master of Arts in Exercise Science is a 30-33 credit hour degree program. Teacher Licensure is available and requires an additional 20 hours to obtain such licensure. Degree requirements are summarized as follows:

- **Core Required Courses:** 6 hours
- **Research Project Course Requirement:** 9 hours
- **Concentration Required Courses:** 15-18 hours
- **Total Degree Requirement:** 30-33 hours

Admission Requirements

Admission Requirements

Applicants are expected to have earned a BS degree from an approved program. There are no restrictions on undergraduate programs of study. Admission is decided based on a multi-parameter criterion that can include the following and will be evaluated by the graduate faculty in the department:

1. Minimum undergraduate GPA of 2.5 for provisional admission and a minimum 2.75 undergraduate GPA for full standing;

2. Minimum of two (2) letters of recommendation from individuals who can address scholarly aptitude;

3. All undergraduate transcripts;

4. Candidate provide a writing sample from an undergraduate 4000 level class or complete a writing prompt (defined and provided by the department);

5. Letter of Intent outlining the purpose and proposed outcomes of being in the program;

6. Participation in interview with departmental faculty if required.

Based on the level of satisfaction of the above criteria, the department will either recommend admission to full standing, provisional standing, or deny admission. Standing status may be changed to Full standing after the student satisfies requirements specified by the department at the time of admission or upon departmental review.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
> The Master of Arts in Exercise Science is a 30-33 credit hour degree program. Teacher Licensure is available and requires an additional 20 hours to obtain such licensure. Degree requirements are summarized as follows:
>
> ## Degree Requirement
>
> - **Core Required Courses:** 6 hours
> - **Research Project Course Requirement:** 9 hours
> - **Concentration Required Courses:** 15-18 hours
> - **Total Degree Requirement:** 30-33 hours
>
> At least 70% of courses taken must be at the 6000 level.
>
> > **MA in Exercise Science, Adapted Physical Education Concentration**
> > **Type**
> > Completion Requirement

> **Core Required Courses (6 hours)**
>
> **Complete ALL of the following Courses:**
> - EXPW6230 - Seminar in Exercise Science
> - EXPW6240 - Assessment in Phys Ed
>
> **Capstone Research Project Course Requirement (9 hours)**
>
> **Complete ALL of the following Courses:**
> - EXPW6510 - Research Methods
> - EXPW6530 - Qualitative Research in Ex Sci
> - EXPW6550 - Capstone Project
>
> **Adapted Physical Education Concentration (15 hours)**
>
> **Complete ALL of the following Courses:**
> - SPED6010 - Surv-Disab Char,Proc,Meth/SPED
> - SPED6060 - Ed-Orth & Motor Impaired
> - EXPW6140 - Adapted Phys Ed & Sport
>
> - Plus: Electives - 6 credit hours from any EXPW 5000-6000 or SPED 5000-6000 level course.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU College of Education undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admissions requirements for participating in the Exercise Science, Physical Education, and Wellness program Fast Track Program are:

• Enrolled in Tennessee Tech as an undergraduate Exercise Science major with at least 90 hours of completed courses within their program of study,

• Overall GPA of 3.25 or better,

• Recommendation from the undergraduate advisor, and

• Approval by departmental coordinator of graduate studies. Fast Track program participants should consult with the undergraduate and graduate advisors regarding enrollment in the appropriate courses and must earn a minimum grade of "B" in the identified courses to apply them to their MA program of study.

Courses to be included in the Fast Track program include:

Dual listed courses:

- EXPW 4520/5520 - Adapted Physical Education and Sport
- EXPW 4730/5730 - Assessment in Exercise Science
- EXPW 4440/5440 - Exercise Physiology
- EXPW 4042/5042 - Health Promotion

(Courses listed at the 5000 level will include additional graduate coursework and a culminating project in each course.)

Graduate courses:

- EXPW 6140 - Assessment and Strategies for Adapted Physical Education

- EXPW 6240 - Assessment in Sport, Physical Education and Wellness EXPW 6440 - Physiology of Exercise

- EXPW 6042 - Health Promotions

In addition to requirements for admission to the Fast Track BS/MA program, all requirements for admission to the College of Graduate Studies must also be met upon graduation. Meeting the minimum requirements does not guarantee admission to the graduate program.

EXSC-EMPE - Exercise Science, Elementary & Middle School Physical Education Concentration, M.A.

Program Overview

Program Long Title
Exercise Science, Elementary & Middle School Physical Education Concentration, M.A.

College/School
Education

Department(s)
Exercise Science

Catalog Full Description
The department offers an online Master of Arts degree in Exercise Science with areas of concentration in elementary/middle school physical education, fitness and lifetime wellness, adapted physical education, and sport management. Additionally, candidates may choose to take 20 directed hours in conjunction with the elementary/middle school concentration in pursuit of a Tennessee teaching license in k-12 physical education and health. The elementary/middle school concentration and the teacher licensure program are accredited by the Council for the Accreditation of Educator Preparation (CAEP). Field experience, internships and practicum work can be performed at the student's location and monitored through the online platform. Candidates complete comprehensive exams online through the required Tk20 student account, eliminating the need for any Master of Arts student to ever have to come to campus.

Degree Requirements

The Master of Arts in Exercise Science is a 30-33 credit hour degree program. Teacher Licensure is available and requires an additional 20 hours to obtain such licensure. Degree requirements are summarized as follows:

- **Core Required Courses:** 6 hours

- **Research Project Course Requirement:** 9 hours

- **Concentration Required Courses:** 15-18 hours

- **Total Degree Requirement:** 30-33 hours

At least 70% of courses taken must be at the 6000 level

Admission Requirements

Admission Requirements
Applicants are expected to have earned a BS degree from an approved program. There are no restrictions on undergraduate programs of study. Admission is decided based on a multi-parameter criterion that can include the following and will be evaluated by the graduate faculty in the department:

1. Minimum undergraduate GPA of 2.5 for provisional admission and a minimum 2.75 undergraduate GPA for full standing;

2. Minimum of two (2) letters of recommendation from individuals who can address scholarly aptitude;

3. All undergraduate transcripts;

4. Candidate provide a writing sample from an undergraduate 4000 level class or complete a writing prompt (defined and provided by the department);

5. Letter of Intent outlining the purpose and proposed outcomes of being in the program;

6. Participation in interview with departmental faculty if required.

Based on the level of satisfaction of the above criteria, the department will either recommend admission to full standing, provisional standing, or deny admission. Standing status may be changed to Full standing after the student satisfies requirements specified by the department at the time of admission or upon departmental review.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The Master of Arts in Exercise Science is a 30-33 credit hour degree program. Teacher Licensure is available and requires an additional 20 hours to obtain such licensure. Degree requirements are summarized as follows:

Degree Requirement

- **Core Required Courses:** 6 hours

- **Research Project Course Requirement:** 9 hours

- **Concentration Required Courses:** 15-18 hours

- **Total Degree Requirement:** 30-33 hours

At least 70% of courses taken must be at the 6000 level.

MA in Exercise Science, Elementary & Middle School Physical Education Concentration
Type
Completion Requirement

Core Required Courses (6 hours)

Complete ALL of the following Courses:
- EXPW6230 - Seminar in Exercise Science
- EXPW6240 - Assessment in Phys Ed

Capstone Research Project Course Requirement (9 hours)

Complete ALL of the following Courses:
- EXPW6510 - Research Methods
- EXPW6530 - Qualitative Research in Ex Sci
- EXPW6550 - Capstone Project

Elementary & Middle School Physical Education Concentration (15 hours)

Complete ALL of the following Courses:
- EXPW6210 - Curriculum Design/Phys Ed
- EXPW6350 - Inst Strategies/Phys Ed
- EXPW6450 - Tch Middle School Phys Ed
- EXPW6140 - Adapted Phys Ed & Sport
  OR EXPW6250 - Applied Motor Dev/Motor Learn
  OR EXPW6700 - Independent Study

- Plus: Elective - 3 credit hours from any EXPW 5000-6000 level course.

Teacher Licensure Option (EMPE requirement plus 20 credit hours for licensure)

Student must be admitted to Teacher Education program.

Complete ALL of the following Courses:
- EXPW6140 - Adapted Phys Ed & Sport
- EXPW6210 - Curriculum Design/Phys Ed
- EXPW6350 - Inst Strategies/Phys Ed
- EXPW6450 - Tch Middle School Phys Ed

- Advisor Guided Elective - 3 credit hours. (EXPW 5000,6000, or 7000 level)

Licensure Requirement (20 credit hours)

(Only students who's concentration is EMPE may take the additional 20 hours to gain the k-12 PE teaching license.)

Complete ALL of the following Courses:
- EXPW6100 - Instruction in Phys Ed
- EXPW6595 - Fld Exp in Physical Education
- EXPW6880 - Student Teaching in Phys Ed
- EXPW6881 - Prof Seminar in Physical Edu
- EXPW6440 - Physiology of Exercise
  OR EXPW5940 - Fitness & Wellness

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU College of Education undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admissions requirements for participating in the Exercise Science, Physical Education, and Wellness program Fast Track Program are:

• Enrolled in Tennessee Tech as an undergraduate Exercise Science major with at least 90 hours of completed courses within their program of study,

• Overall GPA of 3.25 or better,

• Recommendation from the undergraduate advisor, and

• Approval by departmental coordinator of graduate studies. Fast Track program participants should consult with the undergraduate and graduate advisors regarding enrollment in the appropriate courses and must earn a minimum grade of "B" in the identified courses to apply them to their MA program of study.

Courses to be included in the Fast Track program include:

Dual listed courses:

- EXPW 4520/5520 - Adapted Physical Education and Sport

- EXPW 4730/5730 - Assessment in Exercise Science

- EXPW 4440/5440 - Exercise Physiology

- EXPW 4042/5042 - Health Promotion

(Courses listed at the 5000 level will include additional graduate coursework and a culminating project in each course.)

Graduate courses:

- EXPW 6140 - Assessment and Strategies for Adapted Physical Education

- EXPW 6240 - Assessment in Sport, Physical Education and Wellness EXPW 6440 - Physiology of Exercise

- EXPW 6042 - Health Promotions

In addition to requirements for admission to the Fast Track BS/MA program, all requirements for admission to the College of Graduate Studies must also be met upon graduation. Meeting the minimum requirements does not guarantee admission to the graduate program

EXSC-LW - Exercise Science, Lifetime Wellness Concentration, M.A.

Program Overview

Program Long Title
Exercise Science, Lifetime Wellness Concentration, M.A.

College/School	**Department(s)**
Education	Exercise Science

Catalog Full Description
The department offers an online Master of Arts degree in Exercise Science with areas of concentration in elementary/middle school physical education, fitness and lifetime wellness, adapted physical education, and sport management. Additionally, candidates may choose to take 20 directed hours in conjunction with the elementary/middle school concentration in pursuit of a Tennessee teaching license in k-12 physical education and health. The elementary/middle school concentration and the teacher licensure program are accredited by the Council for the Accreditation of Educator Preparation (CAEP). Field experience, internships and practicum work can be performed at the student's location and monitored through the online platform. Candidates complete comprehensive exams online through the required Tk20 student account, eliminating the need for any Master of Arts student to ever have to come to campus.

Degree Requirements

The Master of Arts in Exercise Science is a 30-33 credit hour degree program. Teacher Licensure is available and requires an additional 20 hours to obtain such licensure. Degree requirements are summarized as follows:

- **Core Required Courses:** 6 hours

- **Research Project Course Requirement:** 9 hours

- **Concentration Required Courses:** 15-18 hours

- **Total Degree Requirement:** 30-33 hours

At least 70% of courses taken must be at the 6000 level.

Admission Requirements

Admission Requirements

Departmental Admission Requirements for Online Master of Arts

Applicants are expected to have earned a BS degree from an approved program. There are no restrictions on undergraduate programs of study. Admission is decided based on a multi-parameter criterion that can include the following and will be evaluated by the graduate faculty in the department:

1. Minimum undergraduate GPA of 2.5 for provisional admission and a minimum 2.75 undergraduate GPA for full standing;

2. Minimum of two (2) letters of recommendation from individuals who can address scholarly aptitude;

3. All undergraduate transcripts;

4. Candidate provide a writing sample from an undergraduate 4000 level class or complete a writing prompt (defined and provided by the department);

5. Letter of Intent outlining the purpose and proposed outcomes of being in the program;

6. Participation in interview with departmental faculty if required.

Based on the level of satisfaction of the above criteria, the department will either recommend admission to full standing, provisional standing, or deny admission. Standing status may be changed to Full standing after the student satisfies requirements specified by the department at the time of admission or upon departmental review.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

The Master of Arts in Exercise Science is a 30-33 credit hour degree program. Teacher Licensure is available and requires an additional 20 hours to obtain such licensure. Degree requirements are summarized as follows:

Degree Requirement

- **Core Required Courses:** 6 hours
- **Research Project Course Requirement:** 9 hours
- **Concentration Required Courses:** 15-18 hours
- **Total Degree Requirement:** 30-33 hours

At least 70% of courses taken must be at the 6000 level.

MA in Exercise Science, Lifetime Wellness Concentration Type
Completion Requirement

Core Required Courses (6 hours)

Complete ALL of the following Courses:
- EXPW6230 - Seminar in Exercise Science
- EXPW6240 - Assessment in Phys Ed

Capstone Research Project Course Requirement (9 hours)

Complete ALL of the following Courses:
- EXPW6510 - Research Methods
- EXPW6530 - Qualitative Research in Ex Sci
- EXPW6550 - Capstone Project

Fitness and Lifetime Wellness Concentration (15 hours)

Complete ALL of the following Courses:
- EXPW5940 - Fitness & Wellness
- EXPW6042 - Wellness Promotion
- EXPW6440 - Physiology of Exercise
- EXPW6250 - Applied Motor Dev/Motor Learn

OR EXPW6590 - Field Experiences
OR EXPW6720 - Lgl/Ethcl/Rsk Mgmt Issues-Sprt

- Plus: Elective - 3 credit hours from any EXPW 5000-6000 level course.

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU College of Education undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admissions requirements for participating in the Exercise Science, Physical Education, and Wellness program Fast Track Program are:

• Enrolled in Tennessee Tech as an undergraduate Exercise Science major with at least 90 hours of completed courses within their program of study,

• Overall GPA of 3.25 or better,

• Recommendation from the undergraduate advisor, and

• Approval by departmental coordinator of graduate studies. Fast Track program participants should consult with the undergraduate and graduate advisors regarding enrollment in the appropriate courses and must earn a minimum grade of "B" in the identified courses to apply them to their MA program of study.

Courses to be included in the Fast Track program include:

Dual listed courses:

- EXPW 4520/5520 - Adapted Physical Education and Sport
- EXPW 4730/5730 - Assessment in Exercise Science
- EXPW 4440/5440 - Exercise Physiology
- EXPW 4042/5042 - Health Promotion

(Courses listed at the 5000 level will include additional graduate coursework and a culminating project in each course.)

Graduate courses:

- EXPW 6140 - Assessment and Strategies for Adapted Physical Education
- EXPW 6240 - Assessment in Sport, Physical Education and Wellness EXPW 6440 - Physiology of Exercise
- EXPW 6042 - Health Promotions

In addition to requirements for admission to the Fast Track BS/MA program, all requirements for admission to the College of Graduate Studies must also be met upon graduation. Meeting the minimum requirements does not guarantee admission to the graduate program.

EXSC-SPMT - Exercise Science, Sport Management Concentration, M.A.

Program Overview

Program Long Title
Exercise Science, Sport Management Concentration, M.A.

College/School	Department(s)
Education	Exercise Science

Catalog Full Description
The department offers an online Master of Arts degree in Exercise Science with areas of concentration in elementary/middle school physical education, fitness and lifetime wellness, adapted physical education, and sport management. Additionally, candidates may choose to take 20 directed hours in conjunction with the elementary/middle school concentration in pursuit of a Tennessee teaching license in k-12 physical education and health. The elementary/middle school concentration and the teacher licensure program are accredited by the Council for the Accreditation of Educator Preparation (CAEP). Field experience, internships and practicum work can be performed at the student's location and monitored through the online platform. Candidates complete comprehensive exams online through the required Tk20 student account, eliminating the need for any Master of Arts student to ever have to come to campus.

Sport Management - Anyone wanting to work as an administrator in various positions within the sports industry will be interested in this concentration.

The Master of Arts in Exercise Science is a 30-33 credit hour degree program. Teacher Licensure is available and requires an additional 20 hours to obtain such licensure. Degree requirements are summarized as follows:

- **Core Required Courses:** 6 hours
- **Research Project Course Requirement:** 9 hours
- **Concentration Required Courses:** 15-18 hours
- **Total Degree Requirement:** 30-33 hours

At least 70% of courses taken must be at the 6000 level.

Admission Requirements

Admission Requirements
Applicants are expected to have earned a BS degree from an approved program. There are no restrictions on undergraduate programs of study. Admission is decided based on a multi-parameter criterion that can include the following and will be evaluated by the graduate faculty in the department:

1. Minimum undergraduate GPA of 2.5 for provisional admission and a minimum 2.75 undergraduate GPA for full standing;

2. Minimum of two (2) letters of recommendation from individuals who can address scholarly aptitude;

3. All undergraduate transcripts;

4. Candidate provide a writing sample from an undergraduate 4000 level class or complete a writing prompt (defined and provided by the department);

5. Letter of Intent outlining the purpose and proposed outcomes of being in the program;

6. Participation in interview with departmental faculty if required.

Based on the level of satisfaction of the above criteria, the department will either recommend admission to full standing, provisional standing, or deny admission. Standing status may be changed to Full standing after the student satisfies requirements specified by the department at the time of admission or upon departmental review.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The Master of Arts in Exercise Science is a 30-33 credit hour degree program. Teacher Licensure is available and requires an additional 20 hours to obtain such licensure. Degree requirements are summarized as follows:

Degree Requirement

- **Core Required Courses:** 6 hours
- **Research Project Course Requirement:** 9 hours
- **Concentration Required Courses:** 15-18 hours
- **Total Degree Requirement:** 30-33 hours

At least 70% of courses taken must be at the 6000 level.

MA in Exercise Science, Sport Management Concentration Type
Completion Requirement

Core Required Courses (6 hours)

Complete ALL of the following Courses:
- EXPW6230 - Seminar in Exercise Science
- EXPW6240 - Assessment in Phys Ed

Capstone Research Project Course Requirement (9 hours)

Complete ALL of the following Courses:
- EXPW6510 - Research Methods
- EXPW6530 - Qualitative Research in Ex Sci
- EXPW6550 - Capstone Project

Sport Management Concentration (18 hours)

Complete ALL of the following Courses:
- EXPW6710 - Leadership/Management in Sport
- EXPW6720 - Lgl/Ethcl/Rsk Mgmt Issues-Sprt
- EXPW6730 - Admin/Supervision of Sport
- EXPW6740 - Sport Marketing & Promotions
- EXPW6750 - Dsgn/Mgmt-Leisure/Sprt Fclties
- EXPW6760 - Internship - Sports Management

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU College of Education undergraduates to accumulate up to six (6) credit hours of graduate coursework, to satisfy both undergraduate and graduate degree requirements, while still pursuing their undergraduate degree. The coursework would enable an efficient graduate program transition with the potential for accelerated completion. The courses must be taken at Tennessee Tech University.

The minimum admissions requirements for participating in the Exercise Science, Physical Education, and Wellness program Fast Track Program are:

• Enrolled in Tennessee Tech as an undergraduate Exercise Science major with at least 90 hours of completed courses within their program of study,

• Overall GPA of 3.25 or better,

• Recommendation from the undergraduate advisor, and

• Approval by departmental coordinator of graduate studies. Fast Track program participants should consult with the undergraduate and graduate advisors regarding enrollment in the appropriate courses and must earn a minimum grade of "B" in the identified courses to apply them to their MA program of study.

Courses to be included in the Fast Track program include:

Dual listed courses:

- EXPW 4520/5520 - Adapted Physical Education and Sport
- EXPW 4730/5730 - Assessment in Exercise Science

- EXPW 4440/5440 - Exercise Physiology
- EXPW 4042/5042 - Health Promotion

(Courses listed at the 5000 level will include additional graduate coursework and a culminating project in each course.)

Graduate courses:

- EXPW 6140 - Assessment and Strategies for Adapted Physical Education
- EXPW 6240 - Assessment in Sport, Physical Education and Wellness EXPW 6440 - Physiology of Exercise
- EXPW 6042 - Health Promotions

In addition to requirements for admission to the Fast Track BS/MA program, all requirements for admission to the College of Graduate Studies must also be met upon graduation. Meeting the minimum requirements does not guarantee admission to the graduate program.

Courses

EDUH7000 - Current Issues in EXPW/EDUH

General

College/School
Education

Course Title
Current Issues in EXPW/EDUH

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7000

Credit Hours

Credit Hours Min
3

Course Description
The content of this course will vary according to current research and publications in areas of exercise science, health behavior, and wellness education related to exercise and physical activity.

Requisites

Simple Requisites

Prerequisites: None

EDUH7010 - Pedagogical Theory of Phy Edu

General

College/School
Education

Course Title
Pedagogical Theory of Phy Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7010

Credit Hours

Credit Hours Min
3

Course Description
This course will cover interpretation and critical analysis of research on selected topics related to teaching and instruction in physical education.

Requisites

Simple Requisites

Prerequisites: None

EDUH7020 - Adv Tchng/Ex Sci-Hlth Rl Flds

General

College/School
Education

Course Title
Adv Tchng/Ex Sci-Hlth Rl Flds

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7020

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to provide knowledge, opportunity, and support for quality teaching in exercise science and related health fields. Methodology of teaching in higher education will be explored.

Requisites

Simple Requisites

Prerequisites: None

EDUH7100 - Biomechanics of Human Movement

General

College/School
Education

Course Title
Biomechanics of Human Movement

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7100

Credit Hours

Credit Hours Min
3

Course Description
This course will cover kinetic and kinematic principles governing efficient human movement. Selected methods of analyzing human movement will be covered.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the PhD program.

EDUH7200 - Foundations/Health Promotion

General

College/School
Education

Course Title
Foundations/Health Promotion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7200

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to provide focus on health promotion and behavior changing strategies. Individual, interpersonal, organizational, community, and public policy will be considered as potential factors that can inhibit or promote behavior change specifically related to health issues.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the PhD program.

EDUH7300 - Bhvrl Aspects/Phys Actvity

General

College/School
Education

Course Title
Bhvrl Aspects/Phys Actvity

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7300

Credit Hours

Credit Hours Min
3

Course Description
This course will include topics such as the effects exercise has on mental health, behavior change theories applied to mental health effects of exercise, behavior change theories applied to physical activity, and physical activity determinants and interventions.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the PhD program.

EDUH7500 - Hlth Bhvr & Welns Edu Rsrch

General

College/School
Education

Course Title
Hlth Bhvr & Welns Edu Rsrch

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7500

Credit Hours

Credit Hours Min
3

Course Description
Students will read, interpret, and critique scientific research.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the PhD program.

EDUH7520 - Inquiry/Hlth Bhvr & Welns Edu

General

College/School
Education

Course Title
Inquiry/Hlth Bhvr & Welns Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7520

Credit Hours

Credit Hours Min
3

Course Description
Can be repeated for up to 12 hours credit. Students will conduct research.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the PhD program.

EDUH7600 - Sp Top/EXPW

General

College/School
Education

Course Title
Sp Top/EXPW

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7600

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
This course is designed to provide students with the opportunity to review literature on topics they are interested in and to write a literature review. The intent is for the candidate to expand their knowledge base, gain factual information about topics of interest, and identify options for future research projects.

Requisites

Simple Requisites

> **Prerequisites:** None

EDUH7610 - Ind Study in EXPW/EDUH

General

College/School
Education

Course Title
Ind Study in EXPW/EDUH

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EDUH

Course Number
7610

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Topics to be assigned and approved by instructor and advisor.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW5042 - Health Promotion

General

College/School
Education

Course Title
Health Promotion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
5042

Credit Hours

Credit Hours Min
3

Course Description
This Course is an evaluation of various physical activity behavior change models, assessment of health promotion programs and evaluation standards. Topics include: health status; historical and current issues in health promotion; philosophical foundations of health promotion; intrapersonal health behavior change theories; CHES; work settings for health educators; and ethics in health promotion.Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW5440 - Physiology of Exercise

General

College/School
Education

Course Title
Physiology of Exercise

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
5440

Credit Hours

Credit Hours Min
3

Course Description

During this class, students will examine the physiological effects of exercise, sports, and other stresses on the various systems of the human body. Application of principles to physical fitness, physical education, and athletics is included. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus

Requisites

Simple Requisites

> **Prerequisite:** BIOL2350 Intro Anatomy & Physiology or BIOL2010 Human Anatomy & Physiology I.

EXPW5500 - Persp on PE Fitness/Sports Pgm

General

College/School
Education

Course Title
Persp on PE Fitness/Sports Pgm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
5500

Credit Hours

Credit Hours Min
3

Course Description

An introduction and summary of the body of knowledge and concepts included in the field of physical education, fitness and sport, including the history, people and events, and programs that have led to the current status of these fields. A perspective of the trends in education and their impact on physical education.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW5520 - Adapted Phys Activity-Sport

General

College/School
Education

Course Title
Adapted Phys Activity-Sport

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
5520

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description

The purpose of this course is to guide students in developing knowledge of current trends and concepts in adapted physical education and sport as well as examining various services, programs and requirements for individuals with disabilities. By the end of the course students should display acceptable levels of confidence in screening children who may need adapted physical education/activity as well as working with and evaluating special needs children. Design and implementation of adapted physical activity & sport programs to meet unique needs of individuals will also be required. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW5730 - Assmnt & Eval in Exerc Sci

General

College/School
Education

Course Title
Assmnt & Eval in Exerc Sci

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
5730

Credit Hours

Credit Hours Min
3

Course Description

The purpose of this course is to direct students to select/construct, administer, score, andevaluate tests specific to human performance. Students will be exposed to standardized tests andwill explore the uses and development of authentic tests. Each class period consists of lecture andadministration of assessments. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW5850 - Workshop-Health and/or Phys Ed

General

College/School
Education

Course Title
Workshop-Health and/or Phys Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
5850

Credit Hours

Credit Hours Min
3

Course Description
Laboratory approach providing opportunities for experienced school and nonschool personnel to study in-depth Health and/or Physical Education problems.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW5940 - Fitness & Wellness

General

College/School
Education

Course Title
Fitness & Wellness

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
5940

Credit Hours

Credit Hours Min
3

Course Description
Basic principles of wellness promotion through exercise and nutrition. Assessment and intervention strategies are included.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6042 - Wellness Promotion

General

College/School
Education

Course Title
Wellness Promotion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6042

Credit Hours

Credit Hours Min
3

Course Description
Study of physical activity behavior change models and development/assessment of health promotion programs.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6100 - Instruction in Phys Ed

General

College/School
Education

Course Title
Instruction in Phys Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
Principles of instruction and application of developmentally appropriate instructional strategies in school-based physical activity settings.

Requisites

Simple Requisites

> **Prerequisites:** Restricted to EXPW graduate students working toward teacher license.
>
> **Corequisite:** EXPW6590 Field Experiences Field Experience.

EXPW6140 - Adapted Phys Ed & Sport

General

College/School
Education

Course Title
Adapted Phys Ed & Sport

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6140

Credit Hours

Credit Hours Min
3

Course Description
Advanced assessment techniques, plus strategies for adapting physical education and sports wellness for persons with disabilities.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6210 - Curriculum Design/Phys Ed

General

College/School
Education

Course Title
Curriculum Design/Phys Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6210

Credit Hours

Credit Hours Min
3

Course Description
Current trends, practices, and theories within the discipline of Health and Physical Education with emphasis on research, evaluation, development, organizing of instructional materials.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6230 - Seminar in Exercise Science

General

College/School
Education

Course Title
Seminar in Exercise Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6230

Credit Hours

Credit Hours Min
3

Course Description
This course is designed as an introductory course that will look closely at the processes and procedures of being a successful student in the on-line master's program in Exercise Science. Orientation to the program will be included. An advanced program with multiple concentration choices in the Exercise Science field is challenging but should not present surprises to the students. This class is required in the first semester of study, and will provide needed and relevant information that will serve the student well in the prospective concentrations. Topics include: Being an on-line student, identifying your strengths, On-line learning and navigating the Ilearn system, APA requirements and writing in the APA format, Turn-it-in, using electronic libraries, and more.

Requisites

Simple Requisites

> **Prerequisite:** None

EXPW6240 - Assessment in Phys Ed

General

College/School
Education

Course Title
Assessment in Phys Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6240

Credit Hours

Credit Hours Min
3

Course Description
Application of measurement and evaluation in sport, physical education, and wellness.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6250 - Applied Motor Dev/Motor Learn

General

College/School
Education

Course Title
Applied Motor Dev/Motor Learn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6250

Credit Hours

Credit Hours Min
3

Course Description
Application of concepts concerning lifelong motor development and motor learning to programs of sport and physical education.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6350 - Inst Strategies/Phys Ed

General

College/School
Education

Course Title
Inst Strategies/Phys Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6350

Credit Hours

Credit Hours Min
3

Course Description
Study of research and advanced techniques for teaching elementary and middle school physical education.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6370 - Instr Stat/Lifetime Wellness

General

College/School
Education

Course Title
Instr Stat/Lifetime Wellness

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6370

Credit Hours

Credit Hours Min
3

Course Description
Study of research and advanced techniques for teaching lifetime wellness.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6440 - Physiology of Exercise

General

College/School
Education

Course Title
Physiology of Exercise

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6440

Credit Hours

Credit Hours Min
3

Course Description
Acute and chronic effects of physical activity on body systems with reference to exercise evaluation and prescription.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6450 - Tch Middle School Phys Ed

General

College/School
Education

Course Title
Tch Middle School Phys Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6450

Credit Hours

Credit Hours Min
3

Course Description
Designed to assist teachers in understanding middle school students and their unique needs, to identify and define the need for quality physical education programs in middle schools, and to prepare teachers for the inclusive duties of a teacher in a quality middle school physical education program.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6510 - Research Methods

General

College/School
Education

Course Title
Research Methods

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6510

Credit Hours

Credit Hours Min
3

Course Description
Assessment in Exercise Science The purpose of this course is to prepare students to search, cite, and reference research articles properly. Students will learn to write correct research hypotheses and be able to properly cite information using the APA manual throughout the remaining graduate curriculum. Students will also be required to select a topic appropriate for their research project.

Requisites

Simple Requisites

> **Prerequisite:** EXPW6240 Assessment in Phys Ed.

EXPW6520 - Research Projects

General

College/School
Education

Course Title
Research Projects

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6520

Credit Hours

Credit Hours Min
3

Course Description
Research Methods Examination of current literature in area of study in sport, physical education, and wellness, resulting in an original piece of work. Emphasis will be placed on the evaluation of best practices in a clinical setting.

Requisites

Simple Requisites

> **Prerequisite:** EXPW6510 Research Methods

EXPW6530 - Qualitative Research in Ex Sci

General

College/School
Education

Course Title
Qualitative Research in Ex Sci

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
EXPW

Course Number
6530

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on research in exercise science, sport, health and related fields from qualitative perspectives. Graduate students are introduced to the major historical and contemporary paradigms structuring and influencing qualitative research, moving from historical and theoretical backgrounds to research design, methods of data collections and analysis, interpretation, ethics, validity and decisions for writing. Students will identify a problem in their area of interest related to exercise science and design a qualitative research proposal.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6550 - Capstone Project

General

College/School
Education

Course Title
Capstone Project

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
EXPW

Course Number
6550

Credit Hours

Credit Hours Min
3

Course Description
This capstone course provides the opportunity for students to culminate all aspects of this graduate program through development of a final project based on concentration course content and either quantitative or qualitative research method. Student will present the final project to classmates and professor (oral defense).

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6590 - Field Experiences

General

College/School
Education

Course Title
Field Experiences

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6590

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Practical field experience in student's major area of emphasis.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6595 - Fld Exp in Physical Education

General

College/School
Education

Course Title
Fld Exp in Physical Education

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6595

Credit Hours

Credit Hours Min
3

Course Description
This field experience will be for students who are seeking a teaching license only. Admission is by permit only from the instructor. Taken in conjunction with EXPW 6100 - Instruction in Physical Education and EXPW 6881 - Professional Seminar in Physical Education, the student will participate in a minimum of 72 hours in a practical classroom setting. During this field experience, the student will observe in at least one high school, one middle school and one elementary school physical education class and then choose placement in one of the areas to complete the practicum/methods of teaching experience. This is preparation for student teaching and success in the EdTPA assessment process. Must make a B or better to continue to student teaching.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Teacher Education, Completion of EXPW6210 Curriculum Design/Phys Ed, EXPW6350 Inst Strategies/Phys Ed, and EXPW6450 Tch Middle School Phys Ed.
>
> **Co-requisite:** EXPW6100 Instruction in Phys Ed and EXPW6881 Prof Seminar in Physical Edu.

EXPW6600 - Special Topics

General

College/School
Education

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6600

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Special topics related to pedagogy in physical education and wellness.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6700 - Independent Study

General

College/School
Education

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6700

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Topics to be assigned and approved by the instructor and advisor.

Requisites

Simple Requisites

> **Prerequisite:** Master of Arts students only.

EXPW6710 - Leadership/Management in Sport

General

College/School
Education

Course Title
Leadership/Management in Sport

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6710

Credit Hours

Credit Hours Min
3

Course Description
By the end of the semester, the student should be able to describe theoretical concepts in management and decision-making; describe concepts of strategic planning; describe the benefits and limitations of various leadership styles; identify professional and collegiate sport governance entities; and articulate principles in human resource management, conflict resolution, and negotiation.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6720 - Lgl/Ethcl/Rsk Mgmt Issues-Sprt

General

College/School
Education

Course Title Lgl/Ethcl/Rsk Mgmt Issues-Sprt	**Academic Level (Course Level)** Doctoral, Specialist in Education, Graduate, Undergraduate
Course Subject Code EXPW	**Course Number** 6720

Credit Hours

Credit Hours Min
3

Course Description

By the end of the semester, the student should be able to: describe the impact of negligence in sport; discuss methods to reduce organizational liability and protect consumers; analyze components of negligence as they apply to sport and recreation programs; and, articulate action plans for safety.

Requisites

Simple Requisites

Prerequisites: None

EXPW6730 - Admin/Supervision of Sport

General

College/School
Education

Course Title Admin/Supervision of Sport	**Academic Level (Course Level)** Doctoral, Specialist in Education, Graduate, Undergraduate
Course Subject Code EXPW	**Course Number** 6730

Credit Hours

Credit Hours Min
3

Course Description

This course is designed to examine issues faced by administrators, athletic directors, coaches and recretational professionals. The students will learn effective decision-making skills specific to planning, organizing and staffing in sport and leisure settings. Content includes budgeting and management specific to facilities, equipment and personnel.

Requisites

Simple Requisites

Prerequisites: None

EXPW6740 - Sport Marketing & Promotions

General

College/School
Education

Course Title Sport Marketing & Promotions	**Academic Level (Course Level)** Doctoral, Specialist in Education, Graduate, Undergraduate
Course Subject Code EXPW	**Course Number** 6740

Credit Hours

Credit Hours Min
3

Course Description

By the end of the semester, the student should be able to: describe the marketing mix as it relates to sport; discuss branding in sport; analyze consumer behavior; evaluate market segmentation in sport; and, articulate product, price and sales in sport.

Requisites

Simple Requisites

Prerequisites: None

EXPW6750 - Dsgn/Mgmt-Leisure/Sprt Fclties

General

College/School
Education

Course Title Dsgn/Mgmt-Leisure/Sprt Fclties	**Academic Level (Course Level)** Doctoral, Specialist in Education, Graduate, Undergraduate
Course Subject Code EXPW	**Course Number** 6750

Credit Hours

Credit Hours Min
3

Course Description

Sport facilities are changing at a rapid pace. Sport facility management represents one of the fastest growth areas in the sport industry. With new arenas, stadiums, health clubs, convention centers, and other facilities popping up all over the nation, numerous job opportunities are available in this discipline. Even in these tough economic times when some jobs are harder to find, there is still a signficant need for properly trained sport facility managers. This class will cover numerous issues from construction-related concerns to marketing facilities, naming rights, and concession concerns. Also covered will be topics related to the facility-management side of the industry, with special attention paid to back-house operations such as water, heating, cooling, and related activities. This is a comprehensive course focusing on applied rather than theoretical knowledge. To learn some of the hands-on elements of running a facility, sutdents will visit a variety of facilities such as the TTU's campus recreation center, Putnam County YMCA, Averitt's DI complex, The Bridgestone Arena, and LP Field in Nashville.

Requisites

Simple Requisites

Prerequisites: None

EXPW6760 - Internship - Sports Management

General

College/School
Education

Course Title
Internship - Sports Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6760

Credit Hours

Credit Hours Min
3

Course Description
The internship is intended to provide students with work skills, knowledge and practices in the world of managing sports. Students will be placed in a sport-management environment to successfully complete 120 hours.

Requisites

Simple Requisites

Prerequisites: None

EXPW6810 - Skill Acquisition in Sport

General

College/School
Education

Course Title
Skill Acquisition in Sport

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EXPW

Course Number
6810

Credit Hours

Credit Hours Min
3

Course Description
Principles, practices, and theories of motor learning as related to sport. Practical applications of instruction and feedback, organizing training sessions, developing elite motor skills, and the theories supporting the acquisition of sports skills are included.

Requisites

Simple Requisites

Prerequisites: None

EXPW6820 - Sport Physiology

General

College/School
Education

Course Title
Sport Physiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EXPW

Course Number
6820

Credit Hours

Credit Hours Min
3

Course Description
Physiological elements of sport and performance. Examination and analysis of the inner workings of various energy systems used in sport. Extensive study of demands of performance variables found in sport and how these demands stimulate a plethora of responses at both global and local tissue and hormonal levels. The effects of biomechanics and positioning on performance outcomes will be observed and analyzed.

Requisites

Simple Requisites

Prerequisites: None

EXPW6830 - Recovery & Performance in Sport

General

College/School
Education

Course Title
Recovery & Perf in Sport

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EXPW

Course Number
6830

Credit Hours

Credit Hours Min
3

Course Description
Because recovery methods play a crucial role in optimizing sport and exercise performance, and are essential for promoting muscle repair, preventing injuries, restoring energy, maintaining mental freshness, reducing inflammation, balancing hormones, enabling adaptation, ensuring career sustainability, and fostering training consistency, examination and analysis of such methods will be performed.

Requisites

Simple Requisites

Prerequisites: None

EXPW6840 - Scientific Principles of Strength & Conditioning

General

College/School
Education

Course Title
Sci Prin of Strength & Cond

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EXPW

Course Number
6840

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
A review of anatomy and physiology; biomechanics; bioenergetics and metabolism; neuroendocrine physiology; physiological adaptations; anatomical, physiological and biomechanical differences of athletes, and psychological techniques. Utilization and application of exercise progression from novice to complex movements, basic biomechanical concepts, points of performance, mobility requirements, motor control, and teaching methods will be covered.

Requisites

Simple Requisites

> **Prerequisites:** None

EXPW6850 - Internship in Sport Performance

General

College/School
Education

Course Title
Internship in Sport Perf

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EXPW

Course Number
6850

Credit Hours

Credit Hours Min
3

Course Description
Intended to provide students with work skills, knowledge, and practices in sport performance. Must complete 120 hours in an approved strength and conditioning environment.

Requisites

Simple Requisites

> **Prerequisite:** Complete minimum 75% of concentration coursework for sport performance.

EXPW6880 - Student Teaching in Phys Ed

General

College/School
Education

Course Title
Student Teaching in Phys Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6880

Credit Hours

Credit Hours Min
9

Course Description
This course is the clinical experience for pre-service teachers to work in a classroom setting teaching physical education . This is a full-time experience for 1 semester in which the candidate must plan and teach age- and developmentally appropriate standards-based lessons. In addition, the candidate will complete the EdTPA assessment to be submitted to Pearson for scoring during this semester/class.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Teacher Education and completion of EXPW6100 Instruction in Phys Ed, EXPW6595 Fld Exp in Physical Education, and EXPW6881 Prof Seminar in Physical Edu with a grade of B or better to continue.

EXPW6881 - Prof Seminar in Physical Edu

General

College/School
Education

Course Title
Prof Seminar in Physical Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
EXPW

Course Number
6881

Credit Hours

Credit Hours Min
2

Course Description
This seminar class is designed to assist the pre-service teacher in understanding the EdTPA process as well as provide practice in writing and being evaluated in the EdTPA model. Taken in conjunction with EXPW 6100 and 6595 provides material and opportunity for the candidate to practice the EdTPA assessment. Students may be asked to travel to the main campus during this semester.

Requisites

Simple Requisites

> **Prerequisite:** Admission to Teacher Education.
>
> **Co-requisite:** EXPW6100 Instruction in Phys Ed and EXPW6595 Fld Exp in Physical Education.

EXPW6990 - Research & Thesis

General

College/School
Education

Course Title
Research & Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
EXPW	6990

Credit Hours

Credit Hours Min	Credit Hours Max
3	6
	Credit Hours Operator
	TO

Course Description

Course description not available.

Requisites

Simple Requisites

Prerequisites: None

EXPW7000 - Current Issues in EXPW/EDUH

General

College/School

Education

Course Title	Academic Level (Course Level)
Current Issues in EXPW/EDUH	Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
EXPW	7000

Credit Hours

Credit Hours Min

3

Course Description

The content of this course will vary according to current research and publications in areas of exercise science, health behavior, and wellness education related to exercise and physical activity.

Requisites

Simple Requisites

Prerequisites: None

EXPW7010 - Pedagogical Theory of Phys Ed

General

College/School

Education

Course Title	Academic Level (Course Level)
Pedagogical Theory of Phys Ed	Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
EXPW	7010

Credit Hours

Credit Hours Min

3

Course Description

This course will cover interpretation and critical analysis of research on selected topics related to teaching and instruction in physical education.

Requisites

Simple Requisites

Prerequisites: None

EXPW7020 - Adv Tchng/Ex Sci-Hlth Rl Flds

General

College/School

Education

Course Title	Academic Level (Course Level)
Adv Tchng/Ex Sci-Hlth Rl Flds	Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
EXPW	7020

Credit Hours

Credit Hours Min

3

Course Description

This course is designed to provide knowledge, opportunity, and support for quality teaching in exercise science and related health fields. Methodology of teaching in higher education will be explored.

Requisites

Simple Requisites

Prerequisites: None

EXPW7600 - Special Topics in Exercise Sci

General

College/School

Education

Course Title	Academic Level (Course Level)
Special Topics in Exercise Sci	Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
EXPW	7600

Credit Hours

Credit Hours Min	Credit Hours Max
1	3
	Credit Hours Operator
	TO

Course Description

This course is designed to provide students with the opportunity to review literature on topics they are interested in and to write a literature review. The intent is for the candidate to expand their knowledge base, gain factual information about topics of interest, and identify options for future research projects.

Requisites

Simple Requisites

> Prerequisites: None

EXPW7610 - Ind Study in EXPW/EDUH

General

College/School
Education

Course Title
Ind Study in EXPW/EDUH

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
EXPW

Course Number
7610

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Topics to be assigned and approved by instructor and advisor.

Requisites

Simple Requisites

> Prerequisites: None

Foreign Languages Department

No degree is offered in Foreign Languages but courses may be used (with advisory committee approval) as electives in other fields of study.

Courses

FREN5100 - Advanced Listening

General

College/School
Arts and Sciences

Course Title
Advanced Listening

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FREN

Course Number
5100

Credit Hours

Credit Hours Min
3

Course Description
Development of listening acuity and general comprehension of commercially produced as well as authentic spoken texts. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: FREN 2020 or equivalent.

FREN5810 - Special Topics in French

General

College/School
Arts and Sciences

Course Title
Special Topics in French

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FREN

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> Prerequisites: FREN 3010.

FREN6010 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
FREN

Course Number
6010

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Concentrated readings in areas of special interest. Available to graduate students minoring in French, with consent of departmental chairperson (Maximum of 12 credits.)

Requisites

Simple Requisites

> **Prerequisites:** None

GERM5100 - Advanced Listening

General

College/School
Arts and Sciences

Course Title
Advanced Listening

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
5100

Credit Hours

Credit Hours Min
3

Course Description
Development of listening acuity and general comprehension of commercially produced as well as authentic spoken texts. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** GERM 2020 or equivalent.

GERM5610 - 18th Century Literature

General

College/School
Arts and Sciences

Course Title
18th Century Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
5610

Credit Hours

Credit Hours Min
1

Course Description
Selections primarily from Lessing, Schiller, or authors of the Sturm and Drang. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

GERM5620 - Goethe

General

College/School
Arts and Sciences

Course Title
Goethe

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
5620

Credit Hours

Credit Hours Min
1

Course Description
Goethe¿s poetry, plus, upon demand, Goethe¿s dramas or prose. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

GERM5630 - Romanticism

General

College/School
Arts and Sciences

Course Title
Romanticism

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
5630

Credit Hours

Credit Hours Min
1

Course Description
Selections from the poetry and prose of one or more of the major writers of the period, including Heinrich von Kleist. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

GERM5640 - 19th Century Literature

General

College/School
Arts and Sciences

Course Title
19th Century Literature

Academic Level (Course Level)
Undergraduate

Course Subject Code
GERM

Course Number
5640

Credit Hours

Credit Hours Min
1

Course Description
Selections from the prose or drama of one or more of the major writers of the period, including Keller, Storm, Meyer, Hebbel, Hauptmann. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

GERM5650 - Thomas Mann

General

College/School
Arts and Sciences

Course Title
Thomas Mann

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
5650

Credit Hours

Credit Hours Min
1

Course Description
Shorter works such as Tonio Kroeger, Tod in Venedig, Tristan, etc. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

GERM5660 - Kafka

General

College/School
Arts and Sciences

Course Title
Kafka

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
5660

Credit Hours

Credit Hours Min
1

Course Description
A selection of short stories. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

GERM5670 - Brecht

General

College/School
Arts and Sciences

Course Title
Brecht

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
5670

Credit Hours

Credit Hours Min
1

Course Description
One or two selected dramas. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

GERM5680 - Post-WWII Literature

General

College/School
Arts and Sciences

Course Title
Post-WWII Literature

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
5680

Credit Hours

Credit Hours Min
1

Course Description
Choice of authors such as Boell, Grass, Duerrenmatt, Frisch, etc. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

GERM5810 - Special Topics in German

General

College/School
Arts and Sciences

Course Title
Special Topics in German

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** GERM 3010.

GERM6010 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
GERM

Course Number
6010

Credit Hours

Credit Hours Min
1

Credit Hours Max
4

Credit Hours Operator
TO

Course Description
Concentrated readings in areas of special interest. Available to graduate students minoring in German, with consent of departmental chairperson. (Maximum of 12 credits.)

Requisites

Simple Requisites

> **Prerequisites:** None

SPAN5010 - Intro to Literature of Spain

General

College/School
Arts and Sciences

Course Title
Intro to Literature of Spain

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPAN

Course Number
5010

Credit Hours

Credit Hours Min
3

Course Description
Selections from the literature of Spain. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SPAN 3010 or equivalent.

SPAN5020 - Intro/Lit of Spanish America

General

College/School
Arts and Sciences

Course Title
Intro/Lit of Spanish America

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPAN

Course Number
5020

Credit Hours

Credit Hours Min
3

Course Description
Selections from the literature of Spanish America. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SPAN 3010 or equivalent.

SPAN5030 - Adv Spanish Conversation

General

College/School
Arts and Sciences

Course Title
Adv Spanish Conversation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPAN

Course Number
5030

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: SPAN 3020

SPAN5110 - Culture/Civilization of Spain

General

College/School
Arts and Sciences

Course Title
Culture/Civilization of Spain

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPAN

Course Number
5110

Credit Hours

Credit Hours Min
3

Course Description
Lectures, readings, and discussion in Spanish on the culture and civilization of Spain. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SPAN 3010 or equivalent.

SPAN5120 - Culture/Civ of Spanish Amer

General

College/School
Arts and Sciences

Course Title
Culture/Civ of Spanish Amer

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPAN

Course Number
5120

Credit Hours

Credit Hours Min
3

Course Description
Lectures, readings, and discussion in Spanish on the culture and civilization of Spanish America. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SPAN 3010 or equivalent.

SPAN6010 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SPAN

Course Number
6010

Credit Hours

Credit Hours Min
1

Credit Hours Max
16

Credit Hours Operator
TO

Course Description
Concentrated readings in areas of special interest. Available to graduate students minoring in Spanish, with consent of departmental chairperson. (Maximum of 12 credits.)

Requisites

Simple Requisites

> **Prerequisite**: None.

History Department

No degree is offered in History but courses may be used (with advisory committee approval) as electives in other fields of study.

Unless otherwise noted, the courses listed have the prerequisite of 6 semester hours of history or consent of instructor.

Courses

HIST5010 - Colonial/Revolutionary Periods

General

College/School
Arts and Sciences

Course Title
Colonial/Revolutionary Periods

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5010

Credit Hours

Credit Hours Min

3

Course Description

Early American Society; Revolutionary conflict; Confederation and Constitution. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5020 - The Young Republic 1789-1849

General

College/School

Arts and Sciences

Course Title

The Young Republic 1789-1849

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

HIST

Course Number

5020

Credit Hours

Credit Hours Min

3

Course Description

Political, military, social, and cultural history of the U.S., from the era of Washington through the "Age of Jackson" to the Mexican War. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5030 - Civil War & Reconstruction

General

College/School

Arts and Sciences

Course Title

Civil War & Reconstruction

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

HIST

Course Number

5030

Credit Hours

Credit Hours Min

3

Course Description

Sectionalism and the coming of war; war-time developments; plans of reconstruction and their impact. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5040 - Rise of Modern Am, 1877-1912

General

College/School

Arts and Sciences

Course Title

Rise of Modern Am, 1877-1912

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

HIST

Course Number

5040

Credit Hours

Credit Hours Min

3

Course Description

Industrialism, urbanism, populism, reform and their impact. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5050 - Transform/Mod Am, 1912-1945

General

College/School

Arts and Sciences

Course Title

Transform/Mod Am, 1912-1945

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

HIST

Course Number

5050

Credit Hours

Credit Hours Min

3

Course Description

Wilsonian reform, World War I, New Era, New Deal, World War II, with emphasis on changes in politics, the economy, and society. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Tennessee Technological University

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5060 - Postwar America, 1945-Present

General

College/School
Arts and Sciences

Course Title
Postwar America, 1945-Present

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5060

Credit Hours

Credit Hours Min
3

Course Description
Cold War diplomacy and society, troubled Sixties, post-Watergate politics, contemporary cultural, economic, and social changes. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5070 - History of Comic Books

General

College/School
Arts and Sciences

Course Title
History of Comic Books

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5070

Credit Hours

Credit Hours Min
3

Course Description
Considers artistic and historic themes of comic books.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5090 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5090

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5091 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5091

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5092 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5092

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

Prerequisites: None

HIST5093 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5093

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

Prerequisites: None

HIST5094 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5094

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

Prerequisites: None

HIST5095 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5095

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

Prerequisites: None

HIST5096 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5096

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

Prerequisites: None

HIST5097 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5097

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

Prerequisites: None

HIST5098 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5098

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

Prerequisites: None

HIST5099 - Studies in Popular Culture

General

College/School
Arts and Sciences

Course Title
Studies in Popular Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5099

Credit Hours

Credit Hours Min
3

Course Description
Considers issues in popular culture.

Requisites

Simple Requisites

Prerequisites: None

HIST5110 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5110

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5111 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5111

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5112 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5112

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5113 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5113

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5114 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5114

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5115 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5115

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5116 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5116

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5117 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5117

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5118 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5118

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5119 - Appalachian History/Culture

General

College/School
Arts and Sciences

Course Title
Appalachian History/Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5119

Credit Hours

Credit Hours Min
3

Course Description
Selected topics relating to the history and culture of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5200 - Old South

General

College/School
Arts and Sciences

Course Title
Old South

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5200

Credit Hours

Credit Hours Min
3

Course Description
This course will focus upon the economic, cultural, educational, racial, and political developments in southern society from its colonial beginnings to the Civil War and Reconstruction. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites
Prerequisites: None

HIST5210 - The New South

General
College/School
Arts and Sciences

Course Title
The New South

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5210

Credit Hours
Credit Hours Min
3

Course Description
This course will focus upon the economic, cultural, educational, racial, and political developments in southern society from the end of Reconstruction to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites
Prerequisites: None

HIST5230 - Topics/US Economic History

General
College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5230

Credit Hours
Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites
Prerequisites: None

HIST5231 - Topics/US Economic History

General
College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5231

Credit Hours
Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites
Prerequisites: None

HIST5232 - Topics/US Economic History

General
College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5232

Credit Hours
Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites
Prerequisites: None

HIST5233 - Topics/US Economic History

General

College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5233

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5234 - Topics/US Economic History

General

College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5234

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5235 - Topics/US Economic History

General

College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5235

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5236 - Topics/US Economic History

General

College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5236

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5237 - Topics/US Economic History

General

College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5237

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5238 - Topics/US Economic History

General
College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5238

Credit Hours
Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5239 - Topics/US Economic History

General
College/School
Arts and Sciences

Course Title
Topics/US Economic History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5239

Credit Hours
Credit Hours Min
3

Course Description
Selected topics in U.S. economic history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5250 - American Westward Movement

General
College/School
Arts and Sciences

Course Title
American Westward Movement

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5250

Credit Hours
Credit Hours Min
3

Course Description
The frontier experience in American history, with emphasis on the trans-Mississippi West. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5290 - Sci & Tech In America

General
College/School
Arts and Sciences

Course Title
Sci & Tech In America

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5290

Credit Hours
Credit Hours Min
3

Course Description
Origins and development of science and technology in the U.S. from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5310 - US Diplomacy

General
College/School
Arts and Sciences

Course Title
US Diplomacy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5310

Credit Hours

Credit Hours Min
3

Course Description
The background, origins, and developments of 20th century American foreign relations. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5330 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5330

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5331 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5331

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5332 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5332

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5333 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5333

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5334 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5334

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5335 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5335

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5336 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5336

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5337 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5337

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5338 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5338

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5339 - Religious Studies

General

College/School
Arts and Sciences

Course Title
Religious Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5339

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in religious history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5350 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5350

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5351 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5351

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5352 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5352

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5353 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5353

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5354 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5354

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5355 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5355

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5356 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5356

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5357 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5357

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5358 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5358

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5359 - Gender Studies

General

College/School
Arts and Sciences

Course Title
Gender Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5359

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in gender history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5360 - US Social History

General

College/School
Arts and Sciences

Course Title
US Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5360

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5361 - U S Social History

General

College/School
Arts and Sciences

Course Title
U S Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5361

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5362 - U S Social History

General

College/School
Arts and Sciences

Course Title
U S Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5362

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5363 - U S Social History

General

College/School
Arts and Sciences

Course Title
U S Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5363

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5364 - U S Social History

General

College/School
Arts and Sciences

Course Title
U S Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5364

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5365 - U S Social History

General

College/School
Arts and Sciences

Course Title
U S Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5365

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5366 - U S Social History

General

College/School
Arts and Sciences

Course Title
U S Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5366

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5367 - U S Social History

General

College/School
Arts and Sciences

Course Title
U S Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5367

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5368 - U S Social History

General

College/School
Arts and Sciences

Course Title
U S Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5368

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5369 - U S Social History

General

College/School
Arts and Sciences

Course Title
U S Social History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5369

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in U.S. social history ranging from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5370 - Women in American History

General

College/School
Arts and Sciences

Course Title
Women in American History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5370

Credit Hours

Credit Hours Min
3

Course Description
Public and private experiences of women in the United States from the colonial period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5390 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5390

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5391 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5391

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5392 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5392

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5393 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5393

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5394 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5394

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5395 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5395

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5396 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5396

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5397 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5397

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5398 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5398

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5399 - Topics: African Am Studies

General

College/School
Arts and Sciences

Course Title
Topics: African Am Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5399

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in African American History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5400 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5400

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5401 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5401

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5402 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5402

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5403 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5403

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5404 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5404

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5405 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5405

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5406 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5406

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5407 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5407

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5408 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5408

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5409 - Film Studies

General

College/School
Arts and Sciences

Course Title
Film Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5409

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Selected topics in the history of films. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5420 - Public History

General

College/School
Arts and Sciences

Course Title
Public History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5420

Credit Hours

Credit Hours Min
3

Course Description
Introduce history majors to possible careers in the field and give students practical, hands-on experience in the field of Public History. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5440 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5440

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5441 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5441

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5442 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5442

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5443 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5443

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5444 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5444

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5445 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5445

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5446 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5446

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5447 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5447

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5448 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5448

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5449 - Native American Studies

General

College/School
Arts and Sciences

Course Title
Native American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5449

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in Native American history ranging from the earliest times to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5470 - Sports Studies

General

College/School
Arts and Sciences

Course Title
Sports Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5470

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5471 - Sports Studies

General

College/School
Arts and Sciences

Course Title
Sports Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5471

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5472 - Sports Studies

General

College/School
Arts and Sciences

Course Title
Sports Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5472

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5473 - Sports Studies

General

College/School
Arts and Sciences

Course Title
Sports Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5473

Credit Hours

Credit Hours Min
3

Course Description

Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5474 - Sports Studies

General

College/School
Arts and Sciences

Course Title
Sports Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5474

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5475 - Sports Studies

General

College/School
Arts and Sciences

Course Title
Sports Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5475

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5476 - Sports Studies

General

College/School
Arts and Sciences

Course Title
Sports Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5476

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5477 - Sports Studies

General

College/School
Arts and Sciences

Course Title
Sports Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5477

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5478 - Sports Studies

General

College/School
Arts and Sciences

Course Title
Sports Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5478

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5479 - Sports Studies

General
College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Sports Studies	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HIST	5479

Credit Hours
Credit Hours Min
3

Course Description
Selected topics in the history of sports. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5520 - Medieval Europe

General
College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Medieval Europe	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HIST	5520

Credit Hours
Credit Hours Min
3

Course Description
Evolution of medieval culture from the fall of the Roman Empire to the 13th century and its dissolution during the late medieval period.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5530 - Renaissance & Reformation

General
College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Renaissance & Reformation	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HIST	5530

Credit Hours
Credit Hours Min
3

Course Description
Europe during age of New Learning; Renaissance and Mannerist art; 16th century Reformation; Wars of Religion. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5540 - Absolutism & Enlightenment

General
College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Absolutism & Enlightenment	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HIST	5540

Credit Hours
Credit Hours Min
3

Course Description
Europe during 17th and 18th centuries; rise of centralized states; dynastic wars, rise of modern science; Enlightenment thought. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** None

HIST5550 - French Revolution & Napoleon

General
College/School
Arts and Sciences

Tennessee Technological University

Course Title
French Revolution & Napoleon

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5550

Credit Hours
Credit Hours Min
3

Course Description
Europe from 1789 to 1815, centering on events in France and political, diplomatic, and military history of the period. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: None

HIST5560 - 19th Century Europe

General
College/School
Arts and Sciences

Course Title
19th Century Europe

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5560

Credit Hours
Credit Hours Min
3

Course Description
European politics, diplomacy, society, war, and institutions from 1815 through World War I. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: None

HIST5570 - World War II & The Cold War

General
College/School
Arts and Sciences

Course Title
World War II & The Cold War

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5570

Credit Hours
Credit Hours Min
3

Course Description
Problems of European powers during inter-war years; background, causes, and results of World War II and Cold War. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: None

HIST5620 - Russia

General
College/School
Arts and Sciences

Course Title
Russia

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5620

Credit Hours
Credit Hours Min
3

Course Description
Political, cultural, social, and military history from the Kievan period to the present. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: None

HIST5630 - History of France

General
College/School
Arts and Sciences

Course Title
History of France

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5630

Credit Hours
Credit Hours Min
3

Course Description
France has played a significant role in shaping European and world events, both through its international policies and internal developments. This course considers the historical development of France.

Requisites

Simple Requisites

Prerequisites: None

HIST5640 - History of Modern Germany

General

College/School
Arts and Sciences

Course Title
History of Modern Germany

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5640

Credit Hours

Credit Hours Min
3

Course Description
History of Modern Germany with an emphasis on the nineteenth and twentieth centuries.

Requisites

Simple Requisites

Prerequisites: None

HIST5650 - England to 1688

General

College/School
Arts and Sciences

Course Title
England to 1688

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5650

Credit Hours

Credit Hours Min
3

Course Description
Roman, Anglo-Saxon, and Medieval England; Tudor and Stuart dynasties. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5660 - Modern England

General

College/School
Arts and Sciences

Course Title
Modern England

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5660

Credit Hours

Credit Hours Min
3

Course Description
England since the Glorious Revolution, with special emphasis on the nineteenth and twentieth centuries. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5665 - World War I

General

College/School
Arts and Sciences

Course Title
World War I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HIST

Course Number
5665

Credit Hours

Credit Hours Min
3

Course Description
Considers World War I and its consequences within the political, social, and cultural contexts of European development since 1871.

Requisites

Simple Requisites

Prerequisites: None

HIST5668 - Nazi Germany

General

College/School
Arts and Sciences

Course Title
Nazi Germany

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5668

Credit Hours

Credit Hours Min
3

Course Description
Considers developments relating to the Nazi era in German history.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5680 - The Holocaust

General

College/School
Arts and Sciences

Course Title
The Holocaust

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5680

Credit Hours

Credit Hours Min
3

Course Description
Considers topics relating ot the history of the Holocaust.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5690 - British Empire & Commonwealth

General

College/School
Arts and Sciences

Course Title
British Empire & Commonwealth

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5690

Credit Hours

Credit Hours Min
3

Course Description
Origin, development and decline of the British Empire. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5710 - History of Africa

General

College/School
Arts and Sciences

Course Title
History of Africa

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5710

Credit Hours

Credit Hours Min
3

Course Description
History of Africa with an emphasis on the nineteenth and twentieth centuries. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5730 - The Modern Middle East

General

College/School
Arts and Sciences

Course Title
The Modern Middle East

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5730

Credit Hours

Credit Hours Min
3

Course Description
Consideration of the traditional cultural background of the region, but with emphasis on the rapid changes experienced during the twentieth century. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: None

HIST5740 - History of Japan

General

College/School
Arts and Sciences

Course Title
History of Japan

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5740

Credit Hours

Credit Hours Min
3

Course Description
Early Japanese history followed by a comprehensive investigation of the 20th century experience. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: None

HIST5750 - History of China

General

College/School
Arts and Sciences

Course Title
History of China

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5750

Credit Hours

Credit Hours Min
3

Course Description
Early Chinese history followed by an emphasis on the 20th century revolutionary experience. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: None

HIST5760 - Vietnam: Its Wars & Aftermath

General

College/School
Arts and Sciences

Course Title
Vietnam: Its Wars & Aftermath

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5760

Credit Hours

Credit Hours Min
3

Course Description
Overview of Vietnam, the French experience, the U.S. war and its impact on America, followed by developments since 1975. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: None

HIST5790 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5790

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HIST5791 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5791

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5792 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5792

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5793 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5793

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5794 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5794

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

HIST5795 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5795

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5796 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5796

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5797 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5797

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5798 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5798

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5799 - Latin American Studies

General

College/School
Arts and Sciences

Course Title
Latin American Studies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5799

Credit Hours

Credit Hours Min
3

Course Description
Selected topics in Latin American history. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5810 - Scientific Controversies

General

College/School
Arts and Sciences

Course Title
Scientific Controversies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Historical analysis of selected controversies in science and their impact within and outside the scientific community. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5880 - History of Medicine

General

College/School
Arts and Sciences

Course Title
History of Medicine

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5880

Credit Hours

Credit Hours Min
3

Course Description
Considers the history of medicine and the medical field.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST5890 - History of Nursing/Healthcare

General

College/School
Arts and Sciences

Course Title
History of Nursing/Healthcare

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
5890

Credit Hours

Credit Hours Min
3

Course Description
Considers issues relating to the history of nursing and healthcare. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST6100 - Interdisc Cultural Training

General

College/School
Arts and Sciences

Course Title
Interdisc Cultural Training

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
This will be an active learning course focused on sociology, history, cultures, economics, and language of the Cherokee Nation and Appalachia. It will explore effective strategies to collaboratively solve complex food-energy-water challenges from a culturally responsive perspective.

Requisites

Simple Requisites

> **Prerequisites:** None

HIST6440 - Seminar in American Hist

General

College/School
Arts and Sciences

Course Title
Seminar in American Hist

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HIST

Course Number
6440

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

HIST6940 - Seminar in European Hist

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Seminar in European Hist	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HIST	6940

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

HIST6950 - Practicum/Teaching Hist

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Practicum/Teaching Hist	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HIST	6950

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

HIST6980 - Directed Reading

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Directed Reading	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HIST	6980

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

Human Ecology Department

The department of Human Ecology offers an M.S. in Community Health and Nutrition will provide graduate course work to two audiences: (1) credentialed Registered Dietitians who seek a M.S. degree only and (2) students who seek both credentialing as a Registered Dietitian/Nutritionist (Future Education Model Future Graduate program) and the M.S. Degree. The M.S. degree only in Community Health and Nutrition is a 30-hour degree program. The M.S. degree plus FEM FG program requires an additional 12 credit hours in experiential learning practicum courses. Each practicum course requires approximately 54 hours of experiential learning. In addition, approximately 30 hours of experiential learning is integrated into each didactic online course.

Programs

CHN-MS - Community Health and Nutrition, M.S.

Program Overview

Program Long Title
Community Health and Nutrition, M.S.

College/School	**Department(s)**
Agriculture and Human Ecology	Human Ecology

Catalog Full Description
The School of Human Ecology offers a Master of Science in Community Health and Nutrition. Coursework in this program is online. The Community Health and Nutrition program has been granted candidacy for 79 accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND), as a Future Education Model Future Graduate program, making it appropriate for those students who wish to become registered dietitian/nutritionists.

This program is also designed to offer additional professional training for various community health professionals, including those who are already credentialed registered dietitian/nutritionists, educators, nurses, and others interested in nutrition related health information.

This program includes an experiential learning component. If students meet the admission criteria specific to the Future Graduate program listed below, are admitted to the program, complete the coursework, and earn a Verification Statement, students are then eligible to sit for the registration exam for dietitians/nutritionists that is offered by the Commission on Dietetic Registration.

The M.S. in Community Health and Nutrition will provide graduate course work to two audiences: (1) credentialed Registered Dietitians who seek a M.S. degree only and (2) students who seek both credentialing as a Registered Dietitian/Nutritionist (Future Education Model Future Graduate program) and the M.S. Degree.

The M.S. degree only in Community Health and Nutrition is a 30-hour degree program.

The M.S. degree plus FEM FG program requires an additional 12 credit hours in experiential learning practicum courses. Each practicum course requires approximately 54 hours of experiential learning. In addition, approximately 30 hours of experiential learning is integrated into each didactic online course.

Admission Requirements

Admission Requirements

Applicants must submit the following for admission consideration:

1. Online application for graduate admission and the nonrefundable application fee;

2. Official transcripts of undergraduate and graduate credit from all institutions attended;

3. Undergraduate degrees accepted include: nutrition, dietetics, public health, kinesiology, health sciences, nursing, psychology, human development and family studies, family and consumer sciences, and biobehavioral health. Other undergraduate degrees not specifically listed here will be reviewed based on transcript content;

4. Prerequisite undergraduate coursework must include an introductory nutrition course (equivalent to Tennessee Tech's HEC 2020 Nutrition for Health Sciences); one advanced nutrition course (higher level than introductory nutrition) must have a "B" or better in these two nutrition courses.

5. Undergraduate GPA of at least 3.0 on a 4.0 scale;

6. References (2)- when you submit your application provide contact information for two references. An email will then be sent to these references to complete an online recommendation form. At least one reference should be from a former professor/instructor. Your application is not completed until these recommendation forms are submitted by your references;

7. You will need to indicate on your graduate application if you are applying to only the MS Degree in Community Health and Nutrition or both the Degree and the optional Experiential Learning Track, the Experiential Learning Track has additional admission requirements;

8. Resume – upload your resume (no more than 2 pages);

9. Student Health Form;

10. Personal Statement- upload a separate document which includes the following: state why you have the abilities, experiences, skills and knowledge to succeed in our degree program. Your statement should demonstrate why you are interested in this graduate degree program and how it will help you meet career goals. Please limit your statement to 1,200 words or fewer and use 12-point font, single-spaced format.

Specifically address the following questions in your personal statement:

a. What are your professional goals; elaborate on future career plans and the motivation for pursuing a MS in Community Health and Nutrition

b. In what ways will the MS in Community Health and Nutrition build upon your current skill set

c. Why are you a good fit for this degree program

d. Elaborate on your unique story which motivates you to seek this graduate degree

Note: Applicants are selected on a competitive basis and, therefore, admission is not granted to all applicants who meet only the minimum requirements.

Application deadline for degree only seeking students varies based on the semester you wish to enroll. Application deadlines may be found on the College of Graduate Studies "How to Apply" section of the website.

For those interested in the supervised experiential learning necessary to become a registered dietitian/nutritionist, they must apply by the December 15 deadline for a Fall start date. If cohort does not fill, applications for a Fall start date will be accepted until April 15.

<u>Direct Admission to the degree only pathway:</u> Any Registered Dietician/Nutritionist will be admitted with the following the verification of current registration status with the Commission on Dietetic Registration.

Additional Admissions Requirements, Experiential Learning Track

In addition to the requirements for admission to the MS in Community Health and Nutrition Degree as stated above, applicants who want to also be admitted to the Experiential Learning Track must provide:

1. Evidence of Work/Volunteer Experience – documentation of 300 hours of work or volunteer experience completed within four years of application is preferred. Of the 300 hours, at least 200 hours must be in a nutrition- or dietetics-related field. You will be required to complete the Experiential Track Supplemental Form to document your experiences. This form will be uploaded with your Graduate application and is available on the College of Graduate Studies Online Forms webpage.

2. Prerequisite coursework- for applicants who do not have a Verification Statement from an ACEND accredited Didactic Program in Dietetics (DPD) the following prerequisite coursework must have been completed within five years from an accredited institution:

a. Introductory Nutrition course equivalent to Tennessee Tech's HEC 2020 Nutrition for Health Sciences

b. Advanced Nutrition course (higher level than Introductory Nutrition)

c. Organic Chemistry

d. Microbiology or Biochemistry

e. Experimental Foods, Food Preparation, Quantity Food Production, or Foodservice Management

Additionally, students must have a grade of "B "or better in each of the nutrition courses and a grade of "C" or better in the science courses.

3. DPD Verification Statement- for students with a bachelor's degree from an ACEND accredited Didactic Program in Dietetics (DPD), you will be required to upload your DPD Verification statement or an Intent to Complete form or letter from DPD Director stating courses to be completed with your Graduate application.

4. Personal Statement: in addition to the questions listed above for the Personal Statement, applicants for the Experiential Learning Track should include why they are pursuing the Registered Dietitian/Nutritionist (RDN) credential.

5. Candidates for admission to the Experiential Learning Track will be required to participate in a virtual (face to face) interview via a video conferencing platform

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> The M.S. in Community Health and Nutrition will provide graduate course work to two audiences: (1) credentialed Registered Dietitians who seek a M.S. degree only and (2) students who seek both credentialing as a Registered Dietitian/Nutritionist (Future Education Model Future Graduate program) and the M.S. Degree.

The M.S. degree only in Community Health and Nutrition is a 30-hour degree program.

The M.S. degree plus FEM FG program requires an additional 12 credit hours in experiential learning practicum courses. Each practicum course requires approximately 54 hours of experiential learning. In addition, approximately 30 hours of experiential learning is integrated into each didactic online course.

Community Health and Nutrition M.S. Degree Requirements
Type
Completion Requirement

Fall 1 Courses

Complete ALL of the following Courses:
- HEC5010 - Principles/Nutrition Research
- HEC5015 - Perspectives/Rural Comm Health
- HEC5025 - Cultural Issues/Health

Spring 1 Courses

Complete ALL of the following Courses:
- HEC6201 - Comm Nutrition Prog/Serv
- HEC6225 - Adv Counseling Techniques
- PRST6540 - Health Informatics

Summer 1 Courses

Complete ALL of the following Courses:
- HEC6405 - Nutrition Across Life Cycle
- HEC6440 - Leadership/Nutrition Policy

Fall 2

Complete ALL of the following Courses:
- HEC6410 - Nutrition and Aging
- HEC6430 - Comm Health/Nutrition Capstone
- PRST6100 - Prof Environmntl Issues/Ethics

Additional Comments:
Total Degree Requirement: 30 hours

Community Health and Nutrition, Future Education Model (FEM)
Type
Completion Requirement

Fall 1 Courses

Complete ALL of the following Courses:
- HEC5010 - Principles/Nutrition Research
- HEC5015 - Perspectives/Rural Comm Health
- HEC5025 - Cultural Issues/Health

Spring 1 Courses

Complete ALL of the following Courses:
- HEC6201 - Comm Nutrition Prog/Serv
- HEC6225 - Adv Counseling Techniques
- HEC6250 - EXP Food Mgmt/Ext Care

Summer 1 Courses

Complete ALL of the following Courses:
- HEC6251 - EXP Community Nutrition
- HEC6252 - Experiential Learning Practicum: Clinical Nutrition

Fall 2 Courses

Complete ALL of the following Courses:
- HEC6410 - Nutrition and Aging
- HEC6405 - Nutrition Across Life Cycle
- HEC6253 - EXP Practicum

Spring 2 Courses

Complete ALL of the following Courses:
- PRST6540 - Health Informatics
- HEC6430 - Comm Health/Nutrition Capstone
- HEC6440 - Leadership/Nutrition Policy

Additional Comments:

Total Degree Requirement: 42 hours

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

Courses

HEC5010 - Principles/Nutrition Research

General

College/School
Agriculture and Human Ecology

Course Title
Principles/Nutrition Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5010

Credit Hours

Credit Hours Min
3

Course Description
Principles of research as applied to the study of nutrition-based research questions, including standards of responsible research and evidence-based practice. Students will be required to conduct, analyze, and present an evaluative or applied research project.

Requisites

Simple Requisites

Prerequisite: Admission to the MS in Community Health and Nutrition Program.

HEC5011 - Personal/Family Finance Edu

General

College/School
Agriculture and Human Ecology

Course Title
Personal/Family Finance Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5011

Credit Hours

Credit Hours Min
3

Course Description
Advanced study of financial literacy, consumer decision-making, and financial responsibilities for individuals and families. Course prepares students for the Personal and Family Financial Educator exam, which with passage to Certification in Personal and Family Financial Educator (CPFFE).

Requisites

Simple Requisites

> **Prerequisites:** None

HEC5015 - Perspectives/Rural Comm Health

General

College/School
Agriculture and Human Ecology

Course Title
Perspectives/Rural Comm Health

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5015

Credit Hours

Credit Hours Min
3

Course Description
Emphasis on health promotion, health maintenance, and illness prevention among populations. Analysis of community health resources. Students will recognize and evaluate the interrelationships among individuals, families, and population groups within rural communities in determining health and nutrition needs.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC5025 - Cultural Issues/Health

General

College/School
Agriculture and Human Ecology

Course Title
Cultural Issues/Health

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5025

Credit Hours

Credit Hours Min
3

Course Description
Identifying the formation and significance of cultural identity among populations as related to food choices, behaviors, and nutritional status. Examining the impact of cultural differences and disparities in health care faced by various groups, especially rural communities and assessment of strategies for disease prevention and intervention.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC5065 - Social Policy/Chldrn&Families

General

College/School
Agriculture and Human Ecology

Course Title
Social Policy/Chldrn&Families

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5065

Credit Hours

Credit Hours Min
3

Course Description
An understanding of the legal issues, policies and laws influencing the well-being of children and families. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** HEC 2065.

HEC5200 - Advanced Nutrition

General

College/School
Agriculture and Human Ecology

Course Title
Advanced Nutrition

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5200

Credit Hours

Credit Hours Min
3

Course Description
Interrelationships of nutrients as chemicals in metabolism at the cellular level. Current issues in nutrition. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** HEC 2020, CHEM 3010, BIOL 3350, and admission to the HEC-DPD program.

HEC5201 - Community Nutrition Prgrms/Srv

General

College/School
Agriculture and Human Ecology

Course Title
Community Nutrition Prgrms/Srv

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5201

Credit Hours

Credit Hours Min
3

Course Description
Synthesis of social, economic, cultural, and geographic factors on food and nutrition services for families. Analysis of community intervention programs and services as related to disease prevention and food policy issues.

Requisites

Simple Requisites

> **Prerequisites:** Introductory nutrition course.

HEC5220 - Research Food Sci/Nutrition

General

College/School
Agriculture and Human Ecology

Course Title
Research Food Sci/Nutrition

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5220

Credit Hours

Credit Hours Min
2

Course Description
Independent work for students with special ability. May be repeated for a total of six credits when content varies. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Departmental approval.

HEC5230 - Fld Exp: OFCS-Culinary Arts

General

College/School
Agriculture and Human Ecology

Course Title
Fld Exp: OFCS-Culinary Arts

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5230

Credit Hours

Credit Hours Min
3

Course Description
Supervised field experience and seminar in teaching Family and Consumer Sciences related occupations.

Requisites

Simple Requisites

> **Prerequisite:** Advance approval of Instructor.

HEC5235 - Principles of Food Prod/Prep

General

College/School
Agriculture and Human Ecology

Course Title
Principles of Food Prod/Prep

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5235

Credit Hours

Credit Hours Min
3

Course Description
Principles of food production and preparation including functions and sources of nutrients; factors that affect food quality and nutrient retention; cultural influences and global factors that affect production, supply and distribution of food; food acquisition, safety, sanitation, preparation and service of food to promote individual and family well-being.

Tennessee Technological University

Requisites

Simple Requisites

> **Prerequisite:** Fundamental nutrition course or consent of instructor.

HEC5240 - Food Systems Administration

General

College/School
Agricultural/Human Sciences

Course Title
Food Systems Administration

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5240

Credit Hours

Credit Hours Min
4

Course Description
Prerequisite: HEC 2210, 3240. Systems approach to food service management; facilities, financial, personnel, equipment, and legal issues in food service. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HEC5241 - Quantity Food Production

General

College/School
Agriculture and Human Ecology

Course Title
Quantity Food Production

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5241

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Management and preparation of quality food in quantity; systems theory of management; advanced food safety and sanitation. Serv Safe certification offered.

Requisites

Simple Requisites

> **Prerequisite:** HEC 3240 or appropriate food service work experience.

HEC5242 - Food Systems Administration

General

College/School
Agriculture and Human Ecology

Course Title
Food Systems Administration

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5242

Credit Hours

Credit Hours Min
3

Course Description
Systems approach to food service administration. Legal issues in food and nutrition services. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** HEC5241 Quantity Food Production or appropriate food service work experience.

HEC5250 - Field Exp in Sch Food Service

General

College/School
Agriculture and Human Ecology

Course Title
Field Exp in Sch Food Service

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5250

Credit Hours

Credit Hours Min
4

Course Description
Work experience in school food service management. Supervision by instructor and Tennessee certified school food service supervisor. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** HEC 3240, HEC4242 Food Systems Administration (HEC 5242)

HEC5270 - Nutrition/Disease Application

General

College/School
Agricultural/Human Sciences

Course Title
Nutrition/Disease Application

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5270

Credit Hours

Credit Hours Min

3

Course Description

Prerequisites: HEC 3270, HEC 4200. Medical nutrition therapy and nutritional status assessment. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HEC5271 - Medical Nutrition Therapy

General

College/School

Agriculture and Human Ecology

Course Title

Medical Nutrition Therapy

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

HEC

Course Number

5271

Credit Hours

Credit Hours Min

3

Course Description

Medical nutrition therapy and nutritional status assessment. Students enrolled in the 5000-level course will be required to complete additional work as stated on the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** HEC3270 Nutrition in Disease
>
> **Prerequisite or corequisite:** HEC 4200 (HEC5200 Advanced Nutrition)

HEC5420 - Current Housing Issues

General

College/School

Agriculture and Human Ecology

Course Title

Current Housing Issues

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

HEC

Course Number

5420

Credit Hours

Credit Hours Min

3

Course Description

New developments in housing including current and emerging trends: Age appropriate needs for housing throughout the human lifespan.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC5430 - Textiles/Apparel-Global Econ

General

College/School

Agriculture and Human Ecology

Course Title

Textiles/Apparel-Global Econ

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

HEC

Course Number

5430

Credit Hours

Credit Hours Min

3

Course Description

Evaluation of key issues facing textiles and apparel businesses operating supply chains and sourcing in the global economy considering economic, political, and social perspectives and profesional implications.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC5440 - New Dvlpmnts-Textiles/Apparel

General

College/School

Agriculture and Human Ecology

Course Title

New Dvlpmnts-Textiles/Apparel

Academic Level (Course Level)

Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code

HEC

Course Number

5440

Credit Hours

Credit Hours Min

3

Course Description

New developments in textiles and apparel including fiber, yarn, fabric, apparel design, production, evaluation, quality control, retailing and forecasting.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC5610 - Fam:Norm/Catastrophic Issues

General

College/School
Agriculture and Human Ecology

Course Title
Fam:Norm/Catastrophic Issues

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5610

Credit Hours

Credit Hours Min
4

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC5800 - Learn/Instrct Strat-FCS Edu

General

College/School
Agricultural/Human Sciences

Course Title
Learn/Instrct Strat-FCS Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5800

Credit Hours

Credit Hours Min
3

Course Description
Responsibilities of the family and consumer sciences teacher in middle and/or secondary school. Selection, use, and evaluation of learning experiences and material, program planning. Includes participation and observation in local schools and extension programs.

HEC5810 - Learn/Instrct Strat-FCS Edu

General

College/School
Agricultural/Human Sciences

Course Title
Learn/Instrct Strat-FCS Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Responsibilities of the family and consumer sciences teacher in middle and secondary school. Selection, use and evaluation of learning experiences and material, program planning. Includes participation and observation in local schools and extension programs.

HEC5811 - Learn/Instrct Strat-FCS Edu

General

College/School
Agriculture and Human Ecology

Course Title
Learn/Instrct Strat-FCS Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5811

Credit Hours

Credit Hours Min
3

Course Description
Responsibilities of the family and consumer sciences teacher in middle and secondary school. Selection, use and evaluation of learning experiences and material, program planning. Includes participation and observation in local schools and extension programs.

HEC5830 - OFCS Fld Exp: Child Care Srv

General

College/School
Agriculture and Human Ecology

Course Title
OFCS Fld Exp: Child Care Srv

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5830

Credit Hours

Credit Hours Min
1

Course Description
Supervised field experience and seminar in teaching occupational family and consumer sciences: child care services

Requisites

Simple Requisites

> **Prerequisite:** Advanced approval of instructor.

HEC5831 - OFCS Fld Exp: Food Srvcs

General

College/School
Agriculture and Human Ecology

Course Title
OFCS Fld Exp: Food Srvcs

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5831

Credit Hours

Credit Hours Min
1

Course Description
Prerequisite: Advance approval of instructor. Supervised field experience and seminar in teaching Family and Consumer Sciences related occupations.

HEC5832 - OFCS Fld Exp: Fshn/Fbrc Srvs

General

College/School
Agriculture and Human Ecology

Course Title
OFCS Fld Exp: Fshn/Fbrc Srvs

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5832

Credit Hours

Credit Hours Min
1

Course Description
Supervised field experience and seminar in teaching Family and Consumer Sciences related occupations.

Requisites

Simple Requisites

Prerequisite: Advance approval of instructor.

HEC5840 - Occuptnl Fam & Cons Sci Edu

General

College/School
Agriculture and Human Ecology

Course Title
Occuptnl Fam & Cons Sci Edu

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5840

Credit Hours

Credit Hours Min
1

Course Description
Organization and operation of Occupational Family and Consumer Sciences Programs at middle school, high school and adult levels.

HEC5841 - OFCS/Field Experience

General

College/School
Agriculture and Human Ecology

Course Title
OFCS/Field Experience

Academic Level (Course Level)
Undergraduate

Course Subject Code
HEC

Course Number
5841

Credit Hours

Credit Hours Min
3

Course Description
Organization and operation of Occupational Family and Consumer Sciences Programs at middle school, high school and adult levels.

HEC5900 - Special Topics

General

College/School
Agriculture and Human Ecology

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5900

Credit Hours

Credit Hours Min
1

Credit Hours Max
7

Credit Hours Operator
TO

Course Description
Prerequisite: Departmental approval. Research in contemporary developments in human ecology. May be repeated. Maximum 7 hours. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HEC5940 - Nutrition, Fitness & Wellness

General

College/School
Agriculture and Human Ecology

Course Title
Nutrition, Fitness & Wellness

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5940

Credit Hours

Credit Hours Min
2

Course Description
Basic principles of wellness promotion through exercise and nutrition; assessment and intervention strategies are included. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

HEC5960 - Independent Study

General

College/School
Agriculture and Human Ecology

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5960

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Special study of an approved topic (area) within Human Ecology under the supervision of a member of the Human Ecology graduate faculty. Up to six credit hours may be earned by Independent Study.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC5990 - Internship

General

College/School
Agriculture and Human Ecology

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
5990

Credit Hours

Credit Hours Min
3

Credit Hours Max
12

Credit Hours Operator
TO

Course Description
Supervised work experience. Application must be submitted to internship coordinator two semesters prior to internship semester. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Human ecology major, departmental approval.

HEC6010 - Theories of Human Development

General

College/School
Agriculture and Human Ecology

Course Title
Theories of Human Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
A study of Human Development theories across the lifespan with cross-cultural exploration. Application of development perspectives to research and professional practice in human development.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6020 - Nutrition Science

General

College/School
Agriculture and Human Ecology

Course Title
Nutrition Science

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6020

Credit Hours

Credit Hours Min
3

Course Description
Advanced concepts of nutrition and health. Emphasis upon the function, food sources, recommended intake, food safety and assimilation of each of the six nutrient classes. Application of nutrition education practices in the classroom and community.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6200 - Theories/Apps-Child Devlpmnt

General

College/School
Agriculture and Human Ecology

Course Title
Theories/Apps-Child Devlpmnt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description
A topical approach to theories and emerging issues in child development; an exploration of environmental and hereditary factors impacting child development with emphasis on at-risk population and children with exceptionalities.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6201 - Comm Nutrition Prog/Serv

General

College/School
Agriculture and Human Ecology

Course Title
Comm Nutrition Prog/Serv

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6201

Credit Hours

Credit Hours Min
3

Course Description
Synthesis of social, economic, cultural, and geographic factors on food and nutrition services for families. Analysis of community intervention programs and services as related to disease prevention and food policy issues; emphasis on rural communities.

Requisites

Simple Requisites

> **Prerequisites:** HEC5025 Cultural Issues/Health

HEC6220 - Theories/Child Guidance-Bhvior

General

College/School
Agriculture and Human Ecology

Course Title
Theories/Child Guidance-Bhvior

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6220

Credit Hours

Credit Hours Min
3

Course Description
A topical approach to theories of child behavior and emerging issues in child guidance. An exploration of environmental factors that impact child behavior with emphasis on children with exceptionalities.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6225 - Adv Counseling Techniques

General

College/School
Agriculture and Human Ecology

Course Title
Adv Counseling Techniques

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6225

Credit Hours

Credit Hours Min
3

Course Description
An in-depth exploration of historical and theoretical/philosophical foundations of delivering health counseling services in the context of the larger social services system. Also Addresses issues of diversity in the application of counseling models, intervention, and services delivery to promote healthy behavior change.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6240 - Dvlp Apprp Pract/Creative Play

General

College/School
Agriculture and Human Ecology

Course Title
Dvlp Apprp Pract/Creative Play

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6240

Credit Hours

Credit Hours Min
3

Course Description
Developmentally appropriate practice and emphasis on creative play techniques in educational and social service areas. (This course can be added to the 30-credit curriculum by Professionals with Licensure-seeking endorsement in Early Child Care Services (451)).

Requisites
Simple Requisites

> **Prerequisites:** None

HEC6250 - EXP Food Mgmt/Ext Care

General
College/School
Agriculture and Human Ecology

Course Title
EXP Food Mgmt/Ext Care

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6250

Credit Hours
Credit Hours Min
3

Course Description
Application and integration of food systems management and extended care knowledge and skills in a professional setting.

Requisites
Simple Requisites

> **Prerequisites:** None

HEC6251 - EXP Community Nutrition

General
College/School
Agriculture and Human Ecology

Course Title
EXP Community Nutrition

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6251

Credit Hours
Credit Hours Min
3

Course Description
Admission to the MS in Community Health and Nutrition Graduate Program. Application and integration of community nutrition knowledge and skills to individuals, families and communities. Emphasis is placed on interaction with clients in rural community settings.

Requisites
Simple Requisites

> **Prerequisites:** HEC6250 EXP Food Mgmt/Ext Care

HEC6252 - Experiential Learning Practicum: Clinical Nutrition

General
College/School
Agriculture and Human Ecology

Course Title
EXP Clinical Nutrition

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6252

Credit Hours
Credit Hours Min
3

Course Description
Integration and application of knowledge and skills in medical nutrition therapy in a professional setting.

Requisites
Simple Requisites

> **Prerequisites:** HEC6250 EXP Food Mgmt/Ext Care and Admission to the MS in Community Health and Nutrition Program.

HEC6253 - EXP Practicum

General
College/School
Agriculture and Human Ecology

Course Title
EXP Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6253

Credit Hours
Credit Hours Min
3

Course Description
Integration and application of clinical, community and food service knowledge and skills in a variety of settings; including sports nutrition and professional meetings.

Requisites
Simple Requisites

> **Prerequisites:** HEC6252 EXP Clinical Nutrition and Admission to the MS in Community Health and Nutrition Program.

HEC6300 - Aging/Grntlgy:Issues Impct Soc

General

College/School
Agriculture and Human Ecology

Course Title
Aging/Grntlgy:Issues Impct Soc

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6300

Credit Hours

Credit Hours Min
3

Course Description
A topical approach to emerging issues in the aging population, with emphasis on advocacy and services for individuals and families in the later stages of the life span.

Requisites

Simple Requisites

Prerequisites: None

HEC6405 - Nutrition Across Life Cycle

General

College/School
Agriculture and Human Ecology

Course Title
Nutrition Across Life Cycle

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6405

Credit Hours

Credit Hours Min
3

Course Description
Examination of the nutritional needs of individuals during critical ages and stages of development. Assessing and promoting health throughout the life cycle, including consequences of over- and under-nutrition.

Requisites

Simple Requisites

Prerequisite: HEC6225 Adv Counseling Techniques

HEC6410 - Nutrition and Aging

General

College/School
Agriculture and Human Ecology

Course Title
Nutrition and Aging

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6410

Credit Hours

Credit Hours Min
3

Course Description
Review of the major health issues and nutritional needs of older adults. Overview of human nutrient needs and the physiological, psychological, and sociological relationships with nutrition and aging.

Requisites

Simple Requisites

Prerequisites: None

HEC6430 - Comm Health/Nutrition Capstone

General

College/School
Agriculture and Human Ecology

Course Title
Comm Health/Nutrition Capstone

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6430

Credit Hours

Credit Hours Min
3

Course Description
Capstone project resulting in an in-depth synthesis of evidence-based knowledge in a community health and nutrition topic.

Requisites

Simple Requisites

Prerequisite: HEC6405 Nutrition Across Life Cycle

HEC6440 - Leadership/Nutrition Policy

General

College/School
Agriculture and Human Ecology

Course Title
Leadership/Nutrition Policy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6440

Credit Hours

Credit Hours Min
3

Course Description
Synthesis of leadership and advocacy skills needed in health-related professions. Application of knowledge of nutrition and health related-issues and policies.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6600 - Fam Thries/Issues Impctng Fams

General

College/School
Agriculture and Human Ecology

Course Title
Fam Thries/Issues Impctng Fams

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6600

Credit Hours

Credit Hours Min
3

Course Description
Examination of selected family theories to provide context of understanding the family as a social system with emphasis on family-professional collaboration.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6610 - Crisis Mgmt/Interv-Families

General

College/School
Agriculture and Human Ecology

Course Title
Crisis Mgmt/Interv-Families

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6610

Credit Hours

Credit Hours Min
3

Course Description
In-depth study of family stress and effective coping mechanisms that relate to normative transitions and crisis events.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6630 - Strategies & Advocacy-Families

General

College/School
Agriculture and Human Ecology

Course Title
Strategies & Advocacy-Families

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6630

Credit Hours

Credit Hours Min
3

Course Description
Survey of service delivery programs that serve and advocate for families.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6811 - Learn/Instrct Strat-FCS Edu

General

College/School
Agriculture and Human Ecology

Course Title
Learn/Instrct Strat-FCS Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6811

Credit Hours

Credit Hours Min
3

Course Description
Responsibilities of the family and consumer sciences teacher in middle and secondary school. Selection, use and evaluation of learning experiences and material, program planning. Includes participation and observation in local schools and extension programs.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6820 - Pract: Inst Dvlp/Teach-FCS

General

College/School
Agriculture and Human Ecology

Course Title
Pract: Inst Dvlp/Teach-FCS

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6820

Credit Hours

Credit Hours Min
2

Course Description
Observation and supervised teaching and participation in Family and Consumer Sciences Educational settings.

Requisites

Simple Requisites

> **Pre or Co-Requisite:** HEC6811 Learn/Instrct Strat-FCS Edu

HEC6841 - OFCS/Field Experience

General

College/School
Agriculture and Human Ecology

Course Title
OFCS/Field Experience

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6841

Credit Hours

Credit Hours Min
3

Course Description
Organization and operation of Occupational Family and Consumer Sciences Programs at middle school, high school and adult levels.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6900 - Special Topics

General

College/School
Agriculture and Human Ecology

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
HEC

Course Number
6900

Credit Hours

Credit Hours Min
3

Course Description
Research in contemporary developments in Human Ecology. May be repeated. Maximum six credits

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6920 - Topics/Issues/Research in HEC

General

College/School
Agriculture and Human Ecology

Course Title
Topics/Issues/Research in HEC

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6920

Credit Hours

Credit Hours Min
3

Course Description
Advanced study of a topic or topics relevant to research and/or practice in the field of Human Ecology.

Requisites

Simple Requisites

> **Prerequisites:** None

HEC6940 - Nutrition, Fitness & Wellness

General

College/School
Agriculture and Human Ecology

Course Title
Nutrition, Fitness & Wellness

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6940

Credit Hours

Credit Hours Min
3

Course Description
Basic principles of wellness promotion through exercise and nutrition; assessment and intervention strategies are included.

Requisites

Simple Requisites

Prerequisites: None

HEC6945 - Advanced Sports Nutrition

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Advanced Sports Nutrition	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HEC	6945

Credit Hours

Credit Hours Min
3

Course Description
Interrelations of nutrients in metabolism at the cellular level. Application of metabolic processes for energy consumption to fuel athletic performance.

Requisites

Simple Requisites

Prerequisites: None

HEC6990 - Professional Capstone Project

General

College/School
Agriculture and Human Ecology

Course Title	**Academic Level (Course Level)**
Professional Capstone Project	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HEC	6990

Credit Hours

Credit Hours Min
3

Course Description
Development of an integrated, culminating project that is a substantial piece of independent research or significant professional project that demonstrates the student's ability to use the knowledge gained from this program of study in the field of Human Ecology.

Requisites

Simple Requisites

Prerequisite: HEC6920 Topics/Issues/Research in HEC

HEC6991 - Problems in Prof Practice I

General

College/School
Agricultural/Human Sciences

Course Title	**Academic Level (Course Level)**
Problems in Prof Practice I	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HEC	6991

Credit Hours

Credit Hours Min
2

Course Description
Development and application of critical thinking skills in the identification of problems in professional practice.

HEC6992 - Problems in Prof Practice II

General

College/School
Agricultural/Human Sciences

Course Title	**Academic Level (Course Level)**
Problems in Prof Practice II	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HEC	6992

Credit Hours

Credit Hours Min
2

Course Description
The use of critical thinking and ethical reasoning to evaluate and resolve a problem in professional practice.

HEC6993 - Problems in Prof Practice III

General

College/School
Agricultural/Human Sciences

Course Title	**Academic Level (Course Level)**
Problems in Prof Practice III	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
HEC	6993

Credit Hours

Credit Hours Min
2

Course Description

The preparation of a paper on the resolution of a problem in professional practice and the submission of the paper for publication and/or presentation in a setting requiring peer review.

HEC6994 - Res & Refl of Prob/Prof Pract

General

College/School
Agriculture and Human Ecology

Course Title
Res & Refl of Prob/Prof Pract

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6994

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: HEC 6990. Employing strategic thinking and ethical reasoning in the process of resolving problems in professional practice.

HEC6995 - Sport Specific Nutrition Persp

General

College/School
Agriculture and Human Ecology

Course Title
Sport Specific Nutrition Persp

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
HEC

Course Number
6995

Credit Hours

Credit Hours Min
3

Course Description
Specific nutrition strategies to support various types of training to include: resistance, power/sprint, middle distance/speed endurance, endurance, technical/skill, team and competition nutrition needs. Disordered eating and health complications in various athletic populations.

Requisites

Simple Requisites

Prerequisites: None

Mathematics Department

The Department of Mathematics offers a comprehensive program leading to a Master of Science degree in Mathematics. The program of study provides suitable preparation for further study at the doctoral level or for a career in teaching, government, or industry. The moderate size of the program encourages faculty-student interaction and allows the student an opportunity to tailor a program of study based on individual background, interest, and goals. Graduate students attend a weekly Graduate Seminar and develop teaching skills through participation in the weekly Teaching Seminar. For more information, please contact the Mathematics Department at (931) 372-3441, or visit the departmental web page at http://www.tntech.edu/math.

Programs

MATH-MS - Mathematics, M.S.

Program Overview

Program Long Title
Mathematics, M.S.

College/School
Arts and Sciences

Department(s)
Mathematics

Catalog Full Description
The Department of Mathematics offers a comprehensive program leading to a Master of Science degree in Mathematics. The program of study provides suitable preparation for further study at the doctoral level or for a career in teaching, government, or industry. The moderate size of the program encourages faculty-student interaction and allows the student an opportunity to tailor a program of study based on individual background, interest, and goals. Graduate students attend a weekly Graduate Seminar and develop teaching skills through participation in the weekly Teaching Seminar. For more information, please contact the Mathematics Department at (931) 372-3441, or visit the departmental web page at http://www.tntech.edu/math .

Requirements for the M.S. degree in Mathematics are:

Thesis Option

The M.S. in Mathematics with a Thesis option is a 30 hour degree program. Degree requirements include:

- **Core Required Coursework:** 6 hours
- **Advisor Approved Electives:** 6 hours
- **Advisor Approved Sequence:** 12 hours
- **Research and Thesis Requirement:** 6 hours
- **Total Degree Requirements:** 30 hours

At least 21 of the above credit hours must be at the 6000 level.

Non-Thesis Option

The M.S. in Mathematics in the Non-Thesis program is a 33 hour program. Degree requirements are as follows:

- **Core Course Requirements:** 6 hours
- **Advisor Approved Electives:** 6 hours
- **Advisor Approved Sequence:** 18 hours
- **Non-Thesis Project:** 3 hours
- **Total Degree Requirements:** 33 hours

Admission Requirements

Admission Requirements

As a necessary condition to be admitted to the Mathematics Graduate Program with Full Standing, and applicant must meet the following minimum requirements:

1. successful completion (at least a C or better) or at least one semester-long undergraduate course in abstract algebra (MATH 4010 or equivalent)

2. successful completion (at least a C or better) of at least onesemester-long undergraduate courses in real analysis (MATH 4110 or equivalent)

3. an overall undergraduate QPA of at least 2.5 (based on a 4.0 scale)

4. at least 3 letters of recommendation each indicating an expectation for success in a graduate mathematics program

5. (international students only) a TOEFL score of at least 550oran IELTS score of at least 6.0orthe attainment of level18 in the FLS international Intensive ESL program

6. Demonstrated potential for success in a graduate mathematics program by attaining **at least one** of the following

   ◦ an overall undergraduate mathematics QPA of at least 3.5 (based on a 4.0 scale);

   ◦ at least a 140 verbal score, 150 quantitative score, and 3.0 analytical writing score on the GRE General Examination

   ◦ at least a 700 on the GRE Subject Test in Mathematics

It should be understood that fulfilling the above minimum requirements is not sufficient to guarantee that an applicant will be admitted with full standing .A student may be admitted to the Mathematics Graduate Program with Provisional Standing if one or more of the above requirements are not met, assuming that the student has an overall undergraduate QPA of at least 2.25 (based on a 4.0 scale) and at least 3 letters of recommendation each indicating and expectation for success in a graduate mathematics program. Recommendations for admission (with Full or Provisional Standing) are made by the Mathematics Department Chairperson in consultation with the Mathematics Graduate Committee based upon an analysis of the applicant's mathematical background and potential for success in the Mathematics Graduate Program. As student in Provisional Standing may be reclassified to Full Standing once the student has satisfied the appropriate requirements detailed in the admission letter.

For the sake of evaluation for an assistantship, applicants are highly encouraged to take both the GRE General Examination and the GRE Subject Test in Mathematics and submit their scores with the application.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Requirements for the M.S. degree in Mathematics are:

Thesis Option

The M.S. in Mathematics with a Thesis option is a 30 hour degree program. Degree requirements include:

- **Core Required Coursework:** 6 hours

- **Advisor Approved Electives:** 6 hours

- **Advisor Approved Sequence:** 12 hours

- **Research and Thesis Requirement:** 6 hours

- **Total Degree Requirements:** 30 hours

At least 21 of the above credit hours must be at the 6000 level.

Non-Thesis Option

The M.S. in Mathematics in the Non-Thesis program is a 33 hour program. Degree requirements are as follows:

- **Core Course Requirements:** 6 hours

- **Advisor Approved Electives:** 6 hours

- **Advisor Approved Sequence:** 18 hours

- **Non-Thesis Project:** 3 hours

- **Total Degree Requirements:** 33 hours

A comprehensive examination on two (2) of the three (3) one-year approved sequences used to fulfill the 18 credit hour requirement. The selection of the two (2) areas of examination will be left to the graduate student and to the graduate student's advisor, subject to the approval of the student's Graduate Advisory Committee. The exam will test both the student's knowledge of the subject areas and ability to independently solve problems and prove theorems.

At least 24 of the 33 hours will be at the 6000 level.

Thesis Option

Type

Completion Requirement

Core Required Coursework (6 hours)

Complete ALL of the following Courses:
- MATH6110 - Abstract Algebra I
- MATH6010 - Functional Analysis I
  OR MATH6410 - Real Analysis 1
  OR MATH6310 - Complex Analysis I

Advisor Approved Electives (6 hours)

Selection of appropriate MATH advisor approved courses (MATH 5XXX-MATH 6XXX) will be made in consultation with the student's advisory committee and/or graduate coordinator.

Advisor Approved Sequence (12 hours)

A student may complete a sequence by taking any two of the six courses listed below. A student who takes four of of the six courses listed is considered to have completed two sequences.

Complete at least 2 of the following courses:
- MATH6510 - Finite Difference Solut
- MATH6520 - Fin Element Sol-Diff Equ
- MATH6810 - Partial Differ Equations
- MATH6530 - Integral Equations/Apps
- MATH6540 - Calc Of Variation & Appl
- MATH6610 - Operational Mathematics

Additional Sequences

Student may choose additional sequences from the following list:

Complete ANY of the following Courses:
- MATH6010 - Functional Analysis I
  AND MATH6020 - Functional Analysis II
- MATH6070 - App Linear Stat Meth I
  AND MATH6080 - App Linear Stat Meth II
- MATH6110 - Abstract Algebra I
  AND MATH6120 - Abstract Algebra II

- MATH6170 - Experimental Design I
  AND MATH6180 - Experimental Design II
- MATH6210 - Topology I
  AND MATH6220 - Topology II
- MATH6240 - Reprsntatns/Chrctrs-Groups I
  AND MATH6250 - Reprsntatns/Chrctrs-Groups II
- MATH6310 - Complex Analysis I
  AND MATH6320 - Complex Analysis II
- MATH6370 - Prob & Stochast Proc I
  AND MATH6380 - Prob & Stocast Proc II
- MATH6410 - Real Analysis 1
  AND MATH6420 - Real Analysis II
- MATH6450 - Adv Theory of Computation
  AND MATH6460 - Comp Meth/Graphics & Modeling
- MATH6910 - Special Topics in Math
  AND MATH6920 - Special Topics in Math

Research and Thesis Requirement (6 hours)

Complete ALL of the following Courses:
- MATH6990 - Research & Thesis

Additional Comments:

Non-Thesis Option (33 hours)
Type
Completion Requirement

Core Required Coursework (6 hours)

Complete ALL of the following Courses:
- MATH6110 - Abstract Algebra I
- MATH6010 - Functional Analysis I
  OR MATH6410 - Real Analysis 1
  OR MATH6310 - Complex Analysis I

Advisor Approved Electives (6 hours).

Selection of appropriate MATH advisor approved courses (MATH5XXX-MATH6XXX) will be made in consultation with the student's advisory committee and/or graduate coordinator.

Advisor Approved Electives (6 hours).

Advisor Approved Sequence (18 hours total)

A student may complete a sequence by taking any two of the six courses listed below. A student who takes four of the six courses listed is considered to have completed two sequences.

Complete at least 2 of the following courses:
- MATH6510 - Finite Difference Solut
- MATH6520 - Fin Element Sol-Diff Equ
- MATH6810 - Partial Differ Equations
- MATH6530 - Integral Equations/Apps
- MATH6540 - Calc Of Variation & Appl
- MATH6610 - Operational Mathematics

Student may choose additional sequences from the following list:

Complete ANY of the following Courses:
- MATH6010 - Functional Analysis I
  AND MATH6020 - Functional Analysis II
- MATH6070 - App Linear Stat Meth I
  AND MATH6080 - App Linear Stat Meth II
- MATH6110 - Abstract Algebra I

  AND MATH6120 - Abstract Algebra II
- MATH6170 - Experimental Design I
  AND MATH6180 - Experimental Design II
- MATH6210 - Topology I
  AND MATH6220 - Topology II
- MATH6240 - Reprsntatns/Chrctrs-Groups I
  AND MATH6250 - Reprsntatns/Chrctrs-Groups II
- MATH6310 - Complex Analysis I
  AND MATH6320 - Complex Analysis II
- MATH6370 - Prob & Stochast Proc I
  AND MATH6380 - Prob & Stocast Proc II
- MATH6410 - Real Analysis 1
  AND MATH6420 - Real Analysis II
- MATH6450 - Adv Theory of Computation
  AND MATH6460 - Comp Meth/Graphics & Modeling
- MATH6910 - Special Topics in Math
  AND MATH6920 - Special Topics in Math

Additional Comments:
A comprehensive examination on two (2) of the three (3) one-year approved sequences used to fulfill the 18 credit hour requirement. The selection of the two (2) areas of examination will be left to the graduate student and to the graduate student's advisor, subject to the approval of the student's Graduate Advisory Committee. The exam will test both the student's knowledge of the subject areas and ability to independently solve problems and prove theorems. At least 24 of the 33 hours will be at the 6000 level.

Non-Thesis Project (3 hours)
Type
Completion Requirement

Non-Thesis Project Course

Complete ALL of the following Courses:
- MATH6991 - Research & Ind Study

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable promising undergraduate mathematics students at Tennessee Tech to begin their pursuit of a Master's degree in Mathematics during their senior year. Upon admission to the program, up to six (6) hours of graduate mathematics courses taken during the senior year can be used to satisfy both undergraduate and graduate degree requirements (see restrictions below).

To be eligible, a student must have an overall GPA of at least 3.25 and have a B or better in all upper division Mathematics courses. Students who meet these minimum requirements may apply to the Mathematics Department for admission to the Fast Track program. The departments graduate committee will review the application and make a decision for approval.

The student must earn a grade of B or better in the graduate courses which are double-counted to have the credit apply toward the Master's degree. In addition, the following classes are not eligible for Fast Track credit: Math 5010, 5110, 5470, 5530, 5510, 5610, and 5620.

Participation in the Fast Track program does not guarantee admission to the Mathematics graduate program. The student must meet all requirements for admission to the graduate program upon graduation and must complete the Fast Track program successfully will be given strong consideration for both admission and financial assistance in the graduate program.

Courses

MATH5010 - Modern Algebra I

General

College/School
Arts and Sciences

Course Title
Modern Algebra I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5010

Credit Hours

Credit Hours Min
3

Course Description
Groups and subgroups including cyclic, abelian, finite; permutation groups, group homomorphisms, cosets and Lagrange's Theorem, normal subgroups and factor groups. Rings including integral domains, unique factoraization domains and Euclidean domains, ideals and factor rings, ring homomorphisms, fields and their extensions, geometric constructions.

Requisites

Simple Requisites

> **Prerequisite:** Grade of C or better in Math 2010 and MATH3400 Intro/ Concepts of Math.

MATH5020 - Modern Algebra II

General

College/School
Arts and Sciences

Course Title
Modern Algebra II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5020

Credit Hours

Credit Hours Min
3

Course Description
Groups and subgroups including cyclic, abelian, finite; permutation groups, group homomorphisms, cosets and Lagrange's Theorem, normal subgroups and factor groups. Rings including integral domains, unique factoraization domains and Euclidean domains, ideals and factor rings, ring homomorphisms, fields and their extensions, geometric constructions.

Requisites

Simple Requisites

> **Prerequisite:** Grade of C or better in MATH4010 Modern Algebra I(MATH5010 Modern Algebra I).

MATH5050 - Number Theory

General

College/School
Arts and Sciences

Course Title
Number Theory

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5050

Credit Hours

Credit Hours Min
3

Course Description
Properties of integers, division algorithms, prime numbers, diophantine equations, congruences. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor or C or better in MATH3400 Intro/ Concepts of Math

MATH5060 - Topics in Cryptography

General

College/School
Arts and Sciences

Course Title
Topics in Cryptography

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5060

Credit Hours

Credit Hours Min
3

Course Description

Fundamental concepts of cryptography presented with mathematical background (including groups, fields, elements of number theory, probability and statistics). Special attention will be given to the RSA algorithm, Elliptic Curve Cryptography, the ElGamal public key cryptosystem, Diffie-Hellman key exchange and pseudo random number generators.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH2010 Introduction to Linear Algebra and C or better in either MATH3400 Intro/Concepts of Math or CSC2700 Discrete Structures for CSC.

MATH5110 - Advanced Calculus I

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Advanced Calculus I	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	5110

Credit Hours

Credit Hours Min
3

Course Description

Rigorous treatment of functions of one and several variables, improper integrals, sequences, infinite series, uniform convergence and applications. Students are expected to improve their ability to work in an abstract setting using precise definitions and formal proofs and to present their work in class. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4110 Advanced Calculus I(MATH5110 Advanced Calculus I): C or better in MATH3400 Intro/Concepts of Math or consent of instructor; MATH4120 Advanced Calculus II(MATH5120 Advanced Calculus II): C or better in MATH4110 Advanced Calculus I (MATH5110 Advanced Calculus I).

MATH5120 - Advanced Calculus II

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Advanced Calculus II	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	5120

Credit Hours

Credit Hours Min
3

Course Description

Rigorous treatment of functions of one and several variables, improper integrals, sequences, infinite series, uniform convergence and applications. Students are expected to improve their ability to work in an abstract setting using precise definitions and formal proofs and to present their work in class. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4110 Advanced Calculus I (MATH5110 Advanced Calculus I): C or better in MATH3400 Intro/Concepts of Math or consent of instructor; MATH4120 Advanced Calculus II (MATH5120 Advanced Calculus II): C or better in MATH4110 Advanced Calculus I (MATH5110 Advanced Calculus I).

MATH5210 - Numerical Analysis I

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Numerical Analysis I	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	5210

Credit Hours

Credit Hours Min
3

Course Description

Iterative methods for nonlinear equations, computational error analysis, convergence of iterative techniques, interpolation, numerical differentiation and integration, approximate solutions of initial-value problems, boundary-value problems, and nonlinear systems, direct and iterative methods for linear systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4210 Numerical Analysis I (MATH5210 Numerical Analysis I): C or better in MATH 1920 (or consent of instructor for MATH5210 Numerical Analysis I); MATH4220 Numerical Analysis II (5220): C or better in MATH 2120 or consent of instructor.

MATH5220 - Numerical Analysis II

General

College/School
Arts and Sciences

Course Title
Numerical Analysis II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5220

Credit Hours

Credit Hours Min
3

Course Description
Iterative methods for nonlinear equations, computational error analysis, convergence of iterative techniques, interpolation, numerical differentiation and integration, approximate solutions of initial-value problems, boundary-value problems, and nonlinear systems, direct and iterative methods for linear systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4210 Numerical Analysis I (MATH5210 Numerical Analysis I): C or better in MATH1920 Calculus II (or consent of instructor for MATH5210 Numerical Analysis I); MATH4220 Numerical Analysis II (MATH5220 Numerical Analysis II): C or better in MATH2120 Differential Equations or consent of instructor.

MATH5250 - Adv Ord Diff Equations I

General

College/School
Arts and Sciences

Course Title
Adv Ord Diff Equations I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5250

Credit Hours

Credit Hours Min
3

Course Description
Systems of ordinary differential equations, matrix methods, approximate solutions, stability theory, basic theory of nonlinear equations and differential systems, trajectories, phase space stability, construction of Liapunov functions. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4250 Adv Ord Diff Equations I (MATH5250 Adv Ord Diff Equations I): C or better in MATH 2110 and MATH 2120 (or consent of instructor for MATH5250 Adv Ord Diff Equations I); MATH4260 Adv Ord Diff Equations II (MATH5260 Adv Ord Diff Equations II): C or better in MATH4250 Adv Ord Diff Equations I (MATH5250 Adv Ord Diff Equations I).

MATH5260 - Adv Ord Diff Equations II

General

College/School
Arts and Sciences

Course Title
Adv Ord Diff Equations II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5260

Credit Hours

Credit Hours Min
3

Course Description
Systems of ordinary differential equations, matrix methods, approximate solutions, stability theory, basic theory of nonlinear equations and differential systems, trajectories, phase space stability, construction of Liapunov functions. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4250 Adv Ord Diff Equations I(MATH5250 Adv Ord Diff Equations I): C or better in MATH 2110 and MATH 2120 (or consent of instructor for MATH5250 Adv Ord Diff Equations I); MATH4260 Adv Ord Diff Equations II (MATH5260 Adv Ord Diff Equations II): C or better in MATH4250 Adv Ord Diff Equations I (MATH5250 Adv Ord Diff Equations I).

MATH5310 - Intro to Topology I

General

College/School
Arts and Sciences

Course Title
Intro to Topology I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5310

Credit Hours

Credit Hours Min
3

Course Description
Topological spaces, continuity, connectedness, compactness, separation axioms, function spaces, and fundamental groups. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4310 Intro to Topology I (MATH5310 Intro to Topology I): C or better in MATH3400 Intro/Concepts of Math (or consent of instructor for MATH5310 Intro to Topology I); MATH4320 Intro to Topology II (MATH5320 Intro to Topology II): C or better in MATH4310 Intro to Topology I (MATH5310 Intro to Topology I).

MATH5320 - Intro to Topology II

General

College/School
Arts and Sciences

Course Title
Intro to Topology II

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5320

Credit Hours

Credit Hours Min
3

Course Description
Topological spaces, continuity, connectedness, compactness, separation axioms, function spaces, and fundamental groups. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4310 Intro to Topology I (MATH5310 Intro to Topology I): C or better in MATH3400 Intro/Concepts of Math (or consent of instructor for MATH5310 Intro to Topology I); MATH4320 Intro to Topology II (MATH5320 Intro to Topology II): C or better in MATH4310 Intro to Topology I (MATH5310 Intro to Topology I).

MATH5350 - Introductory Combinatorics

General

College/School
Arts and Sciences

Course Title
Introductory Combinatorics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5350

Credit Hours

Credit Hours Min
3

Course Description
Topics to be covered include permutations, combinations, multisets, partitions, recurrence relations, generating functions, and the principle of inclusion-exclusion. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH3400 Intro/Concepts of Math or consent of instructor.

MATH5360 - Graph Theory

General

College/School
Arts and Sciences

Course Title
Graph Theory

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5360

Credit Hours

Credit Hours Min
3

Course Description
Fundamental concepts of undirected and directed graphs, trees, connectivity, traversability, planarity, colorability, network flows, and matching theory. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH3400 Intro/Concepts of Math or consent of instructor.

MATH5410 - Differential Geometry

General

College/School
Arts and Sciences

Course Title
Differential Geometry

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5410

Credit Hours

Credit Hours Min
3

Course Description
Geometry of curves and surfaces in three-dimensional space. Calculus on surfaces, curvature and Riemannian geometry. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> Prerequisite: C or better in MATH 2010, 2110, and MATH3400 Intro/Concepts of Math (or consent of instructor for MATH5410 Differential Geometry).

MATH5470 - Probability & Statistics I

General

College/School
Arts and Sciences

Course Title
Probability & Statistics I

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5470

Credit Hours

Credit Hours Min
3

Course Description
Mathematical foundations of elementary statistical methods, application and theory, probability in discrete and continuous distribution, correlation and regression, sampling distributions, significance tests. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH 2110 or consent of instructor.

MATH5480 - Probability & Statistics II

General

College/School
Arts and Sciences

Course Title
Probability & Statistics II

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5480

Credit Hours

Credit Hours Min
3

Course Description
Mathematical foundations of elementary statistical methods, application and theory, probability in discrete and continuous distribution, correlation and regression, sampling distributions, significance tests. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH 2110 or consent of instructor. C or better in MATH4470 Probability & Statistics I (MATH5470 Probability & Statistics I).

MATH5510 - Adv Math for Engineers

General

College/School
Arts and Sciences

Course Title
Adv Math for Engineers

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5510

Credit Hours

Credit Hours Min
3

Course Description
Fourier series, Sturm-Liouville problems, orthogonal functions, Legendre polynomials, Bessel functions, separable partial differential equations (e.g., heat, wave, and Laplace equations), and other topics. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH 2110 and MATH 2120.

MATH5530 - Linear Algebra I

General

College/School
Arts and Sciences

Course Title
Linear Algebra I

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5530

Credit Hours

Credit Hours Min
3

Course Description
A theoretical study of vector spaces, bases and dimensions, subspaces, linear transformations, dual spaces, eigenvalues and eigenvectors, inner product spaces, spectral theory, duality, quadratic and bilinear forms. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4530 Linear Algebra I (MATH5530 Linear Algebra I): C or better in MATH 2010 and MATH3400 Intro/Concepts of Math; MATH4540 Linear Algebra II (MATH5540 Linear Algebra II): C or better in MATH4530 Linear Algebra I (MATH5530 Linear Algebra I).

MATH5540 - Linear Algebra II

General

College/School
Arts and Sciences

Course Title
Linear Algebra II

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5540

Credit Hours

Credit Hours Min

3

Course Description

A theoretical study of vector spaces, bases and dimensions, subspaces, linear transformations, dual spaces, eigenvalues and eigenvectors, inner product speaces, spectral theory, duality, quadratic and bilinear forms. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MATH4530 Linear Algebra I (MATH5530 Linear Algebra I): C or better in MATH 2010 and MATH3400 Intro/Concepts of Math; MATH4540 Linear Algebra II (MATH5540 Linear Algebra II): C or better in MATH4530 Linear Algebra I (MATH5530 Linear Algebra I).

MATH5550 - Mathematics of Investment I

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Mathematics of Investment I	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	5550

Credit Hours

Credit Hours Min

3

Course Description

Prerequisite: C or better in MATH 1920 or consent of instructor. Topics include examination of annuities, loans, bonds and other securities, portfolio, immunization, interest rate swaps.

MATH5560 - Mathematics of Investment II

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Mathematics of Investment II	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	5560

Credit Hours

Credit Hours Min

3

Course Description

Topics include derivative securities, mathematical models of financial risk management, and corporate finance.

Requisites

Simple Requisites

> **Prerequisite:** C or better in both MATH 4550/5550 and MATH 4470/5470, or consent of instructor.

MATH5610 - History of Mathematics I

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
History of Mathematics I	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	5610

Credit Hours

Credit Hours Min

3

Course Description

The development of mathematics and its relation to the development of civilization prior to the beginnings of calculus. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH3400 Intro/Concepts of Math (or consent of instructor for MATH5610 History of Mathematics I).

MATH5620 - History of Mathematics II

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
History of Mathematics II	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	5620

Credit Hours

Credit Hours Min

3

Course Description

History of mathematics from the beginnings of calculus through the modern times. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH3400 Intro/Concepts of Math (or consent of instructor for MATH5620 History of Mathematics II).

MATH5710 - Vector Analysis

General

College/School
Arts and Sciences

Course Title
Vector Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5710

Credit Hours

Credit Hours Min
3

Course Description
The algebra and the differential and integral calculus of vectors; applications to geometry and mechanics. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH 2110.

MATH5750 - Category Theory of Sets

General

College/School
Arts and Sciences

Course Title
Category Theory of Sets

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5750

Credit Hours

Credit Hours Min
3

Course Description
Abstracts sets and mappings, categories, sums, universal property, monomorphisms and parts, finite inverse limits, colimits, epimorphisms, the Axiom of Choice, mapping sets and exponentials, covariant and contravariant functionality of function spaces, Cantor's diagonal argument, powers sets, variable sets, models of additional variation, selected applications. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** C or better in MATH3400 Intro/Concepts of Math (or consent of instructor for MATH5750 Category Theory of Sets).

MATH5850 - Comp Algebraic Geometry I

General

College/School
Arts and Sciences

Course Title
Comp Algebraic Geometry I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5850

Credit Hours

Credit Hours Min
3

Course Description
Affine varieties and polynomial ideals. Groebner bases, elimination theory, Hilbert's Nullstellensatz, Zariski closure, decomposition into irreducible varieties.

Requisites

Simple Requisites

> **Prerequisites:** C or better in MATH 2010, and C or better in MATH3400 Intro/Concepts of Math or equivalent; or consent of instructor for MATH5850 Comp Algebraic Geometry I
>
> **Additional recommended prerequisite:** MATH3510 Modern Algebra I or any other 4000/5000 level mathematics course in which proofs are required.

MATH5860 - Comp Algebraic Geometry II

General

College/School
Arts and Sciences

Course Title
Comp Algebraic Geometry II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5860

Credit Hours

Credit Hours Min
3

Course Description
Polynomial and rational functions on a variety, projective varieties, the dimension of a variety, selected applications in robotics, automatic theorem proving, and invariant theory of finite groups.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4850 Comp Algebraic Geometry I (MATH5850 Comp Algebraic Geometry I).

MATH5910 - Directed Readings

General

College/School
Arts and Sciences

Course Title
Directed Readings

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5910

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Prerequisite: Consent of instructor. These courses provide an opportunity for individual reading and study under the supervision of a qualified staff member. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

MATH5920 - Directed Readings

General

College/School
Arts and Sciences

Course Title
Directed Readings

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5920

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
These courses provide an opportunity for individual reading and study under the supervision of a qualified staff member. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MATH5950 - Topics in Mathematics

General

College/School
Arts and Sciences

Course Title
Topics in Mathematics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
5950

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Consent of instructor. A formal course in any area where there is no other course offering. May be taken more than once, provided that the topic is different. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

MATH6001 - Communicating Mathematics I

General

College/School
Arts and Sciences

Course Title
Communicating Mathematics I

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
MATH

Course Number
6001

Credit Hours

Credit Hours Min
1

Course Description
This course provides practical training in the teaching of mathematics at the pre-calculus level and the uses of technology in the mathematics classroom.

Requisites

Simple Requisites

> **Prerequisites:** None

MATH6010 - Functional Analysis I

General

College/School
Arts and Sciences

Course Title
Functional Analysis I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Metric spaces, normed and Banach spaces, inner product and Hilbert spaces. Fundamental theorems for normed and Banach spaces and their applications. Linear operators on normed and Hilbert spaces.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4120 Advanced Calculus II (MATH5120 Advanced Calculus II) or consent of instructor.

MATH6020 - Functional Analysis II

General

College/School
Arts and Sciences

Course Title
Functional Analysis II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6020

Credit Hours

Credit Hours Min
3

Course Description
Metric spaces, normed and Banach spaces, inner product and Hilbert spaces. Fundamental theorems for normed and Banach spaces and their applications. Linear operators on normed and Hilbert spaces.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4120 Advanced Calculus II (MATH5120 Advanced Calculus II) or consent of instructor.

MATH6070 - App Linear Stat Meth I

General

College/School
Arts and Sciences

Course Title
App Linear Stat Meth I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6070

Credit Hours

Credit Hours Min
3

Course Description
Regression analysis in the context of classical linear, nonlinear, generalized linear, and time series models.

Requisites

Simple Requisites

> **Prerequisite:** Consent of Instructor.

MATH6080 - App Linear Stat Meth II

General

College/School
Arts and Sciences

Course Title
App Linear Stat Meth II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6080

Credit Hours

Credit Hours Min
3

Course Description
Regression analysis in the context of classical linear, nonlinear, generalized linear, and time series models.

Requisites

Simple Requisites

> **Prerequisite:** B or better in MATH6070 App Linear Stat Meth I or consent of instructor.

MATH6110 - Abstract Algebra I

General

College/School
Arts and Sciences

Course Title
Abstract Algebra I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6110

Credit Hours

Credit Hours Min
3

Course Description
An extensive treatment of groups, semigroups, integral domains, rings and ideals, fields, and Galois fields

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4010 Modern Algebra I/MATH5010 Modern Algebra I or consent of instructor.

MATH6120 - Abstract Algebra II

General

College/School
Arts and Sciences

Course Title
Abstract Algebra II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6120

Credit Hours

Credit Hours Min
3

Course Description
An extensive treatment of groups, semigroups, integral domains, rings and ideals, fields, and Galois fields

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH6110 Abstract Algebra I or consent of instructor.

MATH6150 - Mathematical Modeling

General

College/School
Arts and Sciences

Course Title
Mathematical Modeling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6150

Credit Hours

Credit Hours Min
3

Course Description
Applications of mathematics to real world problems with emphasis on problem definition, research, solution, and written report presentation.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MATH6170 - Experimental Design I

General

College/School
Arts and Sciences

Course Title
Experimental Design I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6170

Credit Hours

Credit Hours Min
3

Course Description
Introduction to basic concepts of experimental design, fundamental assumptions in analysis of variance, multiple comparison tests, complete randomized design, general linear model approach to ANOVA, various experimental designs, incomplete block designs, factorial experiments, fractional factorial experiments, response surface methods, repeated measure designs.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MATH6180 - Experimental Design II

General

College/School
Arts and Sciences

Course Title
Experimental Design II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6180

Credit Hours

Credit Hours Min
3

Course Description
Introduction to basic concepts of experimental design, fundamental assumptions in analysis of variance, multiple comparison tests, complete randomized design, general linear model approach to ANOVA, various experimental designs, incomplete block designs, factorial experiments, fractional factorial experiments, response surface methods, repeated measure designs.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MATH6210 - Topology I

General

College/School
Arts and Sciences

Course Title
Topology I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6210

Credit Hours

Credit Hours Min
3

Course Description
Topics in point-set topology, homotopy theory, triangulated spaces, homology theory, other topics in topology.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4320 Intro to Topology II (MATH5320 Intro to Topology II) or consent of instructor.

MATH6220 - Topology II

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Topology II	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	6220

Credit Hours

Credit Hours Min
3

Course Description
Topics in point-set topology, homotopy theory, triangulated spaces, homology theory, other topics in topology.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4320 Intro to Topology II (MATH5320 Intro to Topology II) or consent of instructor.

MATH6240 - Reprsntatns/Chrctrs-Groups I

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Reprsntatns/Chrctrs-Groups I	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	6240

Credit Hours

Credit Hours Min
3

Course Description
FG-modules, reducibility, group algebras, FG-homomorphisms, Maschke's Theorem, Schur's Lemma, irreducible modules, characters, inner products of characters, character tables, orthogonality relations.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4010 Modern Algebra I/MATH5010 Modern Algebra I while C or better in MATH4530 Linear Algebra I/MATH5530 Linear Algebra I is recommended, or consent of instructor.

MATH6250 - Reprsntatns/Chrctrs-Groups II

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Reprsntatns/Chrctrs-Groups II	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	6250

Credit Hours

Credit Hours Min
3

Course Description
Normal subgroups and lifted characters, tensor products, restriction to a subgroup, induced modules and characters, Frobenius reciprocity relation, applications to group theory such as real representations, groups of order pq, p-groups, characters of GL(2,q), symmetric groups, Burnside's Theorem, and molecular vibrations.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH6240 Reprsntatns/Chrctrs-Groups I.

MATH6270 - Mathematical Statistics

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Mathematical Statistics	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	6270

Credit Hours

Credit Hours Min
3

Course Description
Statistical hypothesis, uniform most powerful tests, sufficient statistics, completeness, Roa-Cramer Inequality, sequential probability ratio test, analysis of variance, multiple comparisons, nonparametric techniques.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MATH6310 - Complex Analysis I

General

College/School
Arts and Sciences

Course Title
Complex Analysis I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6310

Credit Hours

Credit Hours Min
3

Course Description
Complex numbers, calculus of complex variables, analytic function. Cauchy's Theorem and complex integration, power series including Taylor's and Laurent's, residue theory with applications, conformal mapping with physical applications.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4120 Advanced Calculus II (MATH5120 Advanced Calculus II) or consent of instructor.

MATH6320 - Complex Analysis II

General

College/School
Arts and Sciences

Course Title
Complex Analysis II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6320

Credit Hours

Credit Hours Min
3

Course Description
Complex numbers, calculus of complex variables, analytic function. Cauchy's Theorem and complex integration, power series including Taylor's and Laurent's, residue theory with applications, conformal mapping with physical applications.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4120 Advanced Calculus II (MATH5120 Advanced Calculus II) or consent of instructor.

MATH6370 - Prob & Stochast Proc I

General

College/School
Arts and Sciences

Course Title
Prob & Stochast Proc I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6370

Credit Hours

Credit Hours Min
3

Course Description
Probability theory of sets, random variable distribution and characteristic functions, convergence, limits and law of large numbers, convolutions, compound distribution, recurrent events, random walk models, Markov chains, homogeneous, nonhomogeneous, and queuing processes.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4480 Probability & Statistics II (MATH5480 Probability & Statistics II) or consent of instructor.

MATH6380 - Prob & Stocast Proc II

General

College/School
Arts and Sciences

Course Title
Prob & Stocast Proc II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6380

Credit Hours

Credit Hours Min
3

Course Description
Probability theory of sets, random variable distribution and characteristic functions, convergence, limits and law of large numbers, convolutions, compound distribution, recurrent events, random walk models, Markov chains, homogeneous, nonhomogeneous, and queuing processes.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH6370 Prob & Stochast Proc I.

MATH6410 - Real Analysis 1

General

College/School
Arts and Sciences

Course Title
Real Analysis 1

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6410

Credit Hours

Credit Hours Min
3

Course Description
Theory of Lebesque measure and integration, Lp spaces. Integration in locally compact space.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4120 Advanced Calculus II (MATH5120 Advanced Calculus II) or consent of instructor.

MATH6420 - Real Analysis II

General

College/School
Arts and Sciences

Course Title
Real Analysis II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6420

Credit Hours

Credit Hours Min
3

Course Description
Theory of Lebesque measure and integration, Lp spaces. Integration in locally compact space.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4120 Advanced Calculus II (MATH5120 Advanced Calculus II) or consent of instructor.

MATH6450 - Adv Theory of Computation

General

College/School
Arts and Sciences

Course Title
Adv Theory of Computation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6450

Credit Hours

Credit Hours Min
3

Course Description
A rigorous treatment of the theory of computation. Topics such as: computable functions, the Church-Turing thesis, complexity theory, and P vs NP.

Requisites

Simple Requisites

> **Prerequisite:** Consent of the instructor (previous coursework involving proofs and some programming experience are needed).

MATH6460 - Comp Meth/Graphics & Modeling

General

College/School
Arts and Sciences

Course Title
Comp Meth/Graphics & Modeling

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6460

Credit Hours

Credit Hours Min
3

Course Description
Mathematical methods for graphics and modeling. Topics such as: 3-D transformations, ray tracing, rendering, image processing, and compression.

Requisites

Simple Requisites

> **Prerequisite:** Consent of the instructor (previous coursework involving proofs and some programming experience are needed).

MATH6470 - Environmental Statistics

General

College/School
Arts and Sciences

Course Title
Environmental Statistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6470

Credit Hours

Credit Hours Min
3

Course Description
This course covers statistical analysis used in environmental modeling. Topics include finite population parameter estimation, spatial sampling techniques, animal population size estimation, variogram estimation, kriging, logistic regression, and survival analysis. Familiarity with computers is necessary. Also necessary is a background in calculus including differentiation and integration of transcendental functions and series.

Requisites

Simple Requisites

> **Prerequisite:** MATH6070 App Linear Stat Meth I or MATH6170 Experimental Design I or their equivalents.

MATH6510 - Finite Difference Solut

General

College/School
Arts and Sciences

Course Title
Finite Difference Solut

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6510

Credit Hours

Credit Hours Min
3

Course Description
Approximate solutions of boundary and initial value problems using the finite difference method. Elliptic, parabolic, and hyperbolic PDE's. Numerical differentiation. Solution methods for linear systems.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4510 Adv Math for Engineers (MATH5510 Adv Math for Engineers) or consent of instructor.

MATH6520 - Fin Element Sol-Diff Equ

General

College/School
Arts and Sciences

Course Title
Fin Element Sol-Diff Equ

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6520

Credit Hours

Credit Hours Min
3

Course Description
Mathematical foundations of the finite element method. Approximate solutions of PDE's. Polynomial interpolation. Variational techniques. Numerical integration. Solution methods for linear systems. Isoparametric technique.

Requisites

Simple Requisites

> **Prerequisite:** C or better in MATH4510 Adv Math for Engineers (MATH5510 Adv Math for Engineers) or consent of instructor.

MATH6530 - Integral Equations/Apps

General

College/School
Arts and Sciences

Course Title
Integral Equations/Apps

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6530

Credit Hours

Credit Hours Min
3

Course Description
Volterra and Fredholm equations. Green's functions, Hilbert-Schmidt and Fredholm theories. Neumann series, iterative methods.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MATH6540 - Calc Of Variation & Appl

General

College/School
Arts and Sciences

Course Title
Calc Of Variation & Appl

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6540

Credit Hours

Credit Hours Min
3

Course Description
Euler equation, constraints, Lagrange multipliers, Ritz method, applications.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MATH6610 - Operational Mathematics

General

College/School
Arts and Sciences

Course Title
Operational Mathematics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6610

Credit Hours

Credit Hours Min
3

Course Description
Integral transforms (Laplace, Fourier) inversion and convolution theorems, applications.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MATH6700 - Graph Theory

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Graph Theory	Doctoral, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	6700

Credit Hours

Credit Hours Min
3

Course Description
Fundamental concepts of undirected and directed graphs, trees, connectivity, traversability, colorability, network flows, matchings and coverings, Ramsey theory and graph minors.

Requisites

Simple Requisites

> **Prerequisite:** C or better grade in MATH3400 Intro/Concepts of Math or consent of instructor.

MATH6810 - Partial Differ Equations

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Partial Differ Equations	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	6810

Credit Hours

Credit Hours Min
3

Course Description
First and second order PDE's, wave, heat, and Laplace's equations, applications to boundary and eigen-value problems of mathematics, physics, and engineering.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

MATH6900 - Mathematics Seminar

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Mathematics Seminar	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	6900

Credit Hours

Credit Hours Min
1

MATH6910 - Special Topics in Math

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Special Topics in Math	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	6910

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	3
	Credit Hours Operator
	TO

Course Description
Prerequisite: Consent of instructor. Individual study of advanced mathematical topics in fields of interest under the supervision of a qualified staff member.

MATH6920 - Special Topics in Math

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Special Topics in Math	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MATH	6920

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	3

Credit Hours Operator
TO

Course Description
Prerequisite: Consent of instructor. Individual study of advanced mathematical topics in fields of interest under the supervision of a qualified staff member.

MATH6921 - Special Topics in Math

General

College/School
Arts and Sciences

Course Title
Special Topics in Math

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6921

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

MATH6950 - Advanced Topics in Mathematics

General

College/School
Arts and Sciences

Course Title
Advanced Topics in Mathematics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6950

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Consent of instructor. A formal course in any area in which there is no other course offering. May be taken more than once proivded the content is different.

MATH6990 - Research & Thesis

General

College/School
Arts and Sciences

Course Title
Research & Thesis

Academic Level (Course Level)
Graduate

Course Subject Code
MATH

Course Number
6990

Credit Hours

Credit Hours Min
3

Credit Hours Max
6

Credit Hours Operator
TO

MATH6991 - Research & Ind Study

General

College/School
Arts and Sciences

Course Title
Research & Ind Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MATH

Course Number
6991

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Prerequisite: Consent of instructor. The purpose of this course is to foster research and independent study at the graduate level in mathematics or statistics. Students will independently study a chosen area of mathematics, explore open and significant problems, draw conclusions, and, if applicable, participate in problem solving via consulting. Students will be required to give presentations on their own investigations and conclusions, and write a research paper.

MATH7910 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
MATH

Course Number
7910

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Individual study of advanced topics in mathematics, statistics or data science under the supervision of a qualified staff member.

Requisites

Simple Requisites

Prerequisite: Consent of Instructor.

MATH7920 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
MATH

Course Number
7920

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Individual study of advanced topics in mathematics, statistics or data science under the supervision of a qualified staff member.

Requisites

Simple Requisites

Prerequisite: Consent of Instructor.

Mechanical Engineering Department

The Mechanical Engineering Department offers courses and research projects leading to the Master of Science Degree in Mechanical Engineering and enthusiastically participates in the Doctor of Philosophy Degree offered in the College for those doctoral students focusing their work in the mechanical engineering area. The MS program is administered by the Department and the Ph.D. program is administered by the Associate Dean of Engineering for Graduate Studies and Research. Both degrees are research-oriented.

Participation in graduate education is consistent with the Mechanical Engineering Department's goals and objectives which are:

- to provide quality instructional programs and research experiences in mechanical engineering subjects that are at a level of sophistication compatible with professional norms;
- to maintain a competent, dynamic faculty, expert in the various facets of mechanical engineering that strive to motivate the student and that practices effective educational techniques;
- and to provide instructional and research facilities, equipped with up-to-date apparatus, which are conducive to the education of mechanical engineering graduate students.

A graduate student may customize his/her graduate courses in one of several areas subject to the approval of his/her graduate advisory committee. Areas of specialty include energy systems (including alternate and renewable), robotics and intelligent systems, solid mechanics and materials, thermal fluid science, vehicle systems (including hybrid and autonomous), vibrations/acoustics/dynamics and control, and advanced manufacturing. Graduate course offerings are offered each semester to meet the needs of the graduate students. Graduate students may carry out their research for their thesis/dissertation in any one of the aforementioned areas under the supervision of a faculty member, having expertise in that area, who is also a member of the graduate faculty. Individual programs of study are developed for each student depending on his/her career goals and thesis research interest. Thesis, non-thesis and on-line non-thesis programs are offered to meet the needs of our students.

Faculty advisors assist graduate students in the development of their individual programs of study depending on their career goals and thesis/dissertation interests. The advisor chairs the student's advisory committee. The student's advisory committee guides the student through degree progression and is responsible for monitoring the student's work to complete the degree requirement.

The research and graduate education within the College are enhanced by four Centers of Excellence: the Center for Energy Systems Research (CESR); the Center for Manufacturing Research (CMR); Cybersecurity Education, Research and Outreach Center (CEROC); and the Center for the Management, Utilization, and Protection of Water Resources (WC). The Mechanical Engineering Department is highly involved with the first two. Faculty actively interact with the Power and Manufacturing Centers in seeking external funding for research. The Centers complement the faculty efforts by supporting graduate students and via administrative support. The interaction involves a strengthening through sharing of resources and personnel.

Programs

ENGR-DME - Engineering, Mechanical Engineering Concentration, Ph.D.

Program Overview

Program Long Title
Engineering, Mechanical Engineering Concentration, Ph.D.

College/School
Engineering

Department(s)
Mechanical Engineering

Catalog Full Description
The Mechanical Engineering Department offers courses and research projects leading to the Master of Science Degree in Mechanical Engineering and enthusiastically participates in the Doctor of Philosophy Degree offered in the College for those doctoral students focusing their work in the mechanical engineering area. The MS program is administered by the Department and the Ph.D. program is administered by the Associate Dean of Engineering for Graduate Studies and Research. Both degrees are research-oriented.

Participation in graduate education is consistent with the Mechanical Engineering Department's goals and objectives which are:

- to provide quality instructional programs and research experiences in mechanical engineering subjects that are at a level of sophistication compatible with professional norms;
- to maintain a competent, dynamic faculty, expert in the various facets of mechanical engineering that strive to motivate the student and that practices effective educational techniques;
- and to provide instructional and research facilities, equipped with up-to-date apparatus, which are conducive to the education of mechanical engineering graduate students.

A graduate student may customize his/her graduate courses in one of several areas subject to the approval of his/her graduate advisory committee. Areas of specialty include energy systems (including alternate and renewable), robotics and intelligent systems, solid mechanics and materials, thermal fluid science, vehicle

systems (including hybrid and autonomous), vibrations/acoustics/dynamics and control, and advanced manufacturing. Graduate course offerings are offered each semester to meet the needs of the graduate students. Graduate students may carry out their research for their thesis/dissertation in any one of the aforementioned areas under the supervision of a faculty member, having expertise in that area, who is also a member of the graduate faculty. Individual programs of study are developed for each student depending on his/her career goals and thesis research interest. Thesis, non-thesis and on-line non-thesis programs are offered to meet the needs of our students.

Faculty advisors assist graduate students in the development of their individual programs of study depending on their career goals and thesis/dissertation interests. The advisor chairs the student's advisory committee. The student's advisory committee guides the student through degree progression and is responsible for monitoring the student's work to complete the degree requirement.

The research and graduate education within the College are enhanced by four Centers of Excellence: the Center for Energy Systems Research (CESR); the Center for Manufacturing Research (CMR); Cybersecurity Education, Research and Outreach Center (CEROC); and the Center for the Management, Utilization, and Protection of Water Resources (WC). The Mechanical Engineering Department is highly involved with the first two. Faculty actively interact with the Power and Manufacturing Centers in seeking external funding for research. The Centers complement the faculty efforts by supporting graduate students and via administrative support. The interaction involves a strengthening through sharing of resources and personnel.

Admission Requirements

Admission Requirements

The basic admission standards for the Ph.D. program are the same as for the Master of Science in Engineering (see requirement list below), in addition, an applicant is expected to have completed an MS degree in an academic area appropriate to the proposed area of study and to have earned an MS GPA of at least 3.5 on a 4.0 scale.

Though the general requirement for admission to the Ph.D. program is a master's degree in an appropriate discipline, students with a bachelor's degree may be admitted to the Ph.D. program directly on exceptional basis, provided the applicant has a record of excellent academic performance in an appropriate engineering program undergraduate program. The applicant's test scores, personal recommendations, and relevant work experience must indicate a high potential for success in doctoral studies and research. In addition, factors such as appropriateness of the applicant's research objectives to the research interests of the program faculty, availability of faculty to supervise the applicant's research, and prior research accomplishments of the applicant will also influence the admission decision.

Fulfilling the minimum requirement does not guarantee admission; an applicant who does not meet the above minimum, but appears to have reasonable potential for success as a Ph.D. student, may be admitted to provisional standing. His/her status may be changed to full standing after satisfying requirements specified by the Associate Dean of Engineering for Graduate Studies and Research, in consultation with the appropriate departmental chairperson, at the time of admission.

If admitted in provisional standing at either the MS or Ph.D. level, the student must remove all deficiencies and apply for reclassification to full standing prior to the completion of 15 graduate hours.

Sometimes a master's-level student takes more graduate-level courses than are required for the degree because the student is expecting to continue on to the Ph.D. program and hopes to use the extra courses to satisfy the Ph.D. coursework requirement. When this is the case, the student can request when registering for the course(s) that the course(s) be "banked" for the Ph.D. program. If the student lacks no more than 12 semester hours on the master's degree, he/she may accumulate a maximum of nine (9) semester hours which may be applied toward the Ph.D. When this is the case, the student's advisory committee must initiate approval via memo with consensus of the departmental chairperson, dean of the

college, and the Associate Dean of Graduate Studies. Banked courses then show up on the student's transcript as courses taken for the Ph.D. rather than being shown as a part of his/her M.S. program. Banking course does not guarantee admission to the Ph.D. program, or, if admitted, that the student's Ph.D. advisory committee will approve the course as part of the student's Ph.D. program of study.

MS Engineering Program Admission Requirements

An applicant for admission to any of the MS programs offered by the departments of the College of Engineering is expected to have earned a BS degree from an approved program, or its equivalent. Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department:

- undergraduate GPA of at least 3.0 on a 4.0 scale,

- GRE® General Test (GRE) scores with Quantitative greater than or equal to 150 (50%); Verbal greater than or equal to 147 (33%); Analytical Writing greater than or equal to 3.5 (33%). Students with BS degrees in related fields from Tennessee Tech are not required to take the GRE.

- Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

- Availability of appropriate faculty to serve as research advisor(s).

- Participation in undergraduate research.

- Post-BS degree professional experience relevant to planned degree of study.

- Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

- International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission. Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Doctor of Philosophy Degree Requirements

The Ph.D. is a research degree. The minimum requirements for a Ph.D. degree in the College of Engineering stated below are the same for all departments. Each department may include additional degree requirements for students pursuing specialization in that department.

Students Admitted with a Master's Degree

1. A minimum of 48 credits of course work and doctoral research and dissertation as follows:

A. A minimum of eighteen (18) credit hours of course work beyond the master's degree, acceptable to the student's advisory committee. Additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department. No 5000-level courses are to be used to meet the minimum requirements of course work.

B. A minimum of twenty four (24) credit hours of doctoral research and dissertation built upon the student's course of study and making a significant contribution to the state of knowledge or to the art of the engineering profession, is required; not more than nine (9) credit hours may be earned in a particular semester.

2. Residence of four (4) semesters beyond the master's degree, with at least two (2) semesters in continuous residence, is required. All requirements, including the dissertation, must be completed within a period of eight (8) consecutive years.

3. Maintenance of a minimum quality point average of 3.0 and adherence to the general regulations of the College of Graduate Studies are expected. All students in the program must follow a plan of study and research developed in conjunction with an advisory committee, satisfactorily complete a comprehensive examination, achieve candidacy, and satisfactorily defend their dissertation.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Degree Program

A student admitted with a bachelor's degree on exceptional basis must successfully complete a qualifying examination based mostly on undergraduate materials before the end of the second semester of enrollment. Students with a Bachelor of Science (B.S.) degree from ABET-accredited programs are exempted from this examination. Other students without such a degree, or M.S. students without an ABET-accredited B.S. degree, switching to direct Ph.D. will have to take a qualifying exam through a formal process established by the department. The process should include at a minimum an examination of the student's fundamental knowledge managed by the Graduate Committee of the department.

Based on the student's performance on the qualifying examination, the student may be (i) permitted to continue in the doctoral program, or (ii) advised to transfer to an M.S. degree program in an appropriate discipline in the college, or (iii) recommended for termination from the graduate program of the college.

If permitted to continue in the doctoral program, the student, as described elsewhere in the catalog, will select a research advisor, form an advisory committee, and submit a program of study satisfying the following requirements.

The program of study should have a minimum total of seventy two (72) credit hours of academic work, consisting of course work and dissertation work, beyond baccalaureate work, subject to the following:

• The program of study should include a minimum of forty two (42) credit hours of appropriate graduate level course work consisting of a maximum of nine (9) credit hours at the 5000-level, acceptable to the student's advisory committee.

• It should also include an additional six (6) credit hours of either graduate level course work or research experience as per the policy of the student's major department.

• A minimum of 24 credit hours of doctoral research and dissertation, built upon the student's course of study and making significant contribution to the state of knowledge and the art of the engineering profession, is required; no more than nine (9) credit hours may be earned in a particular semester.

Students Admitted Directly from the Bachelor's Degree into the Ph.D. Program Earning a Non-thesis M.S. en route

All conditions stated above for the students admitted directly into the Ph.D. program apply. In addition: Nine (9) credit hours will count toward the non-thesis M.S. degree and toward the Ph.D. degree. If the departmental non-thesis M.S. requires a three (3) credit hour non-thesis project course, those three (3) credit hours can be counted as three (3) credit hours of dissertation research toward the Ph.D. degree. Six (6) credit hours of M.S. coursework can be counted toward the Ph.D. coursework. If no project course is required for the non-thesis M.S., then nine (9) credit hours of M.S. coursework can be counted toward the Ph.D.

Limitation on Graduate Assistantships

It is expected that a full-time, post master's Ph.D. Engineering student should be able to achieve candidacy within the first three (3) calendar years after enrollment, and a direct admit Ph.D. Engineering student after four (4) calendar years. If candidacy is not achieved within the aforementioned periods, a student must request and receive approval for an extension of assistantship following the College of Engineering's established procedure. An extension may be granted by the Associate Dean of Engineering for Research and Innovation. This limitation is regardless of student funding or the source of support for the student.

Students Admitted with a Master's Degree

Type
Completion Requirement

> Program of Study will be defined by the committee
>
> Total credit hours required: 48
>
> Comprised of the following:
> 18 credit hours (minimum) of coursework beyond the master's degree
> 6 credit hours of concentration coursework
> 24 credit hours of research and dissertation
>
> **Complete ALL of the following :**

Additional Comments:

Direct Admit Student from BS to PhD

Type
Completion Requirement

> Program of Study will be defined by committee
>
> Total credit hours required: 72
>
> Comprised of the following:
> 42 hours of coursework (maximum of 9 hours at the 5000 level)
> 6 hours of coursework or research experience
> 24 hours of research and dissertation
>
> **Complete ALL of the following :**

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

ME-MS - Mechanical Engineering, M.S.

Program Overview

Program Long Title
Mechanical Engineering, M.S.

College/School
Engineering

Department(s)
Mechanical Engineering

Catalog Full Description
The Mechanical Engineering Department offers courses and research projects leading to the Master of Science Degree in Mechanical Engineering and enthusiastically participates in the Doctor of Philosophy Degree offered in the College for those doctoral students focusing their work in the mechanical engineering area. The MS program is administered by the Department and the Ph.D. program is administered by the Associate Dean of Engineering for Graduate Studies and Research. Both degrees are research-oriented.

Participation in graduate education is consistent with the Mechanical Engineering Department's goals and objectives which are:

- to provide quality instructional programs and research experiences in mechanical engineering subjects that are at a level of sophistication compatible with professional norms;

- to maintain a competent, dynamic faculty, expert in the various facets of mechanical engineering that strive to motivate the student and that practices effective educational techniques;

- and to provide instructional and research facilities, equipped with up-to-date apparatus, which are conducive to the education of mechanical engineering graduate students.

A graduate student may customize his/her graduate courses in one of several areas subject to the approval of his/her graduate advisory committee. Areas of specialty include energy systems (including alternate and renewable), robotics and intelligent systems, solid mechanics and materials, thermal fluid science, vehicle systems (including hybrid and autonomous), vibrations/acoustics/dynamics and control, and advanced manufacturing. Graduate course offerings are offered each semester to meet the needs of the graduate students. Graduate students may carry out their research for their thesis/dissertation in any one of the aforementioned areas under the supervision of a faculty member, having expertise in that area, who is also a member of the graduate faculty. Individual programs of study are developed for each student depending on his/her career goals and thesis research interest. Thesis, non-thesis and on-line non-thesis programs are offered to meet the needs of our students.

Faculty advisors assist graduate students in the development of their individual programs of study depending on their career goals and thesis/dissertation interests. The advisor chairs the student's advisory committee. The student's advisory committee guides the student through degree progression and is responsible for monitoring the student's work to complete the degree requirement.

The research and graduate education within the College are enhanced by four Centers of Excellence: the Center for Energy Systems Research (CESR); the Center for Manufacturing Research (CMR); Cybersecurity Education, Research and Outreach Center (CEROC); and the Center for the Management, Utilization, and Protection of Water Resources (WC). The Mechanical Engineering Department is highly involved with the first two. Faculty actively interact with the Power and Manufacturing Centers in seeking external funding for research. The Centers complement the faculty efforts by supporting graduate students and via administrative support. The interaction involves a strengthening through sharing of resources and personnel.

Master's Program Degree Options

There are two options to consider:

- Thesis option

  ◦ This option requires 30 credit hours, which includes 22-24 credit hours of course work and 6-8 credit hours of thesis research.

  ◦ Funding from the ME Department may be available through the department in the form of Graduate Teaching Assistantships (GTA). Graduate Research Assistantships (GRA) are awarded by individual faculty from their research grants/contracts.

  ◦ The time it takes to complete the M.S. degree depends on the thesis project, the advisor, and the student's motivation and work ethic.

- Non-thesis option

  ◦ This option requires 33 credit hours, which includes 30 hours of course work and 3 hours for the independent project course.

  ◦ There is no funding available through the department for this option.

  ◦ With proper planning, well-motivated students can complete the M.S. non-thesis degree in three semesters.

Admission Requirements

Admission Requirements

An applicant for admission to the MS in Mechanical Engineering is expected to have earned a BS degree from an approved program, or its equivalent. Admission is decided based on a multi-parameter criterion that can include the following items to be evaluated by the department:

- undergraduate GPA of at least 3.0 on a 4.0 scale,

- GRE General Test (GRE) scores with Quantitative greater than or equal to 50%; Verbal greater than or equal to 33%; Analytical Writing greater than or equal to 33%. Students with BS degrees in related fields from TTU are not required to take the GRE.

- Three (3) letters of recommendation that demonstrate strong evidence for success in the graduate program.

- Availability of appropriate faculty to serve as research advisor(s).

- Participation in undergraduate research.

- Post-BS degree professional experience relevant to planned degree of study.

- Publications in peer reviewed journals and/or award-winning presentations in technical conferences.

- International students must score at least 550 (213 computer-based or 79 internet-based) on the TOEFL or a minimum base score of 6.0 on the IELTS.

Based on the level of satisfaction of the above criterion, the department will either recommend admission to Full Standing, Provisional Standing, or Special Standing, or deny admission. Standing status may be changed to Full Standing after the student satisfies the requirements specified by the department at the time of admission.

The ME Department has a Departmental Admissions Committee who reviews and evaluates each application individually for unique merits and for the applicant's potential success in the graduate program and makes admission recommendation to the appropriate administrator. Students who do not meet the minimum admission requirements or whose potential for success is not evident from the application may be considered for provisional standing. These students will be reclassified to full standing once they satisfy the conditions specified in the provisional admission statement. Occasionally, highly qualified students not having their BS degree in mechanical engineering may be admitted on a provisional basis with the stipulation of satisfactorily completing a specified set of undergraduate courses before achieving full standing. If admitted in provisional standing at master's level, the student must remove all deficiencies and apply for reclassification to full standing prior to the completion of 15 graduate hours.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Departmental Degree Requirements

The graduate program in the Mechanical Engineering Department offers a thesis, non-thesis, and fully on-line non-thesis option to meet the needs of the student.

MS in Mechanical Engineering
Type
Completion Requirement

Master of Science with Thesis Option

An MS program of study with thesis option requires a minimum of 22 credit hours of graduate course work (24 credit hour maximum), as specified in the student's approved Program of Study, and either six (6) or eight (8) hours of thesis credit, for a total of 30 credit hours, completed under the supervision of the graduate thesis advisor. No more than nine (9) credit hours of the 22 credit hour total may be at the 5000-level. A minimum GPA of 3.0 is required both to graduate and to remain in good standing in the program. The thesis requirement includes research, the findings of which must be submitted in writing and are subject to the policies and satisfaction of the Graduate School Office and the advisory committee. In addition, each student must pass a comprehensive exam which includes a defense of his/her research work before the advisory committee and submit the defense results to the College of Graduate Studies.

- **Advisor Approved Electives*, including** ME6910 Intro to Graduate Research **(1 credit hour):** 22-24 hours

- **Research and Thesis,** ME6990 Research & Thesis: 6-8 hours

- **Total Degree Requirements:** 30 hours

* Selection of appropriate courses (ME, CSC, ECE, MATH 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Complete ALL of the following Courses:
- ME6910 - Intro to Graduate Research
- ME6990 - Research & Thesis

Master of Science with On-line Non-Thesis Option

An MS program of study with non-thesis option requires a minimum of 33 credit hours of graduate course work, as specified in the student's approved program of study. This program is offered on-line. The program of study shall include 30 semester hours of formal, graded coursework, and three (3) semester hours of ME6960 Non-Thesis Project - Non-Thesis Project. At least seventy percent of the credit to be counted toward the MS degree (21 hours) must be at the 6000 level or above. The Non-Thesis project course will demonstrate the student's capability to engage in independent learning. The content and format of the special topics course, including the comprehensive examination, will be entirely at the discretion of the student's advisory committee. Typically the special topics course will be taken in the final semester listed on the program of study.

- **Advisor Approved Electives*:** 30 hours

- **Non-Thesis Project,** ME6960 Non-Thesis Project: 3 hours

- **Total Degree Requirements:** 33 hours

*Selection of appropriate courses (ME, ECE, CSC, MATH 5000, 6000, 7000 level) will be made in consultation with the student's advisory committee and/or the graduate coordinator.

Complete ALL of the following Courses:
- ME6960 - Non-Thesis Project

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The Fast Track program is designed to enable TTU ME undergraduates to accumulate up to six (6) credit hours of graduate coursework while still pursuing their undergraduate degree and to transition to the graduate program smoothly, with accelerated completion. Up to six (6) hours of graduate coursework, exclusive of directed study, taken during the student's senior year can be used to satisfy both undergraduate and graduate degree requirements (double counted). These courses must be taken at Tennessee Tech University and must be approved as appropriate substitutions in the undergraduate curriculum for senior ME electives (AOE courses). There is no obligation to complete the master's degree if the student's plans change. Students who plan to work on a master's thesis are strongly encouraged to meet with faculty during their junior and senior year to get a head start on the research for their master's degree.

Fast Track Requirements to Apply

- Student must be an ME undergraduate student in their junior or senior year.

- Student must have obtained a grade point average (GPA) of 3.25 or higher for all undergraduate courses.

- Meeting the minimum requirements does not guarantee admission to the BS/MS graduate program. To receive full consideration, all applications to the BS/MS program should be received two weeks before the start of the registration period.

Fast Track Program Rules and Requirements

To maintain eligibility for the BS/MS Fast Track program after being accepted, students must:

- Maintain a 3.25 GPA or higher (ME courses) at the undergraduate level. Students who graduate with their BS degree with less than a 3.25GPAwill not be eligible for the BS/MS program.

- Students must complete their BS degree, and then matriculate into the MS program. Students cannot graduate with a BS and MS at the same time.

- Start in the MS program immediately after graduating with their BS degree. The only exception to this is summer semester. Students who graduate in the spring are allowed to take summer semester off and start in the fall semester.

Courses

ME5020 - Applied Machine Design

General

College/School
Engineering

Course Title
Applied Machine Design

Course Subject Code
ME

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Number
5020

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Design for strength and rigidity under dynamic loads; shaft design; design of joints (threaded fasteners, welds, springs, keys, etc.); design of gear trains; lubrication and bearing design; finite element analysis; and optimization and statistical consideration in design. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ME 4010 and ME 3610

ME5050 - Lubricat/Bearing Design

General

College/School
Engineering

Course Title
Lubricat/Bearing Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5050

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ME5060 - Machine Vibrations

General

College/School
Engineering

Course Title
Machine Vibrations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5060

Credit Hours

Credit Hours Min
3

Course Description
Linear vibration of machine elements, lumped parameter multidegree of freedom, and continuous system solutions; computer-aided solutions of linear and nonlinear systems; simple laboratory vibration measurement and comparative vibration analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ME 3050.

ME5110 - Adv Design Planar Mech

General

College/School
Engineering

Course Title
Adv Design Planar Mech

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5110

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite:** None

ME5120 - Intermediate Dynamics

General

College/School
Engineering

Course Title
Intermediate Dynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5120

Credit Hours

Credit Hours Min
3

Course Description
Rigid-body kinematics, plane and three-dimensional rigid-body kinetics, Lagrangian mechanics, orbital motions, variable mass rockets. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ME 2330.

ME5140 - Intro To Robotics

General

College/School
Engineering

Course Title
Intro To Robotics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5140

Credit Hours

Credit Hours Min
3

Course Description
Robotic concepts and subsystems; mechanics of robots; sensors and intelligence; actuators; and trajectory planning and control. The combination of ME 3050 and ME 3060 or the combination of ECE 3210 and ECE 3260 may be taken concurrently. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ME3050 Dynamic Modeling and Controls and ME3060 Dynamic Modeling/Controls Lab; or ECE 3210 and ECE 3260. The combination of ME 3050 and ME 3060 or the combination of ECE 3210 and ECE 3260 may be taken concurrently.

ME5160 - Experiment Stress Analysis

General

College/School
Engineering

Course Title
Experiment Stress Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5160

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Prerequisites: CEE 3110, MATH 2910. Introduction to theory of elasticity; photoelasticity; theory and application of strain gages and rosettes; brittle coatings; holographic interferometry; moire' analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ME5170 - Contin Theories-Material

General

College/School
Engineering

Course Title
Contin Theories-Material

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5170

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ME5180 - Finite Elem Meth/ME Dsgn

General

College/School
Engineering

Course Title
Finite Elem Meth/ME Dsgn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5180

Credit Hours

Credit Hours Min
3

Course Description
Fundamental concepts; displacement-based finite element formulation using energy methods; one-dimensional and two-dimensional finite elements; modeling considerations and convergence; programming and an introduction to a commercial program. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** CEE 3110.

ME5190 - Adv Mechanics Of Materials

General

College/School
Engineering

Course Title
Adv Mechanics Of Materials

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5190

Credit Hours

Credit Hours Min
3

Course Description
Advanced topics; fracture mechanics, elastic support, noncircular shafts, curved beams, thick-walled cylinders, introduction to plates, thin shells of revolution. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CEE 3110 and MATH 2120, or consent of instructor.

ME5210 - Refrigeration & A/C

General

College/School
Engineering

Course Title
Refrigeration & A/C

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5210

Credit Hours

Credit Hours Min
3

Course Description
Refrigeration systems and HVAC design concepts; air-conditioning systems, principles of psychrometrics, human comfort, and principles of building load calculations and annual energy use simulations. Students enrolled in the 5000-level class will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ME3220 Thermodynamics II, ME 3710, and ME 3720.

ME5220 - Air Conditioning Design

General

College/School
Engineering

Course Title
Air Conditioning Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5220

Credit Hours

Credit Hours Min
3

Course Description
Design of heating, cooling and ventilation systems for buildings. Duct system design, pipe system layout, and equipment selection. Students enrolled at the 5220 level will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ME3220 Thermodynamics II, ME 3710, ME3720 Fluid Mechanics.

ME5260 - Energy Conversion/Conservation

General

College/School
Engineering

Course Title
Energy Conversion/Conservation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5260

Credit Hours

Credit Hours Min
3

Course Description
An in-depth study of industrial steam, pumping and compressed air systems in terms of how to reduce system energy consumption. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ME3220 Thermodynamics II, ME 3710, or equivalent.

ME5310 - Gas Dynamics

General

College/School
Engineering

Course Title
Gas Dynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5310

Credit Hours

Credit Hours Min
3

Course Description
Balance laws, shock waves, Prandtl/Meyer expansion, flow through ducts and nozzles, unstead wave motion, linearized supersonic thin airfoil theory. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ME3220 Thermodynamics II and ME 3720.

ME5340 - Propulsion

General

College/School
Engineering

Course Title
Propulsion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5340

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ME5370 - Mechatronics/Intel Machin Engr

General

College/School
Engineering

Course Title
Mechatronics/Intel Machin Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5370

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Mechatronics; number systems; microcontroller technology and architecture of 8-bit microcontrollers (e.g. Motorola MC 68H110); assembly language programming; A/D and D/A conversion; parallel I/O; programmable timer

operation; interfacing sensors and actuators; applications; team project on design and implementation of a mechatronic system. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ECE2050 Circuits and Electronics I (or ECE2850 Principles of Electric Circuit); ME3050 Dynamic Modeling and Controls and ME3060 Dynamic Modeling/Controls Lab.

ME5380 - Intro - Data Acq & Signal Proc

General

College/School
Engineering

Course Title
Intro - Data Acq & Signal Proc

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5380

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Lab VIEW programming and data acquisition with commercial hardware digital signal processing basics including sampling, analog-to-digital conversion, quantization, aliasing, and Fourier analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ME 3023, ME3050 Dynamic Modeling and Controls, and ME3060 Dynamic Modeling/Controls Lab or Instructor consent.

ME5430 - Micro & Nano Manufacturing

General

College/School
Engineering

Course Title
Micro & Nano Manufacturing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5430

Credit Hours

Credit Hours Min
3

Course Description
Nano manufacturing, silicon micro machining and fabrication, laser materials processing of microstructures, abrasive micro machining, mechanical micro machining, micro rapid prototyping and sintering, case studies. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** Senior of graduate level standing in any College of Engineering Department.

ME5450 - Design for Manufacturability

General

College/School
Engineering

Course Title
Design for Manufacturability

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5450

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Material and manufacturing process constraints on design shape, size, and quantity; plastic and fibrous composite parts manufacturing; rapid prototyping; design for X; dimensions and tolerances. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ME 3010, CEE 3110.

ME5460 - Mech Properties-Material

General

College/School
Engineering

Course Title
Mech Properties-Material

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5460

Credit Hours

Credit Hours Min
3

Course Description
Elastic and anelastic properties, dislocations, slip, plastic deformation, fracture mechanics, creep, fatigue and fatigue crack propagation, materials testing, and introduction to failure analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** CEE 3110, ME 3010, or consent of instructor.

ME5470 - Intdisc Stu/Ceramic Mtrl Proc

General

College/School
Engineering

Course Title
Intdisc Stu/Ceramic Mtrl Proc

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5470

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Materials processing; surface phenomena, particle size reduction; forming; consolidation by sintering and reaction processes; application of fracture mechanics; failure models; research on selected fabrication and synthesis routes for metals, ceramics and their composites; mechanical, chemical and morphological characterization theory and practice; materials design project using several onsite laboratories. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** graduate standing in engineering or science. CHEM 1120, MATH 2120 and PHYS 2110.

ME5480 - Microstructural Analysis

General

College/School
Engineering

Course Title
Microstructural Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5480

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Techniques and applications of microstructural analysis; optical microscopy; metallography; electron microscopy; and fractography and failure analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** ME4460 Mech Properties of Mtrls (ME5460 Mech Properties-Material).

ME5490 - Prop & Selection-Engr Matrls

General
College/School
Engineering

Course Title	**Academic Level (Course Level)**
Prop & Selection-Engr Matrls	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
ME	5490

Credit Hours
Credit Hours Min
3

Course Description
An intermediate course in materials engineering emphasizing the interrelations among material properties, microstructure and optimum material selection for design applications. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** ME 3010.

ME5510 - Aerodynamics

General
College/School
Engineering

Course Title	**Academic Level (Course Level)**
Aerodynamics	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
ME	5510

Credit Hours
Credit Hours Min
3

Course Description
Atmospheric fluid statics, ideal fluid dynamics, potential flow, lift and draft estimation, powered flight, glides, takeoffs, landings. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** ME 3720.

ME5610 - Steam Power Plants

General
College/School
Engineering

Course Title	**Academic Level (Course Level)**
Steam Power Plants	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
ME	5610

Credit Hours
Credit Hours Min
3

Course Description
Energy sources, fuels, firing methods, biolers, turbine characteristics, cooling water and cooling towers, dust collection, new developments in energy generation, plant trip. Students enrolled at the 5610 level will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite:** ME3220 Thermodynamics II, ME 3710, ME3720 Fluid Mechanics.

ME5620 - Turbomachinery

General
College/School
Engineering

Course Title	**Academic Level (Course Level)**
Turbomachinery	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
ME	5620

Credit Hours
Credit Hours Min
3

Course Description
Presents a generalized description and unified theory pertaining to the classification, operation, selection and basic design of rotating turbomachines - pumps, fans, compressors, and turbines. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisites:** ME 3720.

ME5630 - Internal Combustion Engines

General

College/School
Engineering

Course Title
Internal Combustion Engines

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5630

Credit Hours

Credit Hours Min
3

Course Description
Ideal fuel/air cycles, heat loss, friction, combustion and detonation, carburetion and fuel injection; air flow, normal overall performance, and extreme performance. Students enrolled at the 5000 level will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ME3220 Thermodynamics II, ME3710 Heat Transfer, and ME3720 Fluid Mechanics.

ME5640 - Dynamics Of Machinery II

General

College/School
Engineering

Course Title
Dynamics Of Machinery II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5640

Credit Hours

Credit Hours Min
3

Course Description
Graphical and analytical synthesis of linkage mechanisms for function generation, motion generation, and path generation. Kinetostatic analysis of linkage mechanisms; engine dynamics, balancing; rigid-body dynamics, time response analysis. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ME 3610.

ME5710 - Propulsion

General

College/School
Engineering

Course Title
Propulsion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5710

Credit Hours

Credit Hours Min
3

Course Description
This course presents aerospace propulsive devices as systems, with functional requirements and engineering and environmental limitations along with requirements and limitations that constrain design choices. Both airbreathing and rocket engines are covered, at a level which enables rational integration of the propulsive system into an overall vehicle design. Mission analysis, fundamental performance relations, and exemplary design solutions are presented. Additional assignment is required for graduate students.

Requisites

Simple Requisites

> **Prerequisite:** ME3220 Thermodynamics II and ME3720 Fluid Mechanics.
>
> **Co-requisites:** NA.

ME5720 - Thermal Design

General

College/School
Engineering

Course Title
Thermal Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5720

Credit Hours

Credit Hours Min
3

Course Description
Introduction to the design of thermofluid devices and systems; general design methodology, modeling, simulation, and optimization; and heat exchangers and prime movers in systems. Students enrolled at the 5720 level will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** ME3220 Thermodynamics II, ME 3710, ME3720 Fluid Mechanics.

ME5730 - Numerical Heat Transfer

General

College/School
Engineering

Course Title
Numerical Heat Transfer

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5730

Credit Hours

Credit Hours Min
3

Course Description
Fundamentals of numerical methods; steady and unsteady one-dimensional heat conduction; steady and unsteady multidimensional heat conduction; fully-developed duct flows; one- and two-dimensional convection heat transfer; flow through porous media. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** ME 3710, ME 3720.

ME5740 - Transport Phenomena

General

College/School
Engineering

Course Title
Transport Phenomena

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5740

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ME5810 - Automatic Controls

General

College/School
Engineering

Course Title
Automatic Controls

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Mathematical modeling of physical systems, control algorithms, stability, transient response, and frequency response.

Requisites

Simple Requisites

> **Prerequisite:** ME3050 Dynamic Modeling and Controls. ME 3050 may be taken concurrently.

ME5860 - Fluid Power

General

College/School
Engineering

Course Title
Fluid Power

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5860

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ME5900 - Special Topics

General

College/School
Engineering

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5900

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Special topics of current interest in mechanical engineering that are not covered in existing courses. Students enrolled at the 5900 level will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: None

ME5920 - Applied Acoustics

General

College/School
Engineering

Course Title
Applied Acoustics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5920

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Course description not available.

Requisites
Simple Requisites

Prerequisites: None

ME5930 - Noise Control

General

College/School
Engineering

Course Title
Noise Control

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5930

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Identification and description of noise sources and noise radiation, methods of noise measurement and criteria for noise levels, principles and techniques of noise and vibration control. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

Prerequisites: MATH 2120 and PHYS 2110, Consent of Instructor.

ME5950 - Intro to MEMS

General

College/School
Engineering

Course Title
Intro to MEMS

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
5950

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Senior standing in engineering or consent of instructor. Introduce the design, fabrication and performance of MEMS devices. Topics include bulk and surface micromachining, photolithography, sensors, actuation systems, optical MEMS, microcantilever-based systems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

ME6010 - Conduct Heat Transfer

General

College/School
Engineering

Course Title
Conduct Heat Transfer

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
Conduction in steady, periodic, and transient systems; analytical and numerical techniques.

Requisites
Simple Requisites

Prerequisites: MATH4510 Adv Math for Engineers, ME 3710.

ME6030 - Radiation Heat Transfer

General

College/School
Engineering

Course Title
Radiation Heat Transfer

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6030

Credit Hours

Credit Hours Min
3

Course Description
Properties and laws of radiation; black and gray absorbing and emitting media, real and ideal systems.

Requisites

Simple Requisites

Prerequisites: MATH4510 Adv Math for Engineers, ME 3710

ME6040 - Intermediate Fluid Mechanics

General

College/School
Engineering

Course Title
Intermediate Fluid Mechanics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6040

Credit Hours

Credit Hours Min
3

Course Description
Formulation of mass and momentum transfer equations; exact solutions of laminar parallel flows; similarity and approximate solutions; potential flow; laminar momentum boundary layers.

Requisites

Simple Requisites

Prerequisite: ME 3720.

ME6050 - Convection Heat Transfer

General

College/School
Engineering

Course Title
Convection Heat Transfer

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6050

Credit Hours

Credit Hours Min
3

Course Description
Formulation of energy equation; forced and natural convection heat transfer; heat and momentum transfer analogies, exact and approximate solutions; thermal boundary layers.

Requisites

Simple Requisites

Prerequisites: ME6040 Intermediate Fluid Mechanics, or consent of instructor.

ME6200 - Linear Systems Analysis

General

College/School
Engineering

Course Title
Linear Systems Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description
State space analysis of multiple input-multiple output continuous and discrete-time systems; linear spaces; time-varying systems, controllability, observability, and stability.

Requisites

Simple Requisites

Prerequisite: EE 3210 or ME 4810.

ME6210 - Advanced Thermodynamics

General

College/School
Engineering

Course Title
Advanced Thermodynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6210

Credit Hours

Credit Hours Min
3

Course Description
Thorough, in-depth study of the first and second laws of thermodynamics from a macroscopic perspective, concept of energy and availability, general thermodynamic property relationships, property representation for computerized analyses, mixtures and solutions, chemical reactions.

Requisites

Simple Requisites

> **Prerequisites:** ME3210 Thermodynamics I, ME3220 Thermodynamics II

ME6220 - Availability Analysis

General

College/School
Engineering

Course Title
Availability Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6220

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ME6230 - Linear Multi System Design

General

College/School
Engineering

Course Title
Linear Multi System Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6230

Credit Hours

Credit Hours Min
3

Course Description
Optimal control; robust stability; loop shaping design using singular values; loop transfer recovery; survey of other multivariable system designs.

Requisites

Simple Requisites

> **Prerequisites:** ME6200 Linear Systems Analysis (ECE6200), ECE 6250

ME6250 - Model & Contr-Ther P P

General

College/School
Engineering

Course Title
Model & Contr-Ther P P

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6250

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ME6260 - State Estimation & System ID

General

College/School
Engineering

Course Title
State Estimation & System ID

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6260

Credit Hours

Credit Hours Min
3

Course Description
Model structures of stochastic systems. State estimation and Kalman filtering. Parameter estimation and system identification. Estimator performance, optimization, and implementation.

Requisites

Simple Requisites

> **Prerequisites:** ME6200 Linear Systems Analysis (ECE 6200) (or consent of instructor), ECE 6250

ME6280 - Nonlinear Auto Control

General

College/School
Engineering

Course Title
Nonlinear Auto Control

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6280

Credit Hours

Credit Hours Min
3

Course Description
Singular points; limit cycles, perturbation techniques; describing functions; stability.

Requisites

Simple Requisites

> Prerequisite: ME6200 Linear Systems Analysis

ME6330 - Gas Dynamics

General

College/School
Engineering

Course Title
Gas Dynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6330

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> Prerequisites: None

ME6350 - Finite Element Analysis

General

College/School
Engineering

Course Title
Finite Element Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6350

Credit Hours

Credit Hours Min
3

Course Description
Introduction to analysis of stresses in a continuum by the finite element method. Computer applications.

Requisites

Simple Requisites

> Prerequisite: CEE4130 Matrix & Finite Element Method/CEE5130 Matrix & Finite Element Method or CEE4190 Adv Mechanics of Materials/CEE5190 Adv Mechanics of Materials or ME4180 Finite Elem Meth-Mech Dsgn/ME5180 Finite Elem Meth/ME Dsgn or consent of instructor.

ME6360 - Intro to Continuum Mech

General

College/School
Engineering

Course Title
Intro to Continuum Mech

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6360

Credit Hours

Credit Hours Min
3

Course Description
Tensors, balance, laws, constitutive equations, thermodynamic restrictions, applications.

Requisites

Simple Requisites

> Prerequisite: Consent of instructor.

ME6370 - Vibrations-Continuous Media

General

College/School
Engineering

Course Title
Vibrations-Continuous Media

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6370

Credit Hours

Credit Hours Min
3

Course Description
Governing equations for strings, bars, and membranes; natural frequencies; normal modes; series solutions; wave propagation; transform methods; characteristics.

Requisites
Simple Requisites

> **Prerequisites**: CEE 3110, MATH4510 Adv Math for Engineers, ME 3050.

ME6410 - Lubrication/Bearing Design

General

College/School
Engineering

Course Title
Lubrication/Bearing Design

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6410

Credit Hours

Credit Hours Min
3

Course Description
Lubricants; hydrostatic and hydrodynamic lubrication; Reynolds equation and computer-aided design and optimization of journal, slider, polar, and air-lubricated bearings; squeeze films and dynamic loading; foil and compliant bearings, elastohydrodynamics, rotor dynamics with lubricant interaction, magnetic tape lubrication; Non-Newtonian lubricants, finite element applications, seals.

Requisites
Simple Requisites

> **Prerequisites**: ME 3720, ME 4020 .

ME6420 - Design-Measurement Sys

General

College/School
Engineering

Course Title
Design-Measurement Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6420

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Design, synthesis, and analysis of measurement systems; principles of transducers; errors; dynamic response.

Requisites
Simple Requisites

> **Prerequisite**: Consent of instructor.

ME6430 - Fundamentals of Acoustics

General

College/School
Engineering

Course Title
Fundamentals of Acoustics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6430

Credit Hours

Credit Hours Min
3

Course Description
Wave equation and one-dimensional solutions; Reflection and transmission; Absorption of sound waves; sources and receivers.

Requisites
Simple Requisites

> **Prerequisite**: MATH4510 Adv Math for Engineers or consent of instructor.

ME6440 - Applied Acoustics

General

College/School
Engineering

Course Title
Applied Acoustics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6440

Credit Hours

Credit Hours Min
3

Course Description
Three-dimensional plane, cylindrical, and spherical waves; waves in enclosures, in horns; architectural acoustics; ultrasonics.

Requisites
Simple Requisites

> **Prerequisite**: MATH4510 Adv Math for Engineers or consent of instructor.

ME6450 - Curr Tech-Exper Mech

General

College/School
Engineering

Course Title
Curr Tech-Exper Mech

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6450

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Review of elementary elasticity; semiconductor strain gages; piezoelectric gages; applications of piezoresistive and piezoelectric gages; residual stress measurement; thermoelastic stress measurement; photoelastic coatings; speckle techniques; hybrid stress analysis; computer-aided stress analysis.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

ME6460 - Exper Transport Phenomena

General

College/School
Engineering

Course Title
Exper Transport Phenomena

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6460

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Review of elementary principles of transport phenomena, data acquisition, and data reduction; measurements of temperature by thermocouples and resistance probes; calculation of heat flux; high temperature optical techniques; differential pressure measurement; volume flow measurements; optical measurement of fluid flow.

Requisites

Simple Requisites

Prerequisite: Consent of instructor

ME6510 - Adv Motion Programming

General

College/School
Engineering

Course Title
Adv Motion Programming

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6510

Credit Hours

Credit Hours Min
3

Course Description
Structural analysis and synthesis of mechanisms; mobility of mechanisms; Burmester theory; instantaneous kinematics and curvature theory; design of planar mechanisms for prescribed finite positions, higher order motions, mixed positions, and complex motions; computer aided linkage synthesis.

Requisites

Simple Requisites

Prerequisite: ME 3610, ME4640 Dynamics of Machinery II, or ME 4140 .

ME6610 - Fatigue & Wear in Mech Dsgn

General

College/School
Engineering

Course Title
Fatigue & Wear in Mech Dsgn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6610

Credit Hours

Credit Hours Min
3

Course Description
Design for life and reliability, consideration of stress-life fatigue, strain-life fatigue, fatigue crack growth, and wear; applications and analysis tools.

Requisites

Simple Requisites

Prerequisites: ME 4020 or consent of instructor.

ME6620 - Plasticity/Creep in Mech Dsgn

General

College/School
Engineering

Course Title
Plasticity/Creep in Mech Dsgn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6620

Credit Hours

Credit Hours Min
3

Course Description
Design for static strength and creep resistance, consideration of plastic mechanical and thermal stress-strain states; applications and analysis tools.

Requisites

Simple Requisites

> **Prerequisites**: ME 4020 or consent of instructor.

ME6640 - Advanced Robotics

General

College/School
Engineering

Course Title
Advanced Robotics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6640

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Design, analysis, programming, dynamics, and control of robotic systems; mobile robots; walking robots; redundancy and manipulability, applications and projects.

Requisites

Simple Requisites

> **Prerequisites**: ME 4140 or equivalent.

ME6710 - Dynamics of Machinery

General

College/School
Engineering

Course Title
Dynamics of Machinery

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6710

Credit Hours

Credit Hours Min
3

Course Description
Relative motion of two- and three-dimensional systems; dynamics of particles and machine elements; Lagrangian mechanics; energy methods, equations of motion and computer-aided solution methods, analysis and synthesis of linear and nonlinear mechanical dynamic systems; dynamics of planar linkages, gear trains, and cam-follower systems; balancing of rotors and mechanisms; engine dynamics.

Requisites

Simple Requisites

> **Prerequisites**: ME4640 Dynamics of Machinery II

ME6730 - Modal Vibration Analysis

General

College/School
Engineering

Course Title
Modal Vibration Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6730

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Fourier transforms. Linear vibration analysis of n degree of freedom mechanical structures. Laboratory experience with rectangular and curved structures. Evaluation of mode shape, natural frequencies and damping coefficients. Computer model compared to a laboratory solution.

Requisites

Simple Requisites

> **Prerequisite**: ME 4060 (5060).

ME6750 - Wireless Comm Sys

General

College/School
Engineering

Course Title
Wireless Comm Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6750

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: None.

ME6760 - Smart Materials and Structures

General

College/School
Engineering

Course Title
Smart Materials and Structures

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6760

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: Undergraduate courses in Differential Equations, Mechanics of Materials, and System Dynamics, or consent of the instructor.

ME6810 - Adv Materials Science I

General

College/School
Engineering

Course Title
Adv Materials Science I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6810

Credit Hours

Credit Hours Min
3

Course Description
Thermodynamics of irreversible processes, diffusion in the solid state, reaction kinetics, alloy design.

Requisites

Simple Requisites

> **Prerequisite**: ME4460 Mech Properties of Mtrls or equivalent.

ME6830 - Adv Comp Aid Dsgn & Mfg

General

College/School
Engineering

Course Title
Adv Comp Aid Dsgn & Mfg

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6830

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Modeling and simulation methods to understand the impact of product design on manufacturing; transforming CAD geometry into useful modeling representations; thermal and dynamics loads, geometric and material; and structural optimization.

Requisites

Simple Requisites

> **Prerequisites**: ME 4020 or consent of instructor.

ME6850 - Fuzzy Logic Control Systems

General

College/School
Engineering

Course Title
Fuzzy Logic Control Systems

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6850

Credit Hours

Credit Hours Min
3

Course Description
Fuzzy set theory. Analysis of fuzzy systems. Design and implementation of fuzzy logic controllers.

Requisites

Simple Requisites

> **Prerequisite**: ME 4810 or equivalent.

ME6900 - Special Topics-Mech Engr

General

College/School
Engineering

Course Title
Special Topics-Mech Engr

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6900

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Prerequisite: Approval by departmental chairperson. Lecture and/or laboratory and library work on special topics or problems of current interest in mechanical engineering.

ME6910 - Intro to Graduate Research

General

College/School
Engineering

Course Title
Intro to Graduate Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6910

Credit Hours

Credit Hours Min
1

Course Description
Research tools and written and oral presentations in Mechanical Engineering; graduate thesis; ethics in research.

Requisites

Simple Requisites

> **Prerequisite**: Graduate student standing.

ME6920 - Security/Networked Control Sys

General

College/School
Engineering

Course Title
Security/Networked Control Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6920

Credit Hours

Credit Hours Min
3

Course Description
This course is an introduction to the security of networked control systems. It covers communication protocols and network security issues related to networked control systems. The stability of networked control systems will be investigated to examine the robustness of the control systems. It also covers common types of attacks, model-based and learning detection and compensation techniques for designing secure networked control system.

Requisites

Simple Requisites

> **Prerequisite**: Undergraduate courses in MATH 2120, ME3050 Dynamic Modeling and Controls and ECE3210 Control System Analysis, or consent of instructor.

ME6930 - Theory of Elasticity

General

College/School
Engineering

Course Title
Theory of Elasticity

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6930

Credit Hours

Credit Hours Min
3

Course Description
Fundamental laws of continuum mechanics; Cartesian tensors; analysis of stress and strain; two-dimensional problems in rectangular and polar coordinates; torsion of various-shaped shafts.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

ME6960 - Non-Thesis Project

General

College/School
Engineering

Course Title
Non-Thesis Project

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ME

Course Number
6960

Credit Hours

Credit Hours Min
3

Course Description

Selected topics of current interest in graduate-level mechanical engineering that are not covered in existing graduate courses.

Requisites

Simple Requisites

> **Prerequisite:** Approval by departmental chairperson.

ME6970 - Selected Topics

General

College/School
Engineering

Course Title
Selected Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
6970

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description

Prerequisite: Approval by departmental chairperson. Selected topics of current interest in graduate-level mechanical engineering that are not covered in existing graduate courses.

ME6980 - Directed Study

General

College/School
Engineering

Course Title
Directed Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ME

Course Number
6980

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description

Individual or small-group study of topics of current interest in graduate-level mechanical engineering.

Requisites

Simple Requisites

> **Prerequisite:** Approval by departmental chairperson.

ME6990 - Research & Thesis

General

College/School
Engineering

Course Title
Research & Thesis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ME

Course Number
6990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

ME7040 - Mass Transfer

General

College/School
Engineering

Course Title
Mass Transfer

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7040

Credit Hours

Credit Hours Min
3

Course Description

Mass diffusion in solids, liquids, and gases; transport equations for multicomponent systems; laminar forced and natural convective mass transfer; mass transfer in turbulent flows; interface mass transports.

Requisites

Simple Requisites

> **Prerequisite:** ME 6050.

ME7060 - Adv Numeric Heat Transfer

General

College/School
Engineering

Course Title
Adv Numeric Heat Transfer

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7060

Credit Hours

Credit Hours Min
3

Course Description
Characteristics of transport equations; difference approximations; solution methodology; combined heat transfer; advanced turbulence model; compressible reacting systems; grid generation.

Requisites
Simple Requisites

> **Prerequisite:** ME 6040, or ME6360 Intro to Continuum Mech, or consent of instructor.

ME7070 - Fluid Mech of Suspensions

General

College/School
Engineering

Course Title
Fluid Mech of Suspensions

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7070

Credit Hours

Credit Hours Min
3

Course Description
Balance laws; constitutive equations; exact solutions; applications.

Requisites
Simple Requisites

> **Prerequisite:** ME 6040, or ME6360 Intro to Continuum Mech, or consent of instructor.

ME7080 - Ad Viscous Flow

General

College/School
Engineering

Course Title
Ad Viscous Flow

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7080

Credit Hours

Credit Hours Min
3

Course Description
Steady and transient solutions of Navier-Stokes equations; advanced similarity solutions; flows with variable thermal properties and viscous dissipation; elementary non-Newtonian flow; stability of laminar flow and transition to turbulence.

Requisites
Simple Requisites

> **Prerequisite:** ME 6040, or ME6360 Intro to Continuum Mech, or consent of instructor.

ME7090 - Comp Fluid Dynamics

General

College/School
Engineering

Course Title
Comp Fluid Dynamics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7090

Credit Hours

Credit Hours Min
3

Course Description
Computation of inviscid, boundary-layer, supersonic, and transonic flows; models of turbulence; compressible Navier-Stokes equations.

Requisites
Simple Requisites

> **Prerequisite:** ME 6040, or ME6360 Intro to Continuum Mech, or consent of instructor.

ME7100 - Turbulence

General

College/School
Engineering

Course Title
Turbulence

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7100

Credit Hours

Credit Hours Min
3

Course Description
Balance laws; Reynolds stresses; microscale transport equations; shear layers, statistical theories, measurements.

Requisites
Simple Requisites

> **Prerequisite:** ME 6040, or ME6360 Intro to Continuum Mech, or consent of instructor.

ME7120 - Trans Penom/Mfg Process

General

College/School
Engineering

Course Title
Trans Penom/Mfg Process

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7120

Credit Hours

Credit Hours Min
3

Course Description
Basic equations of transport phenomena; natural convection; microgravity fluid dynamics and manufacturing in space; numerical modeling of melting and solidification problems; continuum model of binary alloy, solidification; applications to semiconductor crystal growth from melts and casting and welding processes.

Requisites

Simple Requisites

> **Prerequisite:** ME 6040, or ME6360 Intro to Continuum Mech, or consent of instructor.

ME7510 - Space Mechanisms

General

College/School
Engineering

Course Title
Space Mechanisms

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7510

Credit Hours

Credit Hours Min
3

Course Description
Methods of analysis and synthesis of spherical and spatial manipulators/ mechanisms using displacement matrices, screw vectors, screw matrices and quaternions, type of space mechanisms, mobility criteria; and transmission criteria.

Requisites

Simple Requisites

> **Prerequisites:** ME6360 Intro to Continuum Mech, or ME6930 Theory of Elasticity, or consent of instructor.

ME7600 - Theories of Plates & Shells

General

College/School
Engineering

Course Title
Theories of Plates & Shells

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7600

Credit Hours

Credit Hours Min
3

Course Description
Bending and buckling of thin plates and shells. Vibration analysis of plates and shells.

Requisites

Simple Requisites

> **Prerequisite:** CEE 6930 or consent of instructor.

ME7610 - Finite Element Analysis I

General

College/School
Engineering

Course Title
Finite Element Analysis I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7610

Credit Hours

Credit Hours Min
3

Course Description
Analysis of stresses in a continuum by the finite element method. Computer applications.

Requisites

Simple Requisites

> **Prerequisites:** CEE4130 Matrix & Finite Element Method, CEE6930 Theory of Elasticity, or consent of instructor.

ME7620 - Adv Finite Element Analysis

General

College/School
Engineering

Course Title
Adv Finite Element Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7620

Credit Hours

Credit Hours Min
3

Course Description
Finite element analysis of coupled differential equations. Higher order and isoparametric element formulations. Applications to problems in stress analysis, vibrations, heat transfer and fluid mechanics. Introduction to commercial programs.

Requisites

Simple Requisites

> Prerequisite: CEE6350 Finite Element Analysis/ME6350 Finite Element Analysis or consent of instructor.

ME7640 - Theory/Inelastic Mtrl Behavior

General

College/School
Engineering

Course Title
Theory/Inelastic Mtrl Behavior

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7640

Credit Hours

Credit Hours Min
3

Course Description
Constitutive equations for classical viscoelasticity. Exact solutions for simple constitutive laws. Incremental stress-strain relations for plasticity; yield surface and deformation theories. Application to engineering problems.

Requisites

Simple Requisites

> Prerequisite: CEE6930 Theory of Elasticity or ME6360 Intro to Continuum Mech.

ME7650 - Continuum Theories of Mtrls

General

College/School
Engineering

Course Title
Continuum Theories of Mtrls

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7650

Credit Hours

Credit Hours Min
3

Course Description
Continuum thermodynamics; balance laws and constitutive equations; applications for simple fluids, solids, thermoelastic solids, thermodiffusion and electrodynamics.

Requisites

Simple Requisites

> Prerequisite: CEE6930 Theory of Elasticityor ME6360 Intro to Continuum Mechor consent of instructor.

ME7660 - Fracture Mechanics

General

College/School
Engineering

Course Title
Fracture Mechanics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7660

Credit Hours

Credit Hours Min
3

Course Description
Griffith-Irwin Theory, stress intensity factors; crack tip stresses; plasticity; fatigue crack propagation; fracture toughness testing; experimental aspects; design applications; special topics.

Requisites

Simple Requisites

> Prerequisite: ME6930 Theory of Elasticity or CEE6930

ME7670 - Fiber-Reinforced Compos Mtrls

General

College/School
Engineering

Course Title
Fiber-Reinforced Compos Mtrls

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7670

Credit Hours

Credit Hours Min
3

Course Description
Properties of orthotropic lamina; lamination theory; micromechanics; engineering tests; lamina strength theories; laminate strength theories, laminate strength; stress concentration effects.

Requisites

Simple Requisites

Prerequisite: ME (CEE) 6930.

ME7680 - Theory of Elastic Stability

General

College/School
Engineering

Course Title
Theory of Elastic Stability

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7680

Credit Hours

Credit Hours Min
3

Course Description
Beams-columns; elastic buckling of bars and frames; torsional buckling of thin-walled structures; lateral buckling of beams; bending and buckling of thin plates and shells.

Requisites

Simple Requisites

Prerequisite: CEE 6930 or consent of instructor.

ME7710 - Adv Dynamics of Machinery II

General

College/School
Engineering

Course Title
Adv Dynamics of Machinery II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7710

Credit Hours

Credit Hours Min
3

Course Description
Dynamics and balancing of spatial and spherical mechanisms; statical indeterminacy and finite element applications; gross-motion response, elastodynamics and critical speeds of planar, spatial, and spherical mechanisms; rotors, cam-link mechanisms, engines, geared, and robotic systems; vehicle and suspension system dynamics; homogeneous and screw transformations; applications; Newton-Euler, Lagrangian, finite element, and energy-method formulations; including bearing friction forces.

Requisites

Simple Requisites

Prerequisites: ME6710 Dynamics of Machinery

ME7720 - Transf Function Synth/Dyn Sys

General

College/School
Engineering

Course Title
Transf Function Synth/Dyn Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7720

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
Analysis of transfer function derivation, signature analysis of pulse excitation, transfer function synthesis from experimental data.

Requisites

Simple Requisites

Prerequisites: ME6710 Dynamics of Machinery, ME6730 Modal Vibration Analysis.

ME7810 - Adv Materials Scien-II

General

College/School
Engineering

Course Title
Adv Materials Scien-II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7810

Credit Hours

Credit Hours Min
3

Course Description
Advanced materials science with emphasis on solid state theories. Free electrons. The crystal lattice. Electrons in the lattice. Defect interactions.

Requisites

Simple Requisites

Prerequisite: ME 6810 or equivalent.

ME7930 - Physical Acoustics

General

College/School
Engineering

Course Title
Physical Acoustics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7930

Credit Hours

Credit Hours Min
3

Course Description
Ray theory; nonlinear acoustic wave equation and motion; acoustics in moving media; diffraction.

Requisites

Simple Requisites

> **Prerequisite:** ME6430 Fundamentals of Acoustics, or ME6440 Applied Acoustics, or ME6370 Vibrations-Continuous Media, or consent of instructor.

ME7970 - Selected Topics

General

College/School
Engineering

Course Title
Selected Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7970

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Prerequisite: Approval by departmental chairperson. Selected topics of current interest in graduate-level mechanical engineering that are not covered in existing graduate courses.

ME7980 - Directed Study

General

College/School
Engineering

Course Title
Directed Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ME

Course Number
7980

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Prerequisite: Approval by departmental chairperson. Individual or small-group study of topics of current interest in graduate-level mechanical engineering.

ME7990 - Research & Dissertation

General

College/School
Engineering

Course Title
Research & Dissertation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ME

Course Number
7990

Credit Hours

Credit Hours Min
1

Credit Hours Max
9

Credit Hours Operator
TO

Music Department

No degree is offered in Music but courses may be used (with advisory committee approval) as electives in other fields of study.

Courses

MUED5850 - Workshop in Music Ed

General

College/School
Fine Arts

Course Title
Workshop in Music Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUED

Course Number
5850

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Laboratory approach providing opportunities for experienced music education personnel to study in-depth music educational problems. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites:** None

MUED6600 - Foundation-Music Ed

General

College/School
Fine Arts

Course Title
Foundation-Music Ed

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUED

Course Number
6600

Credit Hours

Credit Hours Min
3

Course Description
A study of the historical foundations, aesthetic philosophies, practices, and reforms in music education.

Requisites

Simple Requisites

> **Prerequisites:** None

MUED6920 - Topics

General

College/School
Fine Arts

Course Title
Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUED

Course Number
6920

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

**Credit Hours
Operator**
TO

Course Description
Laboratory approach providing opportunities for experienced music educators to study specialty areas.

Requisites

Simple Requisites

> **Prerequisites:** None

MUS5075 - Afro-Caribbean Ensemble

General

College/School
Fine Arts

Course Title
Afro-Caribbean Ensemble

Academic Level (Course Level)
Undergraduate

Course Subject Code
MUS

Course Number
5075

Credit Hours

Credit Hours Min
0

Credit Hours Max
1

**Credit Hours
Operator**
TO

Course Description
Students will explore and learn about the Afro-Caribbean culture through a hands-on study of traditional Afro-Caribbean instruments, imported from Trinidad and Tobago, and other authentic resources. This hands-on pedagogical approach will enhance the students' educational interest, understanding, and appreciation for the Afro-Caribbean diaspora, while increasing their involvement with the campus and community. As part of the students' assessment, members of this ensemble will be expected to participate in public concerts, educational workshops, and assembly presentations. These service opportunities will provide students with an enriched educational experience and promote personal growth as they become community ambassadors for cultural diversity.

MUS5110 - Hist & Lit Of Jazz

General

College/School
Fine Arts

Course Title
Hist & Lit Of Jazz

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
5110

Credit Hours

Credit Hours Min
2

Course Description
Jazz traced from its multi-ethnic origin to its present day form and its influences on American culture. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.All music majors must achieve a grade of "C" in each music course. If a lower grade is earned, the student must repeat the course.

Requisites

Simple Requisites

> **Prerequisites:** None

MUS5120 - Contemporary Music

General

College/School
Fine Arts

Course Title
Contemporary Music

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUS

Course Number
5120

Credit Hours

Credit Hours Min
2

Course Description
The culture of musical pluralism since World War II, including art music, jazz, rock, and folk. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.All music majors must achieve a grade of "C" in each music course. If a lower grade is earned, the student must repeat the course.

Requisites

Simple Requisites

> **Prerequisite:** MUS3010 Music History & Lit I or MUS3020 Music History & Lit II, MUS2110 Harmony III-MUS2120 Aural Techniques III with a grade of C or better.

MUS5150 - Computer App In Music

General

College/School
Education

Course Title
Computer App In Music

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUS

Course Number
5150

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
OR

Course Description
An introduction to computer applications in music performance, composition, teaching, and related fields. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MUS 2130.

MUS5250 - Recording Techniques

General

College/School
Education

Course Title
Recording Techniques

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUS

Course Number
5250

Credit Hours

Credit Hours Min
0

Credit Hours Max
2

Credit Hours Operator
OR

Course Description
An introduction to sound recording, including analog and digital formats. Emphasis on applications appropriate to performing musicians. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** MUS 2130.

MUS5400 - Composition

General

College/School
Fine Arts

Course Title
Composition

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUS

Course Number
5400

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
The completion of four semesters in the Lower Division is required for enrollment in the Upper Division. In addition, each applicant must be approved by the jury hearing his/her performance examination at the end of the fourth semester, and also by his/her private instructor before being allowed to register for study at the 3000-level. This course can be repeated for multiple credit.All music majors must achieve a grade of "C" in each music course. If a lower grade is earned, the student must repeat the course.Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

MUS5500 - Conducting

General

College/School
Fine Arts

Course Title
Conducting

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
5500

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
The completion of four semesters in the Lower Division is required for enrollment in the Upper Division. In addition, each applicant must be approved by the jury hearing his/her performance examination at the end of the fourth semester, and also by his/her private instructor before being allowed to register for study at the 3000-level. This course can be repeated for multiple credit.

All music majors must achieve a grade of "C" in each music course. If a lower grade is earned, the student must repeat the course.

Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

MUS5510 - Computer App In Music

General

College/School
Education

Course Title
Computer App In Music

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
5510

Credit Hours

Credit Hours Min
0

Credit Hours Max
2

**Credit Hours
Operator**
OR

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

MUS5710 - Superv Teaching Exp I

General

College/School
Fine Arts

Course Title
Superv Teaching Exp I

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
5710

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
Activities designed to offer supervised, practical experience in private studio teaching: planning and presenting lessons, and directing individual study. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. All music majors must achieve a grade of "C" in each music course. If a lower grade is earned, the student must repeat the course.

Requisites

Simple Requisites

Prerequisites: None

MUS5720 - Superv Teaching Exp II

General

College/School
Fine Arts

Course Title
Superv Teaching Exp II

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
5720

Credit Hours

Credit Hours Min
2

Course Description
Continuation of MUS 4710 (5710). Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus. All music majors must achieve a grade of "C" in each music course. If a lower grade is earned, the student must repeat the course.

Requisites

Simple Requisites

Prerequisites: None

MUS6000 - Ensemble Performance

General

College/School
Fine Arts

Course Title
Ensemble Performance

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6000

Credit Hours

Credit Hours Min
1

Course Description
Participation in music ensemble with the area of specialization. May be repeated for credit.

MUS6010 - Research Techq in Music

General

College/School
Fine Arts

Course Title
Research Techq in Music

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6010

Credit Hours

Credit Hours Min
3

Course Description
An overview of bibliographic sources in music research. Scholarly writing and presentation in area of emphasis.

Requisites

Simple Requisites

> **Prerequisite**: None

MUS6100 - Proseminar-Style/Analysis

General

College/School
Fine Arts

Course Title
Proseminar-Style/Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
In-depth analysis of all parameters of selected musical examples; compositional procedures as a means of developing an intelligent rationale for interpretation.

Requisites

Simple Requisites

> **Prerequisite**: None

MUS6110 - Score Study & Realization

General

College/School
Fine Arts

Course Title
Score Study & Realization

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6110

Credit Hours

Credit Hours Min
3

Course Description
Techniques, principles, and practices of musical score preparation and analysis including solfeggio and appropriate keyboard skills.

Requisites

Simple Requisites

> **Prerequisite**: None

MUS6120 - Seminar in Music Ed

General

College/School
Fine Arts

Course Title
Seminar in Music Ed

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6120

Credit Hours

Credit Hours Min
3

Course Description
A study of current methods and materials in Music Education (K-12) with an emphasis on research findings and applications.

Requisites

Simple Requisites

> **Prerequisite**: None

MUS6200 - Seminar in Music History

General

College/School
Fine Arts

Course Title
Seminar in Music History

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description
Focus on major genre, styles, or selected composers for an in-depth study of a particular topic.

Requisites

Simple Requisites

> **Prerequisite**: None

MUS6220 - Surv-Lit/Homogen Ensemble

General

College/School
Fine Arts

Course Title
Surv-Lit/Homogen Ensemble

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6220

Credit Hours

Credit Hours Min
3

Course Description
A survey of the history and development of literature for homogeneous ensembles from early origins to the present.

Requisites

Simple Requisites

> **Prerequisite**: None

MUS6330 - Adv Choral/Inst Techniques

General

College/School
Fine Arts

Course Title
Adv Choral/Inst Techniques

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6330

Credit Hours

Credit Hours Min
3

Course Description
Techniques and methodologies for teaching performing ensembles, grades 6-12.

Requisites

Simple Requisites

> **Prerequisite**: None

MUS6400 - Applied Study

General

College/School
Fine Arts

Course Title
Applied Study

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6400

Credit Hours

Credit Hours Min
1

Credit Hours Max
2

Credit Hours Operator
TO

Course Description
Private study in the specialized medium of performance. May be repeated for credit.

MUS6800 - Graduate Recital Perform

General

College/School
Fine Arts

Course Title
Graduate Recital Perform

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
MUS

Course Number
6800

Credit Hours

Credit Hours Min
1

Course Description
Performance of representative literature for the appropriate area of specialization.

Requisites

Simple Requisites

> **Prerequisite**: None

MUS6900 - Graduate Performance Doc

General

College/School
Fine Arts

Course Title	**Academic Level (Course Level)**
Graduate Performance Doc	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
MUS	6900

Credit Hours

Credit Hours Min
2

Course Description
A scholarly paper reporting the results of research into problems such as style or analysis, which correlates with the Graduate Recital Performance (MUS 680).

Requisites

Simple Requisites

> **Prerequisite**: None

THEA5100 - Advanced Acting

General

College/School
Fine Arts

Course Title	**Academic Level (Course Level)**
Advanced Acting	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
THEA	5100

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: THEA 2100. Advanced voice and movement study for the stage with an emphasis on period acting styles; in-depth script and character analysis; advanced scene study. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

THEA5121 - Shakespeare

General

College/School
Fine Arts

Course Title	**Academic Level (Course Level)**
Shakespeare	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
THEA	5121

Credit Hours

Credit Hours Min
3

Course Description
Historical, thematic, and other approaches in the study of Shakespeare. (May be repeated once as an elective provided the course content is different.)

Requisites

Simple Requisites

> **Prerequisite**: None

THEA5400 - Dramatic Literature

General

College/School
Fine Arts

Course Title	**Academic Level (Course Level)**
Dramatic Literature	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
THEA	5400

Credit Hours

Credit Hours Min
3

Course Description
Study of representative plays drawn from the classical through contemporary periods. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

THEA5500 - Creative Dramatics

General

College/School
Fine Arts

Course Title	**Academic Level (Course Level)**
Creative Dramatics	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
THEA	5500

Credit Hours

Credit Hours Min
3

Course Description
Use of an individual's dramatic imagination as a learning and teaching device. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: None

Nursing Department

The Whitson Hester School of Nursing offers the Master of Science in Nursing Degree (MSN), Post certification programs, and the Doctor of Nursing Practice Degree (DNP) which is a joint program between TTU and ETSU.

The Master of Science in Nursing Degree (MSN) is delivered following the standard protocol established for the delivery of online courses and programs. This program will prepare nurses to:

- Teach in a variety of academic and practice settings;
- Provide advanced nursing care to rural, urban, and underserved populations;
- Practice in collaborative and interdisciplinary relationships;
- Assume positions of leadership in the health care delivery system;
- Contribute to the current and evolving body of nursing science; and
- Continue study at the doctoral level.

The purposes of the MSN Program are:

- To increase access to graduate nursing education, especially for those nurses aspiring to teach in entry level nursing programs, manage professional practice work settings, and practice as advanced clinicians in a changing health care delivery system.
- To maximize the effective use of technology for delivery of graduate-level instruction. Distance delivery through the use of technology will increase access to graduate education, especially in remote areas of the state and for practicing nurses for whom time flexibility is a critical resource.
- To provide student access to web-based courses and degree programs. Web-based courses will reach populations not currently enrolled in graduate education, and will also permit students who are currently enrolled in on-campus courses to take additional courses, thus completing their programs sooner.

Programs

AGAC-CER - Nursing, Post Graduate Certificate for Adult Geriatric Acute Care Nurse Practitioner

Program Overview

Program Long Title
Nursing, Post Graduate Certificate for Adult Geriatric Acute Care Nurse Practitioner

College/School	Department(s)
Nursing	Nursing

Catalog Full Description
This post-graduate certificate in AGACNP will allow APRN's certified in other concentrations such as FNP to expand their role and increase their ability to market themselves in the acute care environment.

This certificate is a 22 credit hour program and 500 clinical contact hours.

Admission Requirements

Admission Requirements
- Minimum of a Master of Science in Nursing from a regionally accredited college/university and nursing program accreditation
- Current, unencumbered Registered Nurse license
- Current certification as an APRN
- A minimum of 3.0 GPA in the last degree earned
- A minimum of a "B" in the 3 "P's" and these courses must be independent courses and address concepts across the lifespan:
    - Advanced Pathophysiology with general principles applied across the lifespan
    - Advanced Pharmacology including pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of all broad classes of pharmacologic agents
    - Advanced Health Assessment with a lab and includes all human systems, advanced assessment techniques and approaches

    (The above courses are available at Tennessee Tech and students can apply for non-degree status to complete these pre-admission requirements)

- Letters of recommendations from three (3) persons familiar with the applicant's academic and professional background and experience in nursing practice, specifying in the detail the applicant's capabilities for graduate study and for future practice as an advance practice nurse.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree: NURS 4350 (5350) - Healthcare of Communities Cr. 4. NURS 6000 - Theoretical Foundations Cr. 3. NURS 6001 - Health Care Policy Cr. 3. NURS 6002 - Advanced Nursing Research Cr. 3. NURS 6003 - Advanced Role Development Cr. 3.

This certificate is a 22 credit hour program and 500 clinical contact hours.

Required Courses
Type
Completion Requirement

Required Certificate Courses

Complete ALL of the following Courses:
- NURS5604 - Adv Patho/Clin Reas I

- NURS5608 - Adv Patho/Clin Reas II
- NURS5610 - Diag Interpret/Thera Mod
- NURS5612 - Acute Cr/Phamacotherapeutics
- NURS5613 - Acute Disease Mgmt Pr I
- NURS5616 - Int in Acute Care NP Practice
- NURS6021 - App - Adv Skills in Acute Care

Additional Comments:

No Requirement Level

Additional Information

Information And Additional Notes

Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)

- Required GPA:

  - Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;

  - In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.

  - MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.

  - If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.

  - Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.

  - An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean

of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

AGAN-CER - Nursing, Post Graduate Certificate Adult Geriatric Acute Care Nurse Practitioner

Program Overview

Program Long Title
Nursing, Post Graduate Certificate Adult Geriatric Acute Care Nurse Practitioner

College/School
Nursing

Department(s)
Nursing

FNP-CER - Nursing, Post-Graduate Certificate, Family Nurse Practitioner (FNP)

Program Overview

Program Long Title
Nursing, Post-Graduate Certificate, Family Nurse Practitioner (FNP)

College/School
Nursing

Department(s)
Nursing

Catalog Full Description
The scope of practice of the Family Nurse Practitioner is based on a team approach. An interdependent member of the health team, the FNP provides primary care through the following means:

- Documentation of individual and family health history
- Physical assessment
- Diagnostic, therapeutic, and educational care plans
- Collaboration with physicians and other health care professionals
- Referral to appropriate health care providers
- Coordination of health care

Graduates are eligible to take the certifying examination offered by the American Nurses Association and the American Academy of Nurse Practitioners. Graduates find positions in a variety of settings such as outpatient clinics, community health centers, private practice offices, health departments, homeless shelters, chronic care facilities, schools, day care programs, hospices, homes, and acute care settings.

Since opening the MSN, a number of master's prepared nurses have indicated an interest in completing the Family Nurse Practitioner Concentration courses in order to sit for the national certification exam to practice as a Family Nurse Practitioner. In order to be eligible to take the certification exam, students must "successfully complete graduate didactic and clinical requirements of a master's nurse practitioner program through a formal graduate-level certificate or master's level NP program in the desired area of practice." Establishment of the FNP Certificate program offers a formal program of study to meet this need for students without requiring them to complete a second master's degree.

Constant change in the health system challenges the notion that one nurse can be all things to all people. Nurses with varied education and practice competencies bring different skills to patient care, and they must be able to practice to the fullest potential of these capabilities. To compete as attractive professional destinations, practice environments must recognize and reward these differences by defining nurses' roles, and by utilizing and compensating nurses according to their different educational preparation and competencies. Nurses prepared at the master's level in a variety of advanced practice roles are needed to meet patient needs in a changing health care environment.

Certificate is 23 credit hours, a total of 540 clock hours.

Admission Requirements

Admission Requirements
For Current Advance Practice RN (APRN)

- Minimum of a Master of Science in Nursing from a regionally accredited college/university and nursing program accreditation

- Current, unencumbered Registered Nurse license

- Current certification as an APRN

- A minimum of 3.0 GPA in the last degree earned

- A minimum of a "B" in the 3 "P's" and these courses must be independent courses and address concepts across the lifespan:

   ◦ Advanced Pathophysiology with general principles applied across the lifespan

   ◦ Advanced Pharmacology including pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of all broad classes of pharmacologic agents

   ◦ Advanced Health Assessment with a lab and includes all human systems, advanced assessment techniques and approaches

- The above courses are available at Tennessee Tech and students can apply for non-degree status to complete these pre-admission requirements

- Letters of recommendations from three (3) persons familiar with the applicant's academic and professional background and experience in nursing practice, specifying in the detail the applicant's capabilities for graduate study and for future practice as an advance practice nurse.

Additionally, For Non-Advance Practice RN (APRN)

- Non-APRN's holding a minimum of a Master of Science in Nursing are encouraged to apply to the FNP concentration for an evaluation of their transcript to determine placement in the curriculum.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree: NURS 4350 (5350) - Healthcare of Communities Cr. 4. NURS 6000 - Theoretical Foundations Cr. 3. NURS 6001 - Health Care Policy Cr. 3. NURS 6002 - Advanced Nursing Research Cr. 3. NURS 6003 - Advanced Role Development Cr. 3.

Certificate is 23 credit hours, total of 540 clock hours.

Required Courses
Type
Completion Requirement

Required Courses

Complete ALL of the following Courses:
- NURS6610 - Adult Health Primary Care I
- NURS6611 - Adult Hlth Primary Care I Pra
- NURS6614 - Primary Care Ped & Wmn Hlth
- NURS6612 - Adult Health Primary Care II
- NURS6613 - Adult Hlth II PrimycarePrctcm
- NURS6615 - Primary Care/Family: Practicum

- NURS6616 - Final FNP Preceptorship
- NURS6910 - Role Trans to Cert/Practice

Concentration(s) Total credits = 23

Total Clock Hours: 540 hours

Additional Comments:

No Requirement Level

Additional Information

Information And Additional Notes
Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)

- Required GPA:

   ◦ Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;

   ◦ In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.

   ◦ MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.

   ◦ If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.

   ◦ Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.

   ◦ An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean

of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

NRSE-AGNP - Nursing Practice, Adult-Gerontology Acute Care Nurse Practitioner Concentration, DNP (TTU-ETSU)

Program Overview

Program Long Title
Nursing Practice, Adult-Gerontology Acute Care Nurse Practitioner Concentration, DNP (TTU-ETSU)

College/School
Nursing

Department(s)
Nursing

Catalog Full Description

The Doctor of Nursing Practice program offers a terminal professional degree for those who wish to pursue or further their career as an advanced practice nurse focusing on healthcare needs of specific populations. The ETSU College of Nursing and TTU School of Nursing Joint Program currently offers six concentrations within the degree: Adult/Gerontology Acute Care Nurse Practitioner, Nursing and Healthcare Leadership, Family Nurse Practitioner, Pediatric Nurse Practitioner-Primary Care, Psychiatric/Mental Health Nurse Practitioner, and Women's Health Care Nurse Practitioner.

The focus of the Adult-Gerontology Acute Care Nurse Practitioner is to provide healthcare from adolescence to older adults in hospitals and clinic settings focusing on management of clients across acute care settings in collaboration with other members of the healthcare team. Graduates are eligible for the Adult-Gerontology Acute Care Nurse Practitioner national certification examination. Graduates are prepared for employment in varied healthcare settings.

For application terms and deadlines please refer to the Whitson-Hester School of Nursing website.

The program requires the following credit hours to complete the degree:

BSN-DNP Degree Requirements (75 hours)

- **Core Requirements:** 35 hours
- **Concentration:** 28 hours
- **DNP Project:** 12 hours
- **Total:** 75 hours

MSN-DNP Degree Requirements (31 hours)

- **Core Requirements:** 11 hours
- **Concentration:** 8 hours
- **DNP Project:** 12 hours
- **Total:** 35 hours

Admission Requirements

Admission Requirements
Admission requirements for the joint DNP program are as follows:

- a completed application with payment of nonrefundable application fee;
- official transcripts of all previous undergraduate and graduate coursework;

- a written essay.

There are different levels of admission depending upon prior credentials of applicants and whether or not they hold a BSN, MSN, or a BSN and a master's in another discipline. Additional requirements for admission to the DNP program include:

1. **BSN-DNP applicants:**

   1. A bachelor's degree in nursing is required;

   2. For international applicants, a bachelor's degree in nursing or equivalency (for BSN to DNP applicants), or a non-nursing master's degree or equivalency (for MSN to DNP applicants) from a nationally accredited nursing program or comparably recognized non-U.S. institution, with a cumulative grade point average of at least 3.0 on a 4-point scale;

2. **MSN-DNP applicants (4 options)**

   1. Certification in the selected nursing specialty for the concentration. For example: Certified FNP for FNP concentration, Certified WHNP in the WHNP concentration, etc.; or

   2. Master's in Nursing in a specialty different than the intended concentrations (WHNP, PNP, ACNP, PMHNP, FNP, Nursing and Healthcare Leadership) will require a longer program of study adapted to the previous Master's specialty and nursing experience; or

   3. Non-nursing master's with a BSN from a nationally accredited nursing program will require a longer program of study adapted to the previous Master's specialty and nursing experience; or

   4. For the MSN-DNP, Master's in Nursing with advanced practice registered nurse (APRN) certification (Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, or Nurse Anesthetist) or master's level nursing administration/ healthcare systems leadership concentration;

General Requirements:

1. All applicants with a cumulative GPA less than 3.2 as reported by their BSN or MSN institution will be required to take the Graduate Record Exam (GRE);

2. Unencumbered licensure as a Registered Nurse in the United States and eligibility for licensure in Tennessee or equivalency for international students;

3. All applicants are required to have at least two years of full-time work experience (or equivalent) in nursing as a registered nurse;

4. Three letters of recommendation are required: one from the applicant's current (most recent) supervisor, one from a faculty member who has worked directly with the applicant during previous academic study, and one from an individual selected by the applicant; All applicants will participate in an interview;

5. All applicants will be required to complete a writing sample at the time of the interview describing a problem the applicant has identified in practice that the applicant might explore in the DNP program;

6. All applicants must submit a cover letter expressing the applicant's personal goals for doctoral study; and

7. All applicants must submit a current resume or vita.

Application Form
The completed application form and fee, official transcripts of all previous undergraduate and graduate work, essay, documentation of nursing licensure in

the United States, MSN certification (where applicable), letters of recommendation and resume or vita must be submitted to the ETSU School of Graduate Studies or the Tennessee Tech Graduate College, depending upon the applicant's choice. International students must also forward the additionally required documentation to the appropriate school.

Interview and Writing Sample

The personal interview and time for completing the writing sample will be scheduled by the Joint DNP Admissions Committee. Factors given consideration in the admission decision include: previous grade point average (GPA), clarity of the applicant's selected problem as stated in the writing sample and during the interview, writing ability, professional work experience and achievements, professional honors and awards, interest in rural and underserved population groups, and quality of references/recommendations. The Joint DNP Admissions Committee may recommend admission of a promising applicant who has not met all the admission standards on a conditional basis.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

BSN-DNP Degree Requirements (75 hours)

- **Core Requirements:** 35 hours
- **Concentration:** 28 hours
- **DNP Project:** 12 hours
- **Total:** 75 hours

MSN-DNP Degree Requirements (31 hours)*

- **Core Requirements:** 11 hours
- **Concentration:** 8 hours
- **DNP Project:** 12 hours
- **Total:** 35 hours

*If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

BSN-DNP Degree Requirements (75 hours)
Type
Completion Requirement

BSN-DNP Core Requirements (35 hours)

Complete ALL of the following Courses:
- NRSE5000 - Concep Sys for Adv Nurs Prac
- NRSE5001 - Nsg Res/Ev-based Prac-TTU
- NRSE5006 - Adv Role Development
- NRSE5009 - Advanced Health Assessment Throughout the Life Span
- NRSE5010 - Advanced Health Assessment Throughout the Life Span Practicum
- NRSE5016 - Adv Pathophysiology
- NRSE5018 - Adv Clinical Pharmacology
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6002 - Health Policy Leadership
- NRSE6050 - Quality/Translation

- NRSE6713 - Systems Mgmt

BSN-DNP Concentration Requirements (28 hours)

Complete ALL of the following Courses:
- NRSE5604 - Adv Patho/Clin Reas I
- NRSE5608 - Adv Patho/Clin Reas II
- NRSE5610 - Diag Interpret/Thera Mod
- NRSE5612 - Acute Care Pharm
- NRSE5613 - Acute Disease Mgmt Pr I
- NRSE5614 - Acute Disease Mgmt Pr II
- NRSE5616 - Internship/Acute Care NP Pract
- NRSE5617 - Diag Interp/Thera Mod Pr
- NRSE6021 - Integ Appl Adv Prac Skil
- NRSE6022 - Strategic Pln for Health Care
- NRSE6023 - Paltve/End-of-Life Care&APN
- NRSE6024 - Adv Concept in Pathophysiology

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

MSN-DNP Degree Requirements (31 hours)
Type
Completion Requirement

MSN-DNP Core Requirements (11 hours)

Complete ALL of the following Courses:
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

MSN-DNP Concentration Requirements (8 hours)

Complete ALL of the following Courses:
- NRSE6022 - Strategic Pln for Health Care
- NRSE6023 - Paltve/End-of-Life Care&APN
- NRSE6024 - Adv Concept in Pathophysiology

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

No Requirement Level

Additional Information

Information And Additional Notes

Student Retention and Progression Criteria

Required GPA

The DNP graduate student, to remain in good standing, must maintain an overall grade point average of 3.0 (B) or better on all graduate work attempted. In order to graduate, students must have a minimum 3.0 GPA overall and on the program of study.

Nursing Requirement

Credit toward a degree objective will be granted for any graduate course in which a grade of A, B, or S is assigned; however, not more than three (3) hours of credit below a B grade is allowed.

If a student's grade is lower than "B," s/he may repeat a course. However, no more than one required course may be repeated. In repeating a course the previous grade as well as the grade earned from the repeated course will be calculated into the subsequent GPA. Students will be dismissed from the program if they do not meet the requirements in this policy.

Incomplete (I) Grade

An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Time extension requests for removal of an "I" grade must be submitted by the instructor of record to (and approved by) the home school's graduate school Dean before the allotted time expires. An "I" grade not completed within the one year time frame will be converted to an "F."

Academic Probation: Unsatisfactory Performance

When the cumulative GPA falls below 3.0, the graduate student will be placed on academic probation for the following semester. If the student does not achieve a 3.0 cumulative grade point average at the conclusion of one probationary semester, his/her home school's Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. No students will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an average GPA of 3.0 after one semester may be subject to dismissal without a probationary term.

Dismissal

If the student does not achieve a 3.0 cumulative GPA at the conclusion of one probationary semester, the ETSU or TTU Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. A student will also be dismissed from graduate study if they receive a second grade below "B."

NRSE-PNP - Nursing, Pediatric Nurse Practitioner-Primary Care Concentration, DNP

Program Overview

Program Long Title
Nursing, Pediatric Nurse Practitioner-Primary Care Concentration, DNP

College/School
Nursing

Department(s)
Nursing

Catalog Full Description
The Doctor of Nursing Practice program offers a terminal professional degree for those who wish to pursue or further their career as an advanced practice nurse focusing on healthcare needs of specific populations. The ETSU College of Nursing and TTU School of Nursing Joint Program currently offers six concentrations

within the degree: Adult/Gerontology Acute Care Nurse Practitioner, Nursing and Healthcare Leadership, Family Nurse Practitioner, Pediatric Nurse Practitioner-Primary Care, Psychiatric/Mental Health Nurse Practitioner, and Womens Health Care Nurse Practitioner.

The focus of the Pediatric Nurse Practitioner-Primary Care concentration is patient centered quality care including common and acute illnesses while emphasizing quality of care and health outcomes. The patient population for this concentration is children of all ages. Graduates will be eligible for the Pediatric Nurse Practitioner-Primary Care National Certification examination. The Family Nurse Practitioner works in collaboration with other members of the healthcare team. Graduates are prepared for employment in varied healthcare settings.

For application terms and deadlines please refer to the Whitson-Hester School of Nursing website.

BSN-DNP Degree Requirements (77 hours)

- **Core Requirements:** 35 hours
- **Concentration:** 30 hours
- **DNP Project:** 12 hours
- **TOTAL: 77** hours

MSN-DNP Degree Requirements (30 hours)

- **Core Requirements:** 11 hours
- **Concentration: 7** hours
- **DNP Project:** 12 hours
- **TOTAL:** 30 hours*

* If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

Admission Requirements

Admission Requirements
Admission requirements for the joint DNP program are as follows:

- a completed application with payment of nonrefundable application fee;
- official transcripts of all previous undergraduate and graduate coursework;
- a written essay.

There are different levels of admission depending upon prior credentials of applicants and whether or not they hold a BSN, MSN, or a BSN and a master's in another discipline. Additional requirements for admission to the DNP program include:

1. **BSN-DNP applicants:**
   1. A bachelor's degree in nursing is required;
   2. For international applicants, a bachelor's degree in nursing or equivalency (for BSN to DNP applicants), or a non-nursing master's degree or equivalency (for MSN to DNP applicants) from a nationally accredited nursing program or comparably recognized non-U.S. institution, with a cumulative grade point average of at least 3.0 on a 4-point scale;

2. **MSN-DNP applicants (4 options)**

    1. Certification in the selected nursing specialty for the concentration. For example: Certified FNP for FNP concentration, Certified WHNP in the WHNP concentration, etc.; or

    2. Master's in Nursing in a specialty different than the intended concentrations (WHNP, PNP, ACNP, PMHNP, FNP, Nursing and Healthcare Leadership) will require a longer program of study adapted to the previous Master's specialty and nursing experience; or

    3. Non-nursing master's with a BSN from a nationally accredited nursing program will require a longer program of study adapted to the previous Master's specialty and nursing experience; or

    4. For the MSN-DNP, Master's in Nursing with advanced practice registered nurse (APRN) certification (Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, or Nurse Anesthetist) or master's level nursing administration/ healthcare systems leadership concentration;

General Requirements:

1. All applicants with a cumulative GPA less than 3.2 as reported by their BSN or MSN institution will be required to take the Graduate Record Exam (GRE);

2. Unencumbered licensure as a Registered Nurse in the United States and eligibility for licensure in Tennessee or equivalency for international students;

3. All applicants are required to have at least two years of full-time work experience (or equivalent) in nursing as a registered nurse;

4. Three letters of recommendation are required: one from the applicant's current (most recent) supervisor, one from a faculty member who has worked directly with the applicant during previous academic study, and one from an individual selected by the applicant; All applicants will participate in an interview;

5. All applicants will be required to complete a writing sample at the time of the interview describing a problem the applicant has identified in practice that the applicant might explore in the DNP program;

6. All applicants must submit a cover letter expressing the applicant's personal goals for doctoral study; and

7. All applicants must submit a current resume or vita.

Application Form

The completed application form and fee, official transcripts of all previous undergraduate and graduate work, essay, documentation of nursing licensure in the United States, MSN certification (where applicable), letters of recommendation and resume or vita must be submitted to the ETSU School of Graduate Studies or the Tennessee Tech Graduate College, depending upon the applicant's choice. International students must also forward the additionally required documentation to the appropriate school.

Interview and Writing Sample

The personal interview and time for completing the writing sample will be scheduled by the Joint DNP Admissions Committee. Factors given consideration in the admission decision include: previous grade point average (GPA), clarity of the applicant's selected problem as stated in the writing sample and during the interview, writing ability, professional work experience and achievements, professional honors and awards, interest in rural and underserved population groups, and quality of references/recommendations. The Joint DNP Admissions Committee may recommend admission of a promising applicant who has not met all the admission standards on a conditional basis.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

BSN-DNP Degree Requirements (77 hours)

- **Core Requirements:** 35 hours
- **Concentration:** 30 hours
- **DNP Project:** 12 hours
- **TOTAL: 77** hours

MSN-DNP Degree Requirements (30 hours)

- **Core Requirements:** 11 hours
- **Concentration:** 7 hours
- **DNP Project:** 12 hours
- **TOTAL:** 30 hours*

* If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

BSN-DNP Degree Requirements (77 hours)
Type
Completion Requirement

BSN-DNP Core Requirements (35 hours)

Complete ALL of the following Courses:
- NRSE5000 - Concep Sys for Adv Nurs Prac
- NRSE5001 - Nsg Res/Ev-based Prac-TTU
- NRSE5006 - Adv Role Development
- NRSE5009 - Advanced Health Assessment Throughout the Life Span
- NRSE5010 - Advanced Health Assessment Throughout the Life Span Practicum
- NRSE5016 - Adv Pathophysiology
- NRSE5018 - Adv Clinical Pharmacology
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6002 - Health Policy Leadership
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

BSN-DNP Concentration Requirements (30 hours)

Complete ALL of the following Courses:
- NRSE5305 - Ped Pri Care I: Well Child-TTU
- NRSE5306 - Ped Pri Care II:Ep & Minor-TTU
- NRSE5311 - APN Ped Pri Care Prac I-TTU
- NRSE5312 - APN Ped Pri Care Pract II-TTU
- NRSE5314 - Pediatric Certification Prep
- NRSE5315 - Hlth Promo: Growing Child
- NRSE5316 - Chrnc Illns, Disab, Cmplx Cond
- NRSE5317 - Adv Pediatric Nurs Pract III
- NRSE6311 - Adv Fam Sys Assess & Eval-TTU
- NRSE6317 - Int Apps-Ldrshp/Ped Hlthcr Del

DNP Project (12 hours)

Complete ALL of the following Courses:

- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

MSN-DNP Degree Requirements (30 hours)
Type
Completion Requirement

MSN-DNP Core Requirements (11 hours)

Complete ALL of the following Courses:
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

MSN-DNP Concentration Requirements (7 hours)

Complete ALL of the following Courses:
- NRSE6311 - Adv Fam Sys Assess & Eval-TTU
- NRSE6317 - Int Apps-Ldrshp/Ped Hlthcr Del

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

No Requirement Level

Additional Information

Information And Additional Notes

Student Retention and Progression Criteria

Required GPA

The DNP graduate student, to remain in good standing, must maintain an overall grade point average of 3.0 (B) or better on all graduate work attempted. In order to graduate, students must have a minimum 3.0 GPA overall and on the program of study.

Nursing Requirement

Credit toward a degree objective will be granted for any graduate course in which a grade of A, B, or S is assigned; however, not more than three (3) hours of credit below a B grade is allowed.

If a student's grade is lower than B, s/he may repeat a course. However, no more than one required course may be repeated. In repeating a course, the previous grade as well as the grade earned from the repeated course will be calculated into the subsequent GPA. Students will be dismissed from the program if they do not meet the requirements in this policy.

Incomplete (I) Grade

An incomplete grade 'I' indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the 'I' is assigned. The 'I' grade cannot be used to allow a student to do additional work to raise a deficient grade or

to repeat a course. An 'I' grade must be removed no later than one calendar year from the time the grade is awarded. Time extension requests for removal of an 'I' grade must be submitted by the instructor of record to (and approved by) the home schools graduate school Dean before the allotted time expires. An 'I' grade not completed within the one year time frame will be converted to an F.

Academic Probation: Unsatisfactory Performance

When the cumulative GPA falls below 3.0, the graduate student will be placed on academic probation for the following semester. If the student does not achieve a 3.0 cumulative grade point average at the conclusion of one probationary semester, his/her home schools Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. No students will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an average GPA of 3.0 after one semester may be subject to dismissal without a probationary term.

Dismissal

If the student does not achieve a 3.0 cumulative GPA at the conclusion of one probationary semester, the ETSU or TTU Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. A student will also be dismissed from graduate study if they receive a second grade below B.

NRSE-WHNP - Nursing Practice, Women's Health Care Nurse Practitioner Concentration, DNP (TTU-ETSU)

Program Overview

Program Long Title
Nursing Practice, Women's Health Care Nurse Practitioner Concentration, DNP (TTU-ETSU)

College/School	Department(s)
Nursing	Nursing

Catalog Full Description
The Doctor of Nursing Practice program offers a terminal professional degree for those who wish to pursue or further their career as an advanced practice nurse focusing on healthcare needs of specific populations. The ETSU College of Nursing and TTU School of Nursing Joint Program currently offers six concentrations within the degree: Adult/Gerontology Acute Care Nurse Practitioner, Executive Leadership, Family Nurse Practitioner, Pediatric Nurse Practitioner-Primary Care, Psychiatric/Mental Health Nurse Practitioner, and Women's Health Care Nurse Practitioner.

The focus of the Women's Health Care Nurse Practitioner concentration is to prepare advanced practice nurses to provide comprehensive health care to meet the unique needs of women in diverse settings. Graduates are eligible for Women's Health Care Nurse Practitioner national certification examination. The Women's Health Care Nurse Practitioner works in collaboration with other members of the healthcare team. Graduates are prepared for employment in varied healthcare settings.

For application terms and deadlines please refer to the Whitson-Hester School of Nursing website.

BSN-DNP Degree Requirements (79 hours)

- **Core Requirements:** 35 hours
- **Concentration:** 32 hours
- **DNP Project:** 12 hours

- **TOTAL: 79** hours

MSN-DNP Degree Requirements (32 hours)

- **Core Requirements:** 11 hours
- **Concentration:** 9 hours
- **DNP Project:** 12 hours
- **TOTAL:** 32 hours*

Admission Requirements

Admission Requirements

Admission requirements for the joint DNP program are as follows:

- a completed application with payment of nonrefundable application fee;
- official transcripts of all previous undergraduate and graduate coursework;
- a written essay.

There are different levels of admission depending upon prior credentials of applicants and whether or not they hold a BSN, MSN, or a BSN and a master's in another discipline. Additional requirements for admission to the DNP program include:

1. **BSN-DNP applicants:**
   1. A bachelor's degree in nursing is required;
   2. For international applicants, a bachelor's degree in nursing or equivalency (for BSN to DNP applicants), or a non-nursing master's degree or equivalency (for MSN to DNP applicants) from a nationally accredited nursing program or comparably recognized non-U.S. institution, with a cumulative grade point average of at least 3.0 on a 4-point scale;

2. **MSN-DNP applicants (4 options)**
   1. Certification in the selected nursing specialty for the concentration. For example: Certified FNP for FNP concentration, Certified WHNP in the WHNP concentration, etc.; or
   2. Master's in Nursing in a specialty different than the intended concentrations (WHNP, PNP, ACNP, PMHNP, FNP, Executive Leadership) will require a longer program of study adapted to the previous Master's specialty and nursing experience; or
   3. Non-nursing master's with a BSN from a nationally accredited nursing program will require a longer program of study adapted to the previous Master's specialty and nursing experience; or
   4. For the MSN-DNP, Master's in Nursing with advanced practice registered nurse (APRN) certification (Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, or Nurse Anesthetist) or master's level nursing administration/ healthcare systems leadership concentration;

NOTE: All four MSN options for the Executive Leadership in Nursing concentration require at least one year of experience in a nursing administration role.

1. **General Requirements:**
   All applicants with a cumulative GPA less than 3.2 as reported by their BSN or MSN institution will be required to take the Graduate Record Exam (GRE);
2. Unencumbered licensure as a Registered Nurse in the United States and eligibility for licensure in Tennessee or equivalency for international students;
3. All applicants are required to have at least two years of full-time work experience (or equivalent) in nursing as a registered nurse;
4. All applicants will participate in an interview;
5. All applicants will be required to complete a writing sample at the time of the interview describing a problem the applicant has identified in practice that the applicant might explore in the DNP program;
6. All applicants must submit a cover letter expressing the applicant's personal goals for doctoral study; and
7. All applicants must submit a current resume or vita.

Application Form

The completed application form and fee, official transcripts of all previous undergraduate and graduate work, essay, documentation of nursing licensure in the United States, MSN certification (where applicable), letters of recommendation and resume or vita must be submitted to the ETSU School of Graduate Studies or the Tennessee Tech Graduate College, depending upon the applicant's choice. International students must also forward the additionally required documentation to the appropriate school.

Interview and Writing Sample

The personal interview and time for completing the writing sample will be scheduled by the Joint DNP Admissions Committee.   Factors given consideration in the admission decision include: previous grade point average (GPA), clarity of the applicant's selected problem as stated in the writing sample and during the interview, writing ability, professional work experience and achievements, professional honors and awards, interest in rural and underserved population groups, and quality of references/recommendations. The Joint DNP Admissions Committee may recommend admission of a promising applicant who has not met all the admission standards on a conditional basis.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> # BSN-DNP Degree Requirements (79 hours)
>
> - **Core Requirements:** 35 hours
> - **Concentration:** 32 hours
> - **DNP Project:** 12 hours
> - **TOTAL: 79** hours
>
> # MSN-DNP Degree Requirements (32 hours)
>
> - **Core Requirements:** 11 hours
> - **Concentration:** 9 hours
> - **DNP Project:** 12 hours

- **TOTAL:** 32 hours*

*If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

BSN-DNP Degree Requirements (79 hours)
Type
Completion Requirement

BSN-DNP Core Requirements (35 hours)

Complete ALL of the following Courses:
- NRSE5000 - Concep Sys for Adv Nurs Prac
- NRSE5001 - Nsg Res/Ev-based Prac-TTU
- NRSE5006 - Adv Role Development
- NRSE5009 - Advanced Health Assessment Throughout the Life Span
- NRSE5010 - Advanced Health Assessment Throughout the Life Span Practicum
- NRSE5016 - Adv Pathophysiology
- NRSE5018 - Adv Clinical Pharmacology
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6002 - Health Policy Leadership
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

BSN-DNP Concentration Requirements (32 hours)

Complete ALL of the following Courses:
- NRSE5701 - Pharmacology Wom. Health-TTU
- NRSE5702 - Wom Hlth Adv Prac I:GYN-TTU
- NRSE5710 - Primary Care Women's Hlth-TTU
- NRSE5711 - Women's Hlth for Adv Prac IV
- NRSE5712 - Wmns Hlth/Adv Prac II:OB
- NRSE5713 - Complex Issues in Wmns Health
- NRSE5714 - Wmns Hlth for Adv Pract I
- NRSE5715 - Wmns Hlth/Adv Prac II:OB
- NRSE6210 - Dev DNP Prac in Wom Health-TTU
- NRSE6211 - Adv. Nur. Care Vuln. Wom.-TTU
- NRSE6213 - Integ. App. Women's Health-TTU
- NRSE5716 - Women's Hlth for Adv Prac III

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

MSN-DNP Degree Requirements (32 hours)
Type
Completion Requirement

MSN-DNP Core Requirements (11 hours)

Complete ALL of the following Courses:
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

MSN-DNP Concentration Requirements (9 hours)

Complete ALL of the following Courses:
- NRSE6210 - Dev DNP Prac in Wom Health-TTU
- NRSE6211 - Adv. Nur. Care Vuln. Wom.-TTU
- NRSE6213 - Integ. App. Women's Health-TTU

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

No Requirement Level

Additional Information
Information And Additional Notes

Student Retention and Progression Criteria

Required GPA

The DNP graduate student, to remain in good standing, must maintain an overall grade point average of 3.0 (B) or better on all graduate work attempted. In order to graduate, students must have a minimum 3.0 GPA overall and on the program of study.

Nursing Requirement

Credit toward a degree objective will be granted for any graduate course in which a grade of A, B, or S is assigned; however, not more than three (3) hours of credit below a B grade is allowed.

If a student's grade is lower than "B," s/he may repeat a course. However, no more than one required course may be repeated. In repeating a course, the previous grade as well as the grade earned from the repeated course will be calculated into the subsequent GPA. Students will be dismissed from the program if they do not meet the requirements in this policy.

Incomplete (I) Grade

An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Time extension requests for removal of an "I" grade must be submitted by the instructor of record to (and approved by) the home school's graduate school Dean before the allotted time expires. An "I" grade not completed within the one year time frame will be converted to an "F."

Academic Probation: Unsatisfactory Performance

When the cumulative GPA falls below 3.0, the graduate student will be placed on academic probation for the following semester. If the student does not achieve a 3.0 cumulative grade point average at the conclusion of one probationary semester, his/her home school's Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. No students will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate

study. Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an average GPA of 3.0 after one semester may be subject to dismissal without a probationary term.

Dismissal

If the student does not achieve a 3.0 cumulative GPA at the conclusion of one probationary semester, the ETSU or TTU Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. A student will also be dismissed from graduate study if they receive a second grade below "B."

NSED-CER - Nursing, Post Graduate Certificate for Nursing Education (NUED)

Program Overview

Program Long Title
Nursing, Post Graduate Certificate for Nursing Education (NUED)

College/School
Nursing

Department(s)
Nursing

Catalog Full Description
The Nursing Education Certificate program provides a formal program of study for masters prepared nurses interested in obtaining a credential allowing them to teach. The program provides the content necessary to teach nursing students in a specific area of nursing. Once students complete the certificate, they will be eligible to sit for the national certification exam in this area. This certificate is the optimal way for those already holding a masters degree and desiring this specialization to gain marketability without having to complete a second master's degree.

One of the contributing factors for the national nursing shortage is a deficit in qualified nursing faculty to support nursing programs. This is an issue at every level of nursing. In addition, health care facilities are seeking nurse educators to maintain clinical education expectations for nursing staff in their facilities. Providing an opportunity for nurses who currently hold a Master's of Science of Nursing degree to gain formal education and certification as a Nurse Educator is a positive move in promoting nursing education in both the classroom and clinical setting.

This 16-credit hour post graduate certificate can be completed in 3 semesters and students will be enrolled in content courses with current MSN Nursing Education majors.

Certificate is 16 credit hours.

Admission Requirements

Admission Requirements
- Minimum of a Master of Science in Nursing from a regionally accredited college/university and nursing program accreditation

- Current, unencumbered Registered Nurse license

- A minimum of 3.0 GPA in the last degree earned

- A minimum of a "B" in the 3 "P's" and these courses must be independent courses and address the concepts across the lifespan:

  ◦ Advanced Pathophysiology with general principles applied across the lifespan

  ◦ Advanced Pharmacology including pharmacodynamics, pharmacokinetics, and pharmatherapeutics of all broad classes of pharmacologic agents

  ◦ Advanced Health Assessment

(The above courses are available at TTU and students can apply for non-degree status to complete these pre-admission requirements)

- Letters of recommendations from three (3) persons familiar with the applicant's academic and professional background and experience in nursing practice, specifying in the detail the applicant's capabilities for graduate study and for future practice as an advance practice nurse.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)

- Required GPA:

  ◦ Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;

  ◦ In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.

  ◦ MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.

  ◦ If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.

  ◦ Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.

  ◦ An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree: NURS 4350 (5350) - Healthcare of Communities Cr. 4. NURS

6000 - Theoretical Foundations Cr. 3. NURS 6001 - Health Care Policy Cr. 3. NURS 6002 - Advanced Nursing Research Cr. 3. NURS 6003 - Advanced Role Development Cr. 3.

Certificate is 16 credit hours.

Degree Requirements
Type
Completion Requirement

Required Coursework Total Credit Hours: 16

Complete ALL of the following Courses:
- NURS6204 - Curriculum Design/Ed Theory
- NURS6205 - Eval Methods in Nursing Edu
- NURS6207 - Clinical Focus-Practicum
- NURS6209 - Nursing Education Practicum
- NURS6210 - Innovative Teaching Strategies
- NURS6211 - Trends in Healthcare Mgmt
- NURS6212 - Preparation for Certification

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

NUNP-FNP - Nursing Practice, Family Nurse Practitioner Concentration, DNP (TTU-ETSU)

Program Overview

Program Long Title
Nursing Practice, Family Nurse Practitioner Concentration, DNP (TTU-ETSU)

College/School	Department(s)
Nursing	Nursing

Catalog Full Description
The Doctor of Nursing Practice program offers a terminal professional degree for those who wish to pursue or further their career as an advanced practice nurse focusing on healthcare needs of specific populations. The College of Nursing currently offers four concentrations within the degree: Adult/Gerontology Primary Care Nurse Practitioner, Nursing and Healthcare Leadership, Family Nurse Practitioner, and Psychiatric/Mental Health Nurse Practitioner.

The focus of the Family Nurse Practitioner concentration is patient centered quality care including common and acute illnesses while emphasizing quality of care and health outcomes. The patient population for this concentration is across the lifespan. Graduates will be eligible for the Family Nurse Practitioner National Certification examination. The Family Nurse Practitioner works in collaboration with other members of the healthcare team. Graduates are prepared for employment in varied healthcare settings.

BSN-DNP Degree Requirements (83 hours)

- **Core Requirements:** 35 hours
- **Concentration:** 36 hours
- **DNP Project:** 12 hours
- **TOTAL:** 83 hours

MSN-DNP Degree Requirements (32 hours)

- **Core Requirements:** 11 hours
- **Concentrations:** 9 hours
- **DNP Project:** 12 hours
- **TOTAL:** 32 hours*

If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

Admission Requirements

Admission Requirements

Admission requirements for the joint DNP program are as follows:

- a completed application with payment of nonrefundable application fee;
- official transcripts of all previous undergraduate and graduate coursework;
- a written essay.

There are different levels of admission depending upon prior credentials of applicants and whether or not they hold a BSN, MSN, or a BSN and a master's in another discipline. Additional requirements for admission to the DNP program include:

1. **BSN-DNP applicants:**
    1. A bachelor's degree in nursing is required;
    2. For international applicants, a bachelor's degree in nursing or equivalency (for BSN to DNP applicants), or a non-nursing master's degree or equivalency (for MSN to DNP applicants) from a nationally accredited nursing program or comparably recognized non-U.S. institution, with a cumulative grade point average of at least 3.0 on a 4-point scale;

MSN-DNP applicants (4 options)

1. Certification in the selected nursing specialty for the concentration. For example: Certified FNP for FNP concentration, Certified WHNP in the WHNP concentration, etc.; or
2. Master's in Nursing in a specialty different than the intended concentrations (WHNP, PNP, ACNP, PMHNP, FNP, Nursing and Healthcare Leadership) will require a longer program of study adapted to the previous Master's specialty and nursing experience; or
3. Non-nursing master's with a BSN from a nationally accredited nursing program will require a longer program of study adapted to the previous Master's specialty and nursing experience; or
4. For the MSN-DNP, Master's in Nursing with advanced practice registered nurse (APRN) certification (Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, or Nurse Anesthetist) or master's level nursing administration/ healthcare systems leadership concentration;

General Requirements:

1. All applicants with a cumulative GPA less than 3.2 as reported by their BSN or MSN institution will be required to take the Graduate Record Exam (GRE);

2. Unencumbered licensure as a Registered Nurse in the United States and eligibility for licensure in Tennessee or equivalency for international students;
3. All applicants are required to have at least two years of full-time work experience (or equivalent) in nursing as a registered nurse;
4. Three letters of recommendation are required: one from the applicant's current (most recent) supervisor, one from a faculty member who has worked directly with the applicant during previous academic study, and one from an individual selected by the applicant; All applicants will participate in an interview;
5. All applicants will be required to complete a writing sample at the time of the interview describing a problem the applicant has identified in practice that the applicant might explore in the DNP program;
6. All applicants must submit a cover letter expressing the applicant's personal goals for doctoral study; and
7. All applicants must submit a current resume or vita.

Application Form

The completed application form and fee, official transcripts of all previous undergraduate and graduate work, essay, documentation of nursing licensure in the United States, MSN certification (where applicable), letters of recommendation and resume or vita must be submitted to the ETSU School of Graduate Studies or the Tennessee Tech Graduate College, depending upon the applicant's choice. International students must also forward the additionally required documentation to the appropriate school.

Interview and Writing Sample

The personal interview and time for completing the writing sample will be scheduled by the Joint DNP Admissions Committee.   Factors given consideration in the admission decision include: previous grade point average (GPA), clarity of the applicant's selected problem as stated in the writing sample and during the interview, writing ability, professional work experience and achievements, professional honors and awards, interest in rural and underserved population groups, and quality of references/recommendations. The Joint DNP Admissions Committee may recommend admission of a promising applicant who has not met all the admission standards on a conditional basis.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
>
> # BSN-DNP Degree Requirements (83 hours)
>
> - **Core Requirements:** 35 hours
> - **Concentration:** 36 hours
> - **DNP Project:** 12 hours
> - **TOTAL:** 83 hours
>
> # MSN-DNP Degree Requirements (32 hours)
>
> - **Core Requirements:** 11 hours
> - **Concentrations:** 9 hours
> - **DNP Project:** 12 hours
> - **TOTAL:** 32 hours*

If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

BSN-DNP Degree Requirements (83 hours)
Type
Completion Requirement

BSN-DNP Core Requirements (35 hours)

Complete ALL of the following Courses:
- NRSE5000 - Concep Sys for Adv Nurs Prac
- NRSE5001 - Nsg Res/Ev-based Prac-TTU
- NRSE5006 - Adv Role Development
- NRSE5009 - Advanced Health Assessment Throughout the Life Span
- NRSE5010 - Advanced Health Assessment Throughout the Life Span Practicum
- NRSE5016 - Adv Pathophysiology
- NRSE5018 - Adv Clinical Pharmacology
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6002 - Health Policy Leadership
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

BSN-DNP Concentration Requirements (35 hours)

Complete ALL of the following Courses:
- NRSE5011 - Hlth Prom, Treat, Middle Adult
- NRSE5012 - Hlth Prom Middle Prac
- NRSE5013 - Hlth Promotion Older Adults
- NRSE5014 - Hlth Pro Older Adult Practicum
- NRSE5021 - Life Span Women's Health
- NRSE5022 - Life Assess Cl Mgmt Wom Hlth
- NRSE5023 - Hlth Prom Mgmt Chld & Ad
- NRSE5024 - Hlth Pr/Di & Cl Mgt/C&A Pr
- NRSE6400 - Imprv MH Outcomes PrimCare-TTU
- NRSE6613 - Adv Nrs Rural/Undrsv Popls
- NRSE6614 - Adv Intrv DNP Prac

- Plus Advisor Approved Elective Cr. 3.

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

MSN-DNP Degree Requirements (32 hours)
Type
Completion Requirement

MSN-DNP Core Requirements (11 hours)

Complete ALL of the following Courses:
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

MSN-DNP Concentration Requirements (9 hours)

Complete ALL of the following Courses:
- NRSE6613 - Adv Nrs Rural/Undrsv Popls
- NRSE6614 - Adv Intrv DNP Prac

- Plus Advisor Approved Elective Cr. 3.

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

No Requirement Level

Additional Information
Information And Additional Notes

Student Retention and Progression Criteria

Required GPA
The DNP graduate student, to remain in good standing, must maintain an overall grade point average of 3.0 (B) or better on all graduate work attempted. In order to graduate, students must have a minimum 3.0 GPA overall and on the program of study.

Nursing Requirement
Credit toward a degree objective will be granted for any graduate course in which a grade of A, B, or S is assigned; however, not more than three (3) hours of credit below a B grade is allowed.

If a student's grade is lower than "B," s/he may repeat a course. However, no more than one required course may be repeated. In repeating a course, the previous grade as well as the grade earned from the repeated course will be calculated into the subsequent GPA. Students will be dismissed from the program if they do not meet the requirements in this policy.

Incomplete (I) Grade

An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Time extension requests for removal of an "I" grade must be submitted by the instructor of record to (and approved by) the home school's graduate school Dean before the allotted time expires. An "I" grade not completed within the one year time frame will be converted to an "F."

Academic Probation: Unsatisfactory Performance

When the cumulative GPA falls below 3.0, the graduate student will be placed on academic probation for the following semester. If the student does not achieve a 3.0 cumulative grade point average at the conclusion of one probationary semester, his/her home school's Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. No students will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate

study. Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an average GPA of 3.0 after one semester may be subject to dismissal without a probationary term.

Dismissal

If the student does not achieve a 3.0 cumulative GPA at the conclusion of one probationary semester, the ETSU or TTU Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. A student will also be dismissed from graduate study if they receive a second grade below "B."

NUNP-NHL - Nursing Practice, Nursing and Healthcare Leadership Concentration, DNP (TTU-ETSU)

Program Overview

Program Long Title
Nursing Practice, Nursing and Healthcare Leadership Concentration, DNP (TTU-ETSU)

College/School	Department(s)
Nursing	Nursing

Catalog Full Description
The Doctor of Nursing Practice program offers a terminal professional degree for those who wish to pursue or further their career as an advanced practice nurse focusing on healthcare needs of specific populations. The College of Nursing currently offers four concentrations within the degree: Adult/Gerontology Primary Care Nurse Practitioner, Nursing and Healthcare Leadership, Family Nurse Practitioner, and Psychiatric/Mental Health Nurse Practitioner.

The focus of the Nursing and Healthcare Leadership concentration prepares the advanced nurse for multidimensional leadership within today's complex healthcare system. Coursework focuses on leadership theory and practices, legal aspects, fiscal and strategic management, quality, and policy.

BSN-DNP Degree Requirements (77 hours)

- **Core Requirements:** 23 hours
- **Concentration:** 42 hours
- **DNP Project:** 12 hours
- **TOTAL:** 77 hours

MSN-DNP Degree Requirements (32 hours)

- **Core Requirements:** 11 hours
- **Concentration:** 9 hours
- **DNP Project:** 12 hours
- **TOTAL:** 32 hours*

If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

Admission Requirements

Admission Requirements
Admission requirements for the joint DNP program are as follows:

- a completed application with payment of nonrefundable application fee;
- official transcripts of all previous undergraduate and graduate coursework;
- a written essay.

There are different levels of admission depending upon prior credentials of applicants and whether or not they hold a BSN, MSN, or a BSN and a master's in another discipline. Additional requirements for admission to the DNP program include:

1. **BSN-DNP applicants:**
   1. A bachelor's degree in nursing is required;
   2. For international applicants, a bachelor's degree in nursing or equivalency (for BSN to DNP applicants), or a non-nursing master's degree or equivalency (for MSN to DNP applicants) from a nationally accredited nursing program or comparably recognized non-U.S. institution, with a cumulative grade point average of at least 3.0 on a 4-point scale;

2. **MSN-DNP applicants (4 options) *The Nursing and Healthcare Leadership concentration requires at least one year of experience in a nursing administration role for all MSN options.**
   1. Certification in the selected nursing specialty for the concentration. For example: Certified FNP for FNP concentration, Certified WHNP in the WHNP concentration, etc.; or
   2. Master's in Nursing in a specialty different than the intended concentrations (WHNP, PNP, ACNP, PMHNP, FNP, Nursing and Healthcare Leadership) will require a longer program of study adapted to the previous Master's specialty and nursing experience; or
   3. Non-nursing master's with a BSN from a nationally accredited nursing program will require a longer program of study adapted to the previous Master's specialty and nursing experience; or
   4. For the MSN-DNP, Master's in Nursing with advanced practice registered nurse (APRN) certification (Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, or Nurse Anesthetist) or master's level nursing administration/ healthcare systems leadership concentration;

General Requirements:

1. All applicants with a cumulative GPA less than 3.2 as reported by their BSN or MSN institution will be required to take the Graduate Record Exam (GRE);
2. Unencumbered licensure as a Registered Nurse in the United States and eligibility for licensure in Tennessee or equivalency for international students;
3. All applicants are required to have at least two years of full-time work experience (or equivalent) in nursing as a registered nurse;
4. Three letters of recommendation are required: one from the applicant's current (most recent) supervisor, one from a faculty member who has worked directly with the applicant during previous academic study, and one from an individual selected by the applicant; All applicants will participate in an interview;

5. All applicants will be required to complete a writing sample at the time of the interview describing a problem the applicant has identified in practice that the applicant might explore in the DNP program;

6. All applicants must submit a cover letter expressing the applicant's personal goals for doctoral study; and

7. All applicants must submit a current resume or vita.

Application Form

The completed application form and fee, official transcripts of all previous undergraduate and graduate work, essay, documentation of nursing licensure in the United States, MSN certification (where applicable), letters of recommendation and resume or vita must be submitted to the ETSU School of Graduate Studies or the Tennessee Tech Graduate College, depending upon the applicant's choice. International students must also forward the additionally required documentation to the appropriate school.

Interview and Writing Sample

The personal interview and time for completing the writing sample will be scheduled by the Joint DNP Admissions Committee. Factors given consideration in the admission decision include: previous grade point average (GPA), clarity of the applicant's selected problem as stated in the writing sample and during the interview, writing ability, professional work experience and achievements, professional honors and awards, interest in rural and underserved population groups, and quality of references/recommendations. The Joint DNP Admissions Committee may recommend admission of a promising applicant who has not met all the admission standards on a conditional basis.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

BSN-DNP Degree Requirements (77 hours)

- **Core Requirements:** 23 hours
- **Concentration:** 42 hours
- **DNP Project:** 12 hours
- **TOTAL:** 77 hours

MSN-DNP Degree Requirements (32 hours)

- **Core Requirements:** 11 hours
- **Concentration:** 9 hours
- **DNP Project:** 12 hours
- **TOTAL:** 32 hours*

If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

BSN-DNP Degree Requirements (77 hours)
Type
Completion Requirement

BSN-DNP Core Requirements (23 hours)

Complete ALL of the following Courses:
- NRSE5000 - Concep Sys for Adv Nurs Prac

- NRSE5001 - Nsg Res/Ev-based Prac-TTU
- NRSE5006 - Adv Role Development
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6002 - Health Policy Leadership
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

BSN-DNP Concentration Requirements (42 hours)

Complete ALL of the following Courses:
- NRSE5501 - Leadership in Nurs Admin
- NRSE5502 - Exec Ldrship Practicum I
- NRSE5503 - Exec Ldrship Practicum II
- NRSE5504 - Exec Leadership Pract III-ETSU
- NRSE5510 - Organ Theory & Nurs Admin
- NRSE5520 - Fiscal Mgmt in Nurs Admin-TTU
- NRSE5530 - Hlth Care Organizations & Law
- NRSE5550 - Human Resources Mgmt
- NRSE5580 - Proj Mgmt Nrse Leaders
- NRSE5590 - Strategic Plan for Health Care
- NRSE6513 - Case Management
- NRSE6712 - Strategic Fiscal Mgmt
- NRSE6714 - Executive Leadership/Nursing
- NRSE6715 - Contemp Prob Opp Ex Ld-ETSU

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

MSN-DNP Degree Requirements (32 hours)
Type
Completion Requirement

MSN-DNP Core Requirements (11 hours)

Complete ALL of the following Courses:
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE5030 - Scholarly Writing
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

MSN-DNP Concentration Requirements (9 hours)

Complete ALL of the following Courses:
- NRSE6712 - Strategic Fiscal Mgmt
- NRSE6714 - Executive Leadership/Nursing
- NRSE6715 - Contemp Prob Opp Ex Ld-ETSU

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

No Requirement Level

Additional Information

Information And Additional Notes

Student Retention and Progression Criteria

Required GPA

The DNP graduate student, to remain in good standing, must maintain an overall grade point average of 3.0 (B) or better on all graduate work attempted. In order to graduate, students must have a minimum 3.0 GPA overall and on the program of study.

Nursing Requirement

Credit toward a degree objective will be granted for any graduate course in which a grade of A, B, or S is assigned; however, not more than three (3) hours of credit below a B grade is allowed.

If a student's grade is lower than "B," s/he may repeat a course. However, no more than one required course may be repeated. In repeating a course, the previous grade as well as the grade earned from the repeated course will be calculated into the subsequent GPA. Students will be dismissed from the program if they do not meet the requirements in this policy.

Incomplete (I) Grade

An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Time extension requests for removal of an "I" grade must be submitted by the instructor of record to (and approved by) the home school's graduate school Dean before the allotted time expires. An "I" grade not completed within the one year time frame will be converted to an "F."

Academic Probation: Unsatisfactory Performance

When the cumulative GPA falls below 3.0, the graduate student will be placed on academic probation for the following semester. If the student does not achieve a 3.0 cumulative grade point average at the conclusion of one probationary semester, his/her home school's Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. No students will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an average GPA of 3.0 after one semester may be subject to dismissal without a probationary term.

Dismissal

If the student does not achieve a 3.0 cumulative GPA at the conclusion of one probationary semester, the ETSU or TTU Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. A student will also be dismissed from graduate study if they receive a second grade below "B."

NUNP-PMNP - Nursing Practice, Psychiatric/Mental Health Nurse Practitioner Concentration, DNP (TTU-ETSU)

Program Overview

Program Long Title

Nursing Practice, Psychiatric/Mental Health Nurse Practitioner Concentration, DNP (TTU-ETSU)

College/School	Department(s)
Nursing	Nursing

Catalog Full Description

The Doctor of Nursing Practice program offers a terminal professional degree for those who wish to pursue or further their career as an advanced practice nurse focusing on healthcare needs of specific populations. The ETSU College of Nursing and TTU School of Nursing Joint Program currently offers six concentrations within the degree: Adult/Gerontology Acute Care Nurse Practitioner, Nursing and Healthcare Leadership, Family Nurse Practitioner, Pediatric Nurse Practitioner-Primary Care, Psychiatric/Mental Health Nurse Practitioner, and Women's Health Care Nurse Practitioner.

The focus of the Psychiatric/Mental Health Nurse Practitioner concentration is to prepare advanced practice nurses to provide comprehensive psychiatric-mental health care across the life span to individuals, groups and families in diverse settings. Graduates are eligible for Psychiatric Mental Health Nurse Practitioner national certification examination. The Psychiatric Mental Health Nurse Practitioner works in collaboration with other members of the healthcare team. Graduates are prepared for employment in varied healthcare settings.

For application terms and deadlines please refer to the Whitson-Hester School of Nursing website.

BSN-DNP Degree Requirements (80 hours)

- **Core Requirements:** 35 hours
- **Concentration:** 33 hours
- **DNP Project:** 12 hours
- **TOTAL:** 80 hours

MSN-DNP Degree Requirements (32 hours)

- **Core Requirements:** 11 hours
- **Concentration:** 9 hours
- **DNP Project:** 12 hours
- **TOTAL:** 32 hours*

*If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

Admission Requirements

Admission Requirements

Admission requirements for the joint DNP program are as follows:

- a completed application with payment of nonrefundable application fee;
- official transcripts of all previous undergraduate and graduate coursework;
- a written essay.

There are different levels of admission depending upon prior credentials of applicants and whether or not they hold a BSN, MSN, or a BSN and a master's in another discipline. Additional requirements for admission to the DNP program include:

1. **BSN-DNP applicants:**

    1. A bachelor's degree in nursing is required;

    2. For international applicants, a bachelor's degree in nursing or equivalency (for BSN to DNP applicants), or a non-nursing master's degree or equivalency (for MSN to DNP applicants) from a nationally accredited nursing program or comparably recognized non-U.S. institution, with a cumulative grade point average of at least 3.0 on a 4-point scale;

2. **MSN-DNP applicants (4 options)**

    1. Certification in the selected nursing specialty for the concentration. For example: Certified FNP for FNP concentration, Certified WHNP in the WHNP concentration, etc.; or

    2. Master's in Nursing in a specialty different than the intended concentrations (WHNP, PNP, ACNP, PMHNP, FNP, Nursing and Healthcare Leadership) will require a longer program of study adapted to the previous Master's specialty and nursing experience; or

    3. Non-nursing master's with a BSN from a nationally accredited nursing program will require a longer program of study adapted to the previous Master's specialty and nursing experience; or

    4. For the MSN-DNP, Master's in Nursing with advanced practice registered nurse (APRN) certification (Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, or Nurse Anesthetist) or master's level nursing administration/ healthcare systems leadership concentration;

General Requirements:

1. All applicants with a cumulative GPA less than 3.2 as reported by their BSN or MSN institution will be required to take the Graduate Record Exam (GRE);

2. Unencumbered licensure as a Registered Nurse in the United States and eligibility for licensure in Tennessee or equivalency for international students;

3. All applicants are required to have at least two years of full-time work experience (or equivalent) in nursing as a registered nurse;

4. Three letters of recommendation are required: one from the applicant's current (most recent) supervisor, one from a faculty member who has worked directly with the applicant during previous academic study, and one from an individual selected by the applicant; All applicants will participate in an interview;

5. All applicants will be required to complete a writing sample at the time of the interview describing a problem the applicant has identified in practice that the applicant might explore in the DNP program;

6. All applicants must submit a cover letter expressing the applicant's personal goals for doctoral study; and

7. All applicants must submit a current resume or vita.

Application Form

The completed application form and fee, official transcripts of all previous undergraduate and graduate work, essay, documentation of nursing licensure in the United States, MSN certification (where applicable), letters of recommendation and resume or vita must be submitted to the ETSU School of Graduate Studies or the Tennessee Tech Graduate College, depending upon the applicant's choice. International students must also forward the additionally required documentation to the appropriate school.

Interview and Writing Sample

The personal interview and time for completing the writing sample will be scheduled by the Joint DNP Admissions Committee.   Factors given consideration in the admission decision include: previous grade point average (GPA), clarity of the applicant's selected problem as stated in the writing sample and during the interview, writing ability, professional work experience and achievements, professional honors and awards, interest in rural and underserved population groups, and quality of references/recommendations. The Joint DNP Admissions Committee may recommend admission of a promising applicant who has not met all the admission standards on a conditional basis.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

BSN-DNP Degree Requirements (80 hours)

- **Core Requirements:** 35 hours

- **Concentration:** 33 hours

- **DNP Project:** 12 hours

- **TOTAL:** 80 hours

MSN-DNP Degree Requirements (32 hours)

- **Core Requirements:** 11 hours

- **Concentration:** 9 hours

- **DNP Project:** 12 hours

- **TOTAL:** 32 hours*

*If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

BSN-DNP Degree Requirements (80 hours)
Type
Completion Requirement

BSN-DNP Core Requirements (35 hours)

Complete ALL of the following Courses:
- NRSE5000 - Concep Sys for Adv Nurs Prac
- NRSE5001 - Nsg Res/Ev-based Prac-TTU
- NRSE5006 - Adv Role Development
- NRSE5009 - Advanced Health Assessment Throughout the Life Span
- NRSE5010 - Advanced Health Assessment Throughout the Life Span Practicum
- NRSE5016 - Adv Pathophysiology
- NRSE5018 - Adv Clinical Pharmacology
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6002 - Health Policy Leadership
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

BSN-DNP Concentration Requirements (33 hours)

Complete ALL of the following Courses:
- NRSE5303 - Psychopharmacology
- NRSE5404 - Adv Psych Fam Nsg Care I
- NRSE5408 - Adv Family Psych Nsg Care II
- NRSE5409 - Adv Fam Psych Nsg Care Prac II
- NRSE5410 - Intrpers Treatmnt Modalities
- NRSE5411 - Intrpers Trtmnt Modailt Prac
- NRSE6414 - Neurobio Psych Disor
- NRSE6415 - Mental Hlth Care Deliv Systems
- NRSE6950 - Internship Adv Nursg Practice
- NRSE5405 - Adv Fam Psych Nsg Care Prac I

- Plus Advisor Approved Elective Cr. 3.

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

MSN-DNP Degree Requirements (32 hours)
Type
Completion Requirement

MSN-DNP Core Requirements (11 hours)

Complete ALL of the following Courses:
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

MSN-DNP Concentration Requirements (9 hours)

Complete ALL of the following Courses:
- NRSE6414 - Neurobio Psych Disor
- NRSE6415 - Mental Hlth Care Deliv Systems

- Plus Advisor Approved Elective Cr. 3.

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

No Requirement Level

Additional Information

Information And Additional Notes

Student Retention and Progression Criteria

Required GPA

The DNP graduate student, to remain in good standing, must maintain an overall grade point average of 3.0 (B) or better on all graduate work attempted. In order to graduate, students must have a minimum 3.0 GPA overall and on the program of study.

Nursing Requirement

Credit toward a degree objective will be granted for any graduate course in which a grade of A, B, or S is assigned; however, not more than three (3) hours of credit below a B grade is allowed.

If a student's grade is lower than "B," s/he may repeat a course. However, no more than one required course may be repeated. In repeating a course, the previous grade as well as the grade earned from the repeated course will be calculated into the subsequent GPA. Students will be dismissed from the program if they do not meet the requirements in this policy.

Incomplete (I) Grade

An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Time extension requests for removal of an "I" grade must be submitted by the instructor of record to (and approved by) the home school's graduate school Dean before the allotted time expires. An "I" grade not completed within the one year time frame will be converted to an "F."

Academic Probation: Unsatisfactory Performance

When the cumulative GPA falls below 3.0, the graduate student will be placed on academic probation for the following semester. If the student does not achieve a 3.0 cumulative grade point average at the conclusion of one probationary semester, his/her home school's Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. No students will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an average GPA of 3.0 after one semester may be subject to dismissal without a probationary term.

Dismissal

If the student does not achieve a 3.0 cumulative GPA at the conclusion of one probationary semester, the ETSU or TTU Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. A student will also be dismissed from graduate study if they receive a second grade below "B."

NUNP-PNPP - Nursing Practice, Pediatric Nurse Practitioner-Primary Care Concentration, DNP (TTU-ETSU)

Program Overview

Program Long Title
Nursing Practice, Pediatric Nurse Practitioner-Primary Care Concentration, DNP (TTU-ETSU)

College/School	Department(s)
Nursing	Nursing

Catalog Full Description

General Degree Information

The Doctor of Nursing Practice program offers a terminal professional degree for those who wish to pursue or further their career as an advanced practice nurse focusing on healthcare needs of specific populations.

The following provides the required credit hours to complete the degree:

BNS-DNP DEGREE REQUIREMENTS (89-92 hours)

Core Requirements: 35 hours
Concentration: 42 hours
Optional Electives: 0-3 hours
DNP Project: 12 hours
TOTAL: 89-92 hours

MSN-DNP DEGREE REQUIREMENTS (35 hours)

Core Requirements: 11 hours
Concentration: 12 hours
DNP Project: 12 hours
TOTAL: 35 hours *

Admission Requirements

Admission Requirements

Admission requirements for the joint DNP program are as follows:

- a completed application with payment of nonrefundable application fee

- official transcripts of all previous undergraduate and graduate coursework

- a written essay

There are different levels of admission depending upon prior credentials of applicants and whether or not they hold a BSN, MSN, or a BSN and a master's in another discipline. Additional requirements for admission to the DNP program include:

1. *BSN-DNP applicants:*

- A bachelor's degree in nursing is required;

- For international applicants, a bachelor's degree in nursing or equivalency (for BSN to DNP applicants), or a non-nursing master's degree or equivalency (for MSN to DNP applicants) from a nationally accredited nursing program or comparably recognized non-U.S. institution, with a cumulative grade point average of at least 3.0 on a 4-point scale;

2. *BSN-DNP applicants:*

   - Certification in the selected nursing specialty for the concentration. For example: Certified FNP for FNP concentration, Certified WHNP in the WHNP concentration, etc.;
     OR

   - Master's in Nursing in a specialty different than the intended concentrations (WHNP, PNP, ACNP, PMHNP, FNP, Executive Leadership) will require a longer program of study adapted to the previous Master's specialty and nursing experience;
     OR

   - Non-nursing master's with a BSN from a nationally accredited nursing program will require a longer program of study adapted to the previous Master's specialty and nursing experience;
     OR

   - For the MSN-DNP, Master's in Nursing with advanced practice registered nurse (APRN) certification (Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, or Nurse Anesthetist) or master's level nursing administration/ healthcare systems leadership concentration;

     NOTE: All four MSN options for the Executive Leadership in Nursing concentration require at least one year of experience in a nursing administration role.

3. All applicants with a cumulative GPA less than 3.2 as reported by their BSN or MSN institution will be required to take the Graduate Record Exam (GRE);

4. Unencumbered licensure as a Registered Nurse in the United States and eligibility for licensure in Tennessee or equivalency for international students;

5. All applicants are required to have at least two years of full-time work experience (or equivalent) in nursing as a registered nurse;

6. Three letters of recommendation are required: one from the applicant's current (most recent) supervisor, one from a faculty member who has worked directly with the applicant during previous academic study, and one from an individual selected by the applicant;

7. All applicants will participate in an interview;

8. All applicants will be required to complete a writing sample at the time of the interview describing a problem the applicant has identified in practice that the applicant might explore in the DNP program;

9. All applicants must submit a cover letter expressing the applicant's personal goals for doctoral study; and

10. All applicants must submit a current resume or vita.

The completed application form and fee, official transcripts of all previous undergraduate and graduate work, essay, documentation of nursing licensure in the United States, MSN certification (where applicable), letters of recommendation and resume or vita must be submitted to the ETSU School of Graduate Studies or the TTU Graduate College, depending upon the applicant's choice. International students must also forward the additionally required documentation to the appropriate school.

The personal interview and time for completing the writing sample will be scheduled by the Joint DNP Admissions Committee. Factors given consideration in the admission decision include previous grade point average (GPA), clarity of the applicant's selected problem as stated in the writing sample and during the interview, writing ability, professional work experience and achievements, professional honors and awards, interest in rural and underserved population groups, and quality of references/recommendations. The Joint DNP Admissions Committee may recommend admission of a promising applicant who has not met all the admission standards on a conditional basis.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

BNS-DNP DEGREE REQUIREMENTS (89-92 hours)

Core Requirements: 35 hours
Concentration: 42 hours
Optional Electives: 0-3 hours
DNP Project: 12 hours
TOTAL: 89-92 hours

MSN-DNP DEGREE REQUIREMENTS (35 hours)

Core Requirements: 11 hours
Concentration: 12 hours
DNP Project: 12 hours
TOTAL: 35 hours *

* If you are a MSN to DNP student and you are changing your specialization, your transcript will be evaluated and you will receive an individualized program of study from the Graduate Programs Coordinator to include 5000 level courses that you will need for certification.

BSN-DNP Core Requirements (35 hours)
Type
Completion Requirement

Core Requirements

Complete ALL of the following Courses:
- NRSE5000 - Concep Sys for Adv Nurs Prac
  AND NRSE5001 - Nsg Res/Ev-based Prac-TTU
  AND NRSE5006 - Adv Role Development
  AND NRSE5009 - Advanced Health Assessment Throughout the Life Span
  AND NRSE5010 - Advanced Health Assessment Throughout the Life Span Practicum
  AND NRSE5016 - Adv Pathophysiology
  AND NRSE5018 - Adv Clinical Pharmacology
  AND NRSE5030 - Scholarly Writing
  AND NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
  AND NRSE6002 - Health Policy Leadership
  AND NRSE6050 - Quality/Translation
  AND NRSE6713 - Systems Mgmt

Additional Comments:

BSN-DNP Concentration Requirements (42 hours)
Type
Completion Requirement

Concentration Requirements

Complete ALL of the following Courses:
- NRSE5301 - Ped Health Assess & Msmt-TTU
  AND NRSE5302 - Ped. Pharmacotherapeutics-TTU
  AND NRSE5304 - Hlth Prom of Growing Child-TTU
- NRSE5305 - Ped Pri Care I: Well Child-TTU
  AND NRSE5306 - Ped Pri Care II:Ep & Minor-TTU
  AND NRSE5307 - Ped Pri Care III:Chron Ill-TTU
- NRSE5308 - Cont Iss in Adol Hlth Care-TTU
  AND NRSE5309 - Ped Behav & Mntl Hlth Iss-TTU
  AND NRSE5310 - Abused or Neglected Child-TTU
  AND NRSE5311 - APN Ped Pri Care Prac I-TTU
  AND NRSE5312 - APN Ped Pri Care Pract II-TTU
  AND NRSE5313 - APN Ped Pri Care Pract III-TTU
  AND NRSE6311 - Adv Fam Sys Assess & Eval-TTU
  AND NRSE6312 - Epidem. At-Risk Famlies-TTU
  AND NRSE6313 - Ldsp & Collab App Ped Hlth-TTU
  AND NRSE6310 - Ped. Health Care Deliv.Sys

Optional Electives (0-3 hours)

Complete ALL of the following Courses:
- NRSE6314 - Pediatric Palliative Care-TTU
- NRSE6315 - Genet Infl. Child-Fam Hlth-TTU
  AND NRSE6316 - Prov School-Bsd Hlth Care

DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
  AND NRSE6802 - DNP Project Development
  AND NRSE6803 - DNP Project Implementation
  AND NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

MSN-DNP Degree Requirements (35 hours)
Type
Completion Requirement

MSN-DNP Core Requirements (11 hours)

Complete ALL of the following Courses:
- NRSE5030 - Scholarly Writing
- NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr
- NRSE6050 - Quality/Translation
- NRSE6713 - Systems Mgmt

MSN-DNP Concentration Requirements (12 hours)

Complete ALL of the following Courses:
- NRSE6310 - Ped. Health Care Deliv.Sys
- NRSE6311 - Adv Fam Sys Assess & Eval-TTU
- NRSE6312 - Epidem. At-Risk Famlies-TTU
- NRSE6313 - Ldsp & Collab App Ped Hlth-TTU

MSN-DNP DNP Project (12 hours)

Complete ALL of the following Courses:
- NRSE6801 - DNP Project Identification
- NRSE6802 - DNP Project Development
- NRSE6803 - DNP Project Implementation
- NRSE6804 - DNP Project Evalua & Dissemn

Additional Comments:

No Requirement Level

Additional Information

Information And Additional Notes

Student Retention and Progression Criteria

Required GPA

The DNP graduate student, to remain in good standing, must maintain an overall grade point average of 3.0 (B) or better on all graduate work attempted. In order to graduate, students must have a minimum 3.0 GPA overall and on the program of study.

Nursing Requirement

Credit toward a degree objective will be granted for any graduate course in which a grade of A, B, or S is assigned; however, not more than three (3) hours of credit below a B grade is allowed.

If a student's grade is lower than "B," s/he may repeat a course. However, no more than one required course may be repeated. In repeating a course, the previous grade as well as the grade earned from the repeated course will be calculated into the subsequent GPA. Students will be dismissed from the program if they do not meet the requirements in this policy.

Incomplete (I) Grade

An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Time extension requests for removal of an "I" grade must be submitted by the instructor of record to (and approved by) the home school's graduate school Dean before the allotted time expires. An "I" grade not completed within the one year time frame will be converted to an "F."

Academic Probation: Unsatisfactory Performance

When the cumulative GPA falls below 3.0, the graduate student will be placed on academic probation for the following semester. If the student does not achieve a 3.0 cumulative grade point average at the conclusion of one probationary semester, his/her home school's Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. No students will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an average GPA of 3.0 after one semester may be subject to dismissal without a probationary term.

Dismissal

If the student does not achieve a 3.0 cumulative GPA at the conclusion of one probationary semester, the ETSU or TTU Dean of the School of Graduate Studies and appropriate college/departmental/program officials will determine whether the student should be dismissed from graduate study or continued on probation. At the end of the second probationary semester a student whose cumulative GPA is still below 3.0 will be dismissed from graduate study. A student will also be dismissed from graduate study if they receive a second grade below "B."

NURS-AGAC - Nursing, Adult Geriatric Acute Care Nurse Practitioner Concentration, M.S.N.

Program Overview

Program Long Title
Nursing, Adult Geriatric Acute Care Nurse Practitioner Concentration, M.S.N.

College/School
Nursing

Department(s)
Nursing

Catalog Full Description
The Master of Science in Nursing Degree (MSN) is delivered following the standard protocol established for the delivery of online courses and programs. This program will prepare nurses to:

- Teach in a variety of academic and practice settings;
- Provide advanced nursing care to rural, urban, and underserved populations;
- Practice in collaborative and interdisciplinary relationships;
- Assume positions of leadership in the health care delivery system;
- Contribute to the current and evolving body of nursing science; and
- Continue study at the doctoral level.

Coursework
- Core Courses: 12 credit hours

- Advance Practice Courses: 10 credit hours
- Concentration Courses: 24 credit hours

Admission Requirements
Admission Requirements
- Applicant must possess and maintain an unencumbered license to practice as a Registered Nurse in Tennessee or the state in which the clinical assignments are completed.
- Official transcripts from previously attended colleges and/or universities.
- An earned Bachelor's degree with an overall GPA of 3.0 on a 4.0 scale.
- Successful completion of a 3 semester hour or quarter hour undergraduate level Statistics course.
  - For provisional standing admission:
    - an overall undergraduate quality point average of 2.75 - 2.99 on a 4.0 scale, upon completion of a baccalaureate degree program
- Cumulative GPA of 3.0 on a 4.0 scale for all previous graduate studies.
- TOEFL score of 600 (250 CBT) if native language is not English OR IELTS score of 6.0.
- A written document prepared by the applicant that includes a resume, a discussion of prior professional experience, future career goals, and reasons for pursuing graduate study.
- Letters of recommendations from at least three (3) persons (a minimum of one [1] academic) familiar with the applicant's academic and professional background and experience in nursing practice, specifying in detail the applicant's capabilities for graduate study and for future practice as an advanced practice nurse.

Direct Admission
Any TTU BSN graduate with a GPA of 3.2 or higher will be admitted with the following verification:

- Current, unencumbered RN license and eligibility to practice as a Registered Nurse in the state in which clinical assignments are completed.

Students Outside of Tennessee: Only residents of states approved by NC-SARA may apply for online courses. Please check and confirm that your state is eligible before applying.

Degree Requirements and Requisites
Simple Requisites

> **Degree Requirements**
> The Adult Geriatric Acute Care Nurse Practitioner (ACAGNP) is a concentration in the Master of Science in Nursing (MSN) program.
>
> Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)
>
> - Required GPA:
>   - Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point

average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;

◦ In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.

◦ MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.

◦ If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.

◦ Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.

◦ An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree: NURS 4350 (5350) - Healthcare of Communities Cr. 4. NURS 6000 - Theoretical Foundations Cr. 3. NURS 6001 - Health Care Policy Cr. 3. NURS 6002 - Advanced Nursing Research Cr. 3. NURS 6003 - Advanced Role Development Cr. 3.

Adult Geriatric Acute Care Nurse Practitioner (ACAGNP) Concentration Type
Completion Requirement

Core Courses (12 Credit Hours)

Complete ALL of the following Courses:
- NURS6000 - Theoretical Foundations
- NURS6001 - Health Care Policy
- NURS6002 - Advanced Nursing Research
- NURS6003 - Adv Role Development

Advance Practice Courses (10 Credit Hours)

Complete ALL of the following Courses:
- NURS6101 - Adv Health Assessment
- NURS6102 - Adv Health Assmt/Clinical
- NURS6103 - Adv Pathophysiology
- NURS6104 - Adv Pharmacology

AGACNP Concentration Courses (24 Credit Hours)

Complete ALL of the following Courses:
- NURS5604 - Adv Patho/Clin Reas I
- NURS5608 - Adv Patho/Clin Reas II
- NURS5610 - Diag Interpret/Thera Mod
- NURS5612 - Acute Cr/Phamacotherapeutics
- NURS5613 - Acute Disease Mgmt Pr I
- NURS5616 - Int in Acute Care NP Practice
- NURS6021 - App - Adv Skills in Acute Care
- NURS6023 - Palliative Care & the APN

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
Not Available.

NURS-NUAD - Nursing, Nursing Administration Concentration, M.S.N.

Program Overview
Program Long Title
Nursing, Nursing Administration Concentration, M.S.N.

College/School
Nursing

Department(s)
Nursing

Catalog Full Description
The Master of Science in Nursing Degree (MSN) is delivered following the standard protocol established for the delivery of online courses and programs. This program will prepare nurses to:

- Teach in a variety of academic and practice settings;
- Provide advanced nursing care to rural, urban, and underserved populations;
- Practice in collaborative and interdisciplinary relationships;
- Assume positions of leadership in the health care delivery system;
- Contribute to the current and evolving body of nursing science; and
- Continue study at the doctoral level.

The purposes of the MSN Program are:

- To increase access to graduate nursing education, especially for those nurses aspiring to teach in entry level nursing programs, manage professional practice work settings, and practice as advanced clinicians in a changing health care delivery system.

- To maximize the effective use of technology for delivery of graduate-level instruction. Distance delivery through the use of technology will increase access to graduate education, especially in remote areas of the state and for practicing nurses for whom time flexibility is a critical resource.

- To provide student access to web-based courses and degree programs. Web-based courses will reach populations not currently enrolled in graduate education, and will also permit students who are currently enrolled in on-campus courses to take additional courses, thus completing their programs sooner.

Coursework

- **MSN Core:** 15 hours
- **Concentration Core:** 15 hours
- **Practicum:** 6 hours
- **Total:** 36 hours

Admission Requirements

Admission Requirements

- Applicant must possess and maintain an unencumbered license to practice as a Registered Nurse in Tennessee or the state in which the clinical assignments are completed.

- Official transcripts from previously attended colleges and/or universities.

- An earned Bachelor's degree with an overall GPA of 3.0 on a 4.0 scale.

- Successful completion of a 3 semester hour or quarter hour undergraduate level Statistics course.

  - For provisional standing admission:

    - an overall undergraduate quality point average of 2.75 - 2.99 on a 4.0 scale, upon completion of a baccalaureate degree program

- Cumulative GPA of 3.0 on a 4.0 scale for all previous graduate studies.

- TOEFL score of 600 (250 CBT) if native language is not English OR IELTS score of 6.0.

- A written document prepared by the applicant that includes a resume, a discussion of prior professional experience, future career goals, and reasons for pursuing graduate study.

- Letters of recommendations from at least three (3) persons (a minimum of one [1] academic) familiar with the applicant's academic and professional background and experience in nursing practice, specifying in detail the applicant's capabilities for graduate study and for future practice as an advanced practice nurse.

Direct Admission

Any TTU BSN graduate with a GPA of 3.2 or higher will be admitted with the following verification:

- Current, unencumbered RN license and eligibility to practice as a Registered Nurse in the state in which clinical assignments are completed.

Students Outside of Tennessee: Only residents of states approved by NC-SARA may apply for online courses. Please check and confirm that your state is eligible before applying.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)

- Required GPA:

  - 1. Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;

  - 2. In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.

  - 3. MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.

  - 4. If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.

  - 5. Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.

  - 6. An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

BSN to MSN Degree Requirements

- **MSN Core:** 15 hours
- **Concentration Core:** 15 hours
- **Practicum:** 6 hours
- **Total:** 36 hours

**BSN to MSN Degree Requirements
Type**
Completion Requirement

MSN Core Courses (15 hours)

Complete ALL of the following Courses:
- NURS6000 - Theoretical Foundations
- NURS6001 - Health Care Policy
- NURS6002 - Advanced Nursing Research
- NURS6003 - Adv Role Development
- NURS6990 - Scholarly Synthesis

Nursing Administration Concentration Required Courses (15 Hours)

Complete ALL of the following Courses:
- NURS6301 - Nursing Administration I
- NURS6302 - Nursing Administration II
- NURS6303 - Health Care Finance
- NURS6304 - Human Res Mgmt
- NURS6305 - Quality Mgmt in Nursing & Hlth

Nursing Administration Concentration Practicum Requirements (6 hours)

Complete ALL of the following Courses:
- NURS6309 - Nursing Admin Practicum
- NURS6307 - Nursing Management Practicum

Additional Comments:

Total practice contact hours = 360

**ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option
Type**
Completion Requirement

Required Courses

The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree:

Complete ALL of the following Courses:
- NURS4350 - Hlth Care of Comm (RN-BSN)
- NURS6000 - Theoretical Foundations
- NURS6001 - Health Care Policy
- NURS6002 - Advanced Nursing Research
- NURS6003 - Adv Role Development

Additional Comments:

No Requirement Level

NURS-NUED - Nursing, Nursing Education Concentration, M.S.N.

Program Overview

Program Long Title
Nursing, Nursing Education Concentration, M.S.N.

College/School
Nursing

Department(s)
Nursing

Catalog Full Description
The Master of Science in Nursing Degree (MSN) is delivered following the standard protocol established for the delivery of online courses and programs. This program will prepare nurses to:

- Teach in a variety of academic and practice settings;
- Provide advanced nursing care to rural, urban, and underserved populations;
- Practice in collaborative and interdisciplinary relationships;
- Assume positions of leadership in the health care delivery system;
- Contribute to the current and evolving body of nursing science; and
- Continue study at the doctoral level.

The purposes of the MSN Program are:

- To increase access to graduate nursing education, especially for those nurses aspiring to teach in entry level nursing programs, manage professional practice work settings, and practice as advanced clinicians in a changing health care delivery system.
- To maximize the effective use of technology for delivery of graduate-level instruction. Distance delivery through the use of technology will increase access to graduate education, especially in remote areas of the state and for practicing nurses for whom time flexibility is a critical resource.
- To provide student access to web-based courses and degree programs. Web-based courses will reach populations not currently enrolled in graduate education, and will also permit students who are currently enrolled in on-campus courses to take additional courses, thus completing their programs sooner.

Coursework

- **MSN Core:** 15 hours
- **Concentration Core:** 20 hours
- **Practicum:** 5 hours
- **Total:** 40 hours

Admission Requirements

Admission Requirements
- Applicant must possess and maintain an unencumbered license to practice as a Registered Nurse in Tennessee or the state in which the clinical assignments are completed.
- Official transcripts from previously attended colleges and/or universities.
- An earned Bachelor's degree with an overall GPA of 3.0 on a 4.0 scale.

- Successful completion of a 3 semester hour or quarter hour undergraduate level Statistics course.

  ◦ For provisional standing admission:

    ▪ an overall undergraduate quality point average of 2.75 - 2.99 on a 4.0 scale, upon completion of a baccalaureate degree program

- Cumulative GPA of 3.0 on a 4.0 scale for all previous graduate studies.

- TOEFL score of 600 (250 CBT) if native language is not English OR IELTS score of 6.0.

- A written document prepared by the applicant that includes a resume, a discussion of prior professional experience, future career goals, and reasons for pursuing graduate study.

- Letters of recommendations from at least three (3) persons (a minimum of one [1] academic) familiar with the applicant's academic and professional background and experience in nursing practice, specifying in detail the applicant's capabilities for graduate study and for future practice as an advanced practice nurse.

Direct Admission

Any TTU BSN graduate with a GPA of 3.2 or higher will be admitted with the following verification:

- Current, unencumbered RN license and eligibility to practice as a Registered Nurse in the state in which clinical assignments are completed.

Students Outside of Tennessee: Only residents of states approved by NC-SARA may apply for online courses. Please check and confirm that your state is eligible before applying.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)

- Required GPA:

  ◦ 1. Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;

  ◦ 2. In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.

  ◦ 3. MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.

  ◦ 4. If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate

student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.

  ◦ 5. Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.

  ◦ 6. An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

BSN to MSN Degree Requirements

- **MSN Core:** 15 hours

- **Concentration Core:** 20 hours

- **Practicum:** 5 hours

- **Total:** 40 hours

BSN to MSN Degree Requirements
Type
Completion Requirement

MSN Core Courses (15 hours)

Complete ALL of the following Courses:
- NURS6000 - Theoretical Foundations
- NURS6001 - Health Care Policy
- NURS6002 - Advanced Nursing Research
- NURS6003 - Adv Role Development
- NURS6990 - Scholarly Synthesis

Nursing Education Concentration Required Courses (20 Hours)

Complete ALL of the following Courses:
- NURS6101 - Adv Health Assessment
- NURS5009 - Health Assessment Lifespan
- NURS6103 - Adv Pathophysiology
- NURS6104 - Adv Pharmacology
- NURS6204 - Curriculum Design/Ed Theory
- NURS6205 - Eval Methods in Nursing Edu
- NURS6210 - Innovative Teaching Strategies
- NURS6211 - Trends in Healthcare Mgmt
- NURS6212 - Preparation for Certification

Nursing Education Concentration Practicum Requirements (5 hours)

Complete ALL of the following Courses:
- NURS6309 - Nursing Admin Practicum
- NURS6307 - Nursing Management Practicum

Additional Comments:

Total practice contact hours = 360

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option
Type
Completion Requirement

Required Courses

The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree:

Complete ALL of the following Courses:
- NURS4350 - Hlth Care of Comm (RN-BSN)
- NURS6000 - Theoretical Foundations
- NURS6001 - Health Care Policy
- NURS6002 - Advanced Nursing Research
- NURS6003 - Adv Role Development

Additional Comments:

No Requirement Level

NURS-NUFP - Nursing, Family Nurse Practitioner Concentration, M.S.N.

Program Overview

Program Long Title
Nursing, Family Nurse Practitioner Concentration, M.S.N.

College/School   **Department(s)**
Nursing   Nursing

Catalog Full Description

Overview

The Master of Science in Nursing Degree (MSN) is delivered following the standard protocol established for the delivery of online courses and programs. This program will prepare nurses to:

- Teach in a variety of academic and practice settings;
- Provide advanced nursing care to rural, urban, and underserved populations;
- Practice in collaborative and interdisciplinary relationships;
- Assume positions of leadership in the health care delivery system;
- Contribute to the current and evolving body of nursing science; and
- Continue study at the doctoral level.

The purposes of the MSN Program are:

- To increase access to graduate nursing education, especially for those nurses aspiring to teach in entry level nursing programs, manage professional practice work settings, and practice as advanced clinicians in a changing health care delivery system.

- To maximize the effective use of technology for delivery of graduate-level instruction. Distance delivery through the use of technology will increase access to graduate education, especially in remote areas of the state and for practicing nurses for whom time flexibility is a critical resource.

- To provide student access to web-based courses and degree programs. Web-based courses will reach populations not currently enrolled in graduate education, and will also permit students who are currently enrolled in on-campus courses to take additional courses, thus completing their programs sooner.

Coursework

- **MSN Core Courses:** 14 hours
- **Advanced Practice Concentration Required Courses:** 10 hours
- **Required Concentration Courses:** 22 hours
- **Total:** 46 hours

Admission Requirements

Admission Requirements
- Applicant must possess and maintain an unencumbered license to practice as a Registered Nurse in Tennessee or the state in which the clinical assignments are completed.

- Official transcripts from previously attended colleges and/or universities.

- An earned Bachelor's degree with an overall GPA of 3.0 on a 4.0 scale.

- Successful completion of a 3 semester hour or quarter hour undergraduate level Statistics course.

  - For provisional standing admission:

    - an overall undergraduate quality point average of 2.75 - 2.99 on a 4.0 scale, upon completion of a baccalaureate degree program

- Cumulative GPA of 3.0 on a 4.0 scale for all previous graduate studies.

- TOEFL score of 600 (250 CBT) if native language is not English OR IELTS score of 6.0.

- A written document prepared by the applicant that includes a resume, a discussion of prior professional experience, future career goals, and reasons for pursuing graduate study.

- Letters of recommendations from at least three (3) persons (a minimum of one [1] academic) familiar with the applicant's academic and professional background and experience in nursing practice, specifying in detail the applicant's capabilities for graduate study and for future practice as an advanced practice nurse.

Direct Admission

Any TTU BSN graduate with a GPA of 3.2 or higher will be admitted with the following verification:

- Current, unencumbered RN license and eligibility to practice as a Registered Nurse in the state in which clinical assignments are completed.

  Students Outside of Tennessee: Only residents of states approved by NC-SARA may apply for online courses. Please check and confirm that your state is eligible before applying.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)
- Required GPA:
  - Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;
  - In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.
  - MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.
  - If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.
  - Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.
  - An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree: NURS 4350 (5350) - Healthcare of Communities Cr. 4. NURS

6000 - Theoretical Foundations Cr. 3. NURS 6001 - Health Care Policy Cr. 3. NURS 6002 - Advanced Nursing Research Cr. 3. NURS 6003 - Advanced Role Development Cr. 3.

BSN to MSN Degree Requirements

- **MSN Core Courses:** 14 hours
- **Advanced Practice Concentration Required Courses:** 10 hours
- **Required Concentration Courses:** 22 hours
- **Total:** 46 hours

BSN to MSN Degree Requirements
Type
Completion Requirement

MSN Core Courses (14 hours)

Complete ALL of the following Courses:
- NURS6000 - Theoretical Foundations
- NURS6001 - Health Care Policy
- NURS6002 - Advanced Nursing Research
- NURS6003 - Adv Role Development
- NURS6910 - Role Trans to Cert/Practice

Family Nurse Practitioner Concentration Advanced Practice Concentration Required Courses (10 hours)

Complete ALL of the following Courses:
- NURS6101 - Adv Health Assessment
  OR NURS5009 - Health Assessment Lifespan
- NURS6102 - Adv Health Assmt/Clinical
- NURS6103 - Adv Pathophysiology
- NURS6104 - Adv Pharmacology

Family Nurse Practitioner Concentration Required Concentration Courses (22 hours)

Complete ALL of the following Courses:
- NURS6610 - Adult Health Primary Care I
- NURS6611 - Adult Hlth Primary Care I Pra
- NURS6612 - Adult Health Primary Care II
- NURS6613 - Adult Hlth II PrimycarePrctcm
- NURS6614 - Primary Care Ped & Wmn Hlth
- NURS6615 - Primary Care/Family: Practicum
- NURS6616 - Final FNP Preceptorship
- NURS6910 - Role Trans to Cert/Practice

Additional Comments:

Total practice contact hours = 540

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option
Type
Completion Requirement

Required Courses

The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree:

Complete ALL of the following Courses:
- NURS4350 - Hlth Care of Comm (RN-BSN)

- NURS6000 - Theoretical Foundations
- NURS6001 - Health Care Policy
- NURS6002 - Advanced Nursing Research
- NURS6003 - Adv Role Development

Additional Comments:

No Requirement Level

NURS-PMHN - Nursing, Psychiatric/Mental Health Nurse Practitioner Concentration, M.S.N.

Program Overview

Program Long Title
Nursing, Psychiatric/Mental Health Nurse Practitioner Concentration, M.S.N.

College/School   **Department(s)**
Nursing   Nursing

Catalog Full Description
The Master of Science in Nursing Degree (MSN) is delivered following the standard protocol established for the delivery of online courses and programs. This program will prepare nurses to:

- Teach in a variety of academic and practice settings;
- Provide advanced nursing care to rural, urban, and underserved populations;
- Practice in collaborative and interdisciplinary relationships;
- Assume positions of leadership in the health care delivery system;
- Contribute to the current and evolving body of nursing science; and
- Continue study at the doctoral level.

The purposes of the MSN Program are:

- To increase access to graduate nursing education, especially for those nurses aspiring to teach in entry level nursing programs, manage professional practice work settings, and practice as advanced clinicians in a changing health care delivery system.
- To maximize the effective use of technology for delivery of graduate-level instruction. Distance delivery through the use of technology will increase access to graduate education, especially in remote areas of the state and for practicing nurses for whom time flexibility is a critical resource.
- To provide student access to web-based courses and degree programs. Web-based courses will reach populations not currently enrolled in graduate education, and will also permit students who are currently enrolled in on-campus courses to take additional courses, thus completing their programs sooner.

Coursework

- **MSN Core Courses:** 14 hours
- **Advanced Practice Courses:** 10 hours
- **Required Concentration Courses:** 21 hours
- **Total:** 45 hours

Admission Requirements

Admission Requirements

- Applicant must possess and maintain an unencumbered license to practice as a Registered Nurse in Tennessee or the state in which the clinical assignments are completed.
- Official transcripts from previously attended colleges and/or universities.
- An earned Bachelor's degree with an overall GPA of 3.0 on a 4.0 scale.
- Successful completion of a 3 semester hour or quarter hour undergraduate level Statistics course.
  - For provisional standing admission:
    - an overall undergraduate quality point average of 2.75 - 2.99 on a 4.0 scale, upon completion of a baccalaureate degree program
- Cumulative GPA of 3.0 on a 4.0 scale for all previous graduate studies.
- TOEFL score of 600 (250 CBT) if native language is not English OR IELTS score of 6.0.
- A written document prepared by the applicant that includes a resume, a discussion of prior professional experience, future career goals, and reasons for pursuing graduate study.
- Letters of recommendations from at least three (3) persons (a minimum of one [1] academic) familiar with the applicant's academic and professional background and experience in nursing practice, specifying in detail the applicant's capabilities for graduate study and for future practice as an advanced practice nurse.

Direct Admission

Any TTU BSN graduate with a GPA of 3.2 or higher will be admitted with the following verification:

- Current, unencumbered RN license and eligibility to practice as a Registered Nurse in the state in which clinical assignments are completed.

  Students Outside of Tennessee: Only residents of states approved by NC-SARA may apply for online courses. Please check and confirm that your state is eligible before applying.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
Each year 1 in 4 in the United States people will experience mental illness. Those who receive mental health services report improvements in both symptoms and in quality of life, but an alarming number of both children and adults are not receiving this care. There is a growing shortage of mental health providers nationwide and the need for adequate mental health services presents an opportunity for nurses to expand their practice to meet this need.

To address the increasing demand for mental services and providers throughout our state, nation and region, we are offering a Master of Science in Nursing – Psychiatric Mental Health Nurse Practitioner concentration. This concentration prepares graduates to promote mental health and to diagnose and treat mental illnesses in a variety of settings. This degree qualifies graduates to test for certification in this specialty and to then pursue licensure in their respective states as an Advanced Practice Registered Nurse.

Degree Requirements

- Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)
- Required GPA:
  - Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;
  - In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.
  - MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.
  - If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.
  - Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.
  - An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

BSN to MSN Degree Requirements

- **MSN Core Courses:** 14 hours
- **Advanced Practice Courses:** 10 hours
- **Required Concentration Courses:** 21 hours

- **Total:** 45 hours

BSN to MSN Degree Requirements
Type
Completion Requirement

MSN Core Courses (14 hours)

Complete ALL of the following Courses:
- NURS6000 - Theoretical Foundations
- NURS6001 - Health Care Policy
- NURS6002 - Advanced Nursing Research
- NURS6003 - Adv Role Development
- NURS6911 - Trans to Cert/Prac-Psy Nrs Pra

Psychiatric Mental Health Nurse Practitioner Concentration Advanced Practice Concentration Required Courses (10 hours)

Complete ALL of the following Courses:
- NURS6101 - Adv Health Assessment
- NURS6102 - Adv Health Assmt/Clinical
- NURS6103 - Adv Pathophysiology
- NURS6104 - Adv Pharmacology

Psychiatric Mental Health Nurse Practitioner Concentration Required Concentration Courses (21 hours)

Complete ALL of the following Courses:
- NURS6710 - Adv Family Psy Nursing I
- NURS6711 - Adv Family Psy Nurs I: Pract
- NURS6712 - Adv Fam Psy Nursing II
- NURS6713 - Adv Fam Psy Nurs II: Pract
- NURS6714 - Adv Fam Psy Nursing III
- NURS6715 - Adv Fam Psy Nurs III: Pract
- NURS6716 - Final Psy Nurs Preceptorship

Additional Comments:

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option
Type
Completion Requirement

Required Courses

The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree:

Complete ALL of the following Courses:
- NURS4350 - Hlth Care of Comm (RN-BSN)
- NURS6000 - Theoretical Foundations
- NURS6001 - Health Care Policy
- NURS6002 - Advanced Nursing Research
- NURS6003 - Adv Role Development

Additional Comments:

No Requirement Level

Additional Information
Information And Additional Notes

PMNC-CER - Nursing, Post Graduate Certificate for Psychiatric Mental Health Nurse Practitioner

Program Overview

Program Long Title
Nursing, Post Graduate Certificate for Psychiatric Mental Health Nurse Practitioner

College/School
Nursing

Department(s)
Nursing

Catalog Full Description
The PMHNP Post-Graduate Certificate is targeted toward Advance Practice Registered Nurses (Nurse Practitioner) who are seeking a second certification as a PMHNP. This certificate can be completed in a four-semester time frame for current APRN's. Certificate graduates will be eligible to sit for a second certification as a PMHNP.

The certificate is a 23 credit hour and 560 clinical contact hour post-graduate certificate.

Admission Requirements

Admission Requirements
- Minimum of a Master of Science in Nursing from a regionally accredited college/university and nursing program accreditation
- Current, unencumbered Registered Nurse license
- Current certification as an APRN
- A minimum of 3.0 GPA in the last degree earned
- A minimum of a "B" in the 3 "P's" and these courses must be independent courses and address concepts across the lifespan:
    - Advanced Pathophysiology with general principles applied across the lifespan
    - Advanced Pharmacology including pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of all broad classes of pharmacologic agents
    - Advanced Health Assessment with a lab and includes all human systems, advanced assessment techniques and approaches

    (The above courses are available at Tennessee Tech and students can apply for non-degree status to complete these pre-admission requirements)
- Letters of recommendations from three (3) persons familiar with the applicant's academic and professional background and experience in nursing practice, specifying in the detail the applicant's capabilities for graduate study and for future practice as an advance practice nurse.

Degree Requirements and Requisites

Simple Requisites

> **Degree Requirements**
> Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)
>
> - Required GPA:
>   - Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;
>   - In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.
>   - MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.
>   - If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.
>   - Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.
>   - An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree: NURS 4350 (5350) - Healthcare of Communities Cr. 4. NURS 6000 - Theoretical Foundations Cr. 3. NURS 6001 - Health Care Policy Cr. 3. NURS 6002 - Advanced Nursing Research Cr. 3. NURS 6003 - Advanced Role Development Cr. 3.

The certificate is a 23 credit hour and 560 clinical contact hour post-graduate certificate.

> **Certificate Requirements**
> **Type**
> Completion Requirement
>
> > Required Coursework
> >
> > **Complete ALL of the following Courses:**
> > - NURS6710 - Adv Family Psy Nursing I
> > - NURS6711 - Adv Family Psy Nurs I: Pract

- NURS6712 - Adv Fam Psy Nursing II
- NURS6713 - Adv Fam Psy Nurs II: Pract
- NURS6714 - Adv Fam Psy Nursing III
- NURS6715 - Adv Fam Psy Nurs III: Pract
- NURS6716 - Final Psy Nurs Preceptorship
- NURS6911 - Trans to Cert/Prac-Psy Nrs Pra

Additional Comments:

No Requirement Level

PNP-CER - Nursing, Post-Graduate Certificate, Pediatric Nurse Practitioner

Program Overview

Program Long Title
Nursing, Post-Graduate Certificate, Pediatric Nurse Practitioner

College/School
Nursing

Department(s)
Nursing

Catalog Full Description

The Post-Certificate Pediatric Nurse Practitioner program is 23 credit hours and 510 clock hours.

Admission Requirements

Admission Requirements

- Minimum of a Master of Science in Nursing from a regionally accredited college/university and nursing program accreditation

- Current, unencumbered Registered Nurse license

- Current certification as an APRN

- A minimum of 3.0 GPA in the last degree earned

- A minimum of a "B" in the 3 "P's" and these courses must be independent courses and address concepts across the lifespan:

    ◦ Advanced Pathophysiology with general principles applied across the lifespan

    ◦ Advanced Pharmacology including pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of all broad classes of pharmacologic agents

    ◦ Advanced Health Assessment with a lab and includes all human systems, advanced assessment techniques and approaches

- The above courses are available at Tennessee Tech and students can apply for non-degree status to complete these pre-admission requirements

- Letters of recommendations from three (3) persons familiar with the applicant's academic and professional background and experience in nursing practice, specifying in the detail the applicant's capabilities for graduate study and for future practice as an advance practice nurse.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)

- Required GPA:

    ◦ Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;

    ◦ In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.

    ◦ MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.

    ◦ If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.

    ◦ Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.

    ◦ An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree: NURS 4350 (5350) - Healthcare of Communities Cr. 4. NURS 6000 - Theoretical Foundations Cr. 3. NURS 6001 - Health Care Policy Cr. 3. NURS 6002 - Advanced Nursing Research Cr. 3. NURS 6003 - Advanced Role Development Cr. 3.

The Post-Certificate Pediatric Nurse Practitioner program is 23 credit hours and 510 clock hours.

Course Requirements

Type
Completion Requirement

Required Courses

Complete ALL of the following Courses:

- NURS5315 - Hlth Promotio of Growing Child
- NURS5305 - Ped Prim Care I-Well Child
- NURS5311 - Ped Prim Care I-Well Child Pra
- NURS5306 - Ped Prim Care II-Ep/Mnr Ac Iln
- NURS5312 - Adv Ped Nrs Pract II
- NURS5316 - Ped Primary Care III
- NURS5317 - Adv Ped Nurs Pract III
- NURS5314 - Adv Pediatric Precept & Cert

Additional Comments:

No Requirement Level

WHCNP-CER - Nursing, Post-Graduate Certificate, Womens Health Care Nurse Practitioner

Program Overview

Program Long Title
Nursing, Post-Graduate Certificate, Womens Health Care Nurse Practitioner

College/School	Department(s)
Nursing	Nursing

Catalog Full Description
The Post-Graduate Certificate in Women's Health Nurse Practitioner is a 23 credit hour program with 600 contact clinical hours.

Admission Requirements

Admission Requirements

- Minimum of a Master of Science in Nursing from a regionally accredited college/university and nursing program accreditation

- Current, unencumbered Registered Nurse license

- Current certification as an APRN

- A minimum of 3.0 GPA in the last degree earned

- A minimum of a "B" in the 3 "P's" and these courses must be independent courses and address concepts across the lifespan:

  ◦ Advanced Pathophysiology with general principles applied across the lifespan

  ◦ Advanced Pharmacology including pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of all broad classes of pharmacologic agents

  ◦ Advanced Health Assessment with a lab and includes all human systems, advanced assessment techniques and approaches

  (The above courses are available at Tennessee Tech and students can apply for non-degree status to complete these pre-admission requirements)

- Letters of recommendations from three (3) persons familiar with the applicant's academic and professional background and experience in nursing practice, specifying in the detail the applicant's capabilities for graduate study and for future practice as an advance practice nurse.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
Follow the Graduate School Grading System as published in the TTU Graduate School Catalog. (NOTE: only grades of A, B, and S are considered satisfactory at the graduate nursing level.)

- Required GPA:

  ◦ Students in graduate nursing programs must meet the requirements of the School of Graduate Studies to remain in good standing. An overall grade point average (GPA) of 3.0 (B) or better must be maintained in order to graduate. Only grades of A, B and S are considered satisfactory in the graduate nursing level;

  ◦ In addition, a graduate nursing student must achieve a grade of "B" or better in every graduate nursing course. Policies of the School of Graduate Studies for progression will apply.

  ◦ MSN students who earn less than a "B" in a required course will have one opportunity to repeat the course. The course must be repeated at the next available opportunity. Students may only repeat two required courses. The repeated grade and the original grade will be averaged into the student's overall GPA.

  ◦ If a student's cumulative grade point average falls below 3.0, she/he will be placed on academic probation at the end of that semester. Any graduate student placed in probationary Academic Standing at the end of a semester must return to Good Academic Standing by the end of the next enrolled semester. No student will be allowed more than two probationary semesters, whether consecutive or cumulative. At the end of a second probationary semester, a student whose cumulative grade point average is still below 3.0 will be dismissed from graduate study.

  ◦ Students whose performance results in a GPA so far below 3.0 as to make it mathematically impossible to attain an overall GP A of 3 .0 after one semester may be subject to dismissal without a probationary term.

  ◦ An incomplete grade ("I") indicates that the student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course work for which the "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Students with more than one "I" grade cannot progress in the program. Time extension requests for removal of an "I" grade must be submitted to and approved by the Dean of College of Graduate Studies before the allotted time expires. An "I" grade not removed under the guidelines in the Graduate Catalog will be converted to an "F."

ADN or Diploma Graduate with a Bachelor's Degree in another Discipline Accelerated Option The following pathway is provided allowing a registered nurse with a bachelor's degree in another field to complete their Master's in Nursing degree: NURS 4350 (5350) - Healthcare of Communities Cr. 4. NURS 6000 - Theoretical Foundations Cr. 3. NURS 6001 - Health Care Policy Cr. 3. NURS 6002 - Advanced Nursing Research Cr. 3. NURS 6003 - Advanced Role Development Cr. 3.

The Post-Graduate Certificate in Women's Health Nurse Practitioner is a 23 credit hour program with 600 contact clinical hours.

Certificate Requirements
Type
Completion Requirement

Required Coursework (23 Credit Hours)

Complete ALL of the following Courses:
- NURS5701 - Pharm for Women's Health
- NURS5702 - Women's Health Adv Pract I:GYN

- NURS5710 - Primary Care for Women's Hlth
- NURS5711 - Women's Hlth/Adv Pra IV: Pract
- NURS5712 - Women's Health Adv Pract II:OB
- NURS5713 - Complex Issues in Women's Hlth
- NURS5714 - WmnsHlth/Adv Pract I:GYNPrctm
- NURS5715 - WmnsHlth/Adv Pract II:OBPrctm
- NURS5716 - Women's Hlth/Adv Pract III:Pra

Additional Comments:

No Requirement Level

Courses

BSTA5030 - Biostats

General

College/School
Whitson-Hester School of Nurs

Course Title
Biostats

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
BSTA

Course Number
5030

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

BSTA5310 - Biostatistics

General

College/School
Whitson-Hester School of Nurs

Course Title
Biostatistics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
BSTA

Course Number
5310

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

NRSE5000 - Concep Sys for Adv Nurs Prac

General

College/School
Whitson-Hester School of Nurs

Course Title
Concep Sys for Adv Nurs Prac

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5000

Credit Hours

Credit Hours Min
3

Course Description
The philosophical dimensions of the processes of ways of knowing and conceptualization which are linked to research and practice are introduced. Analysis and evaluation of nursing and related concepts, theories, and models are correlated with theory development, research, and practice. (fall)

Requisites

Simple Requisites

Prerequisite(s): Admission to the graduate program. Enrollment is restricted to the College of Nursing students.

NRSE5001 - Nsg Res/Ev-based Prac-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Nsg Res/Ev-based Prac-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5001

Credit Hours

Credit Hours Min
3

Course Description

Prerequisite(s): Admission to the graduate program or permission of instructor. Enrollment is restricted to the College of Nursing students. This course provides students with an understanding of the methodology of research in nursing, evaluation of research design and the critical appraisal of the results of research. Application to clinical problems is central to the course.

NRSE5006 - Adv Role Development

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Role Development

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5006

Credit Hours

Credit Hours Min
3

Course Description

Explore, analyze, and evaluate issues in nursing and other discipline relevant to clinical practice, administration, education, and research issues. Discussion will focus on issues generated by role conflict and ambiguities in practice. Topics promoting the development of negotiation, entrepreneurial, contract development, and financial management skills are addressed in relation to roles of advanced nursing.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE5008 - AdvPath & ClinAcuteMgmt II

General

College/School
Whitson-Hester School of Nurs

Course Title
AdvPath & ClinAcuteMgmt II

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5008

Credit Hours

Credit Hours Min
3

Course Description

Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE5009 - Advanced Health Assessment Throughout the Life Span

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv. Health Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5009

Credit Hours

Credit Hours Min
3

Course Description

Advanced health assessment focuses on the assessment of the total health status of individual and family clients throughout the life span. Emphasis is placed on the decision-making processes to differentiate normal from abnormal health status. Content includes predictable pathological findings and the mechanisms underlying them.

Requisites

Simple Requisites

> **Prerequisite:** None
>
> **Corequisite**: NURS6102 Adv Health Assmt/Clinical or none if Nursing Education

NRSE5010 - Advanced Health Assessment Throughout the Life Span Practicum

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv. Health Assmnt Practicum

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5010

Credit Hours

Credit Hours Min
3

Course Description

This practicum provides the student with opportunities to conduct advanced health assessment focusing on the assessment of the total health status of individual and family clients throughout the life span. Emphasis is placed on the decision-making processes which differentiate normal from abnormal health status. The practicum includes extensive laboratory practice and clinical placements.

Requisites

No Requirements

NRSE5011 - Hlth Prom, Treat, Middle Adult

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Prom, Treat, Middle Adult

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5011

Credit Hours

Credit Hours Min
3

NRSE5012 - Hlth Prom Middle Prac

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Prom Middle Prac

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5012

Credit Hours

Credit Hours Min
3

NRSE5013 - Hlth Promotion Older Adults

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Promotion Older Adults

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5013

Credit Hours

Credit Hours Min
3

NRSE5014 - Hlth Pro Older Adult Practicum

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Pro Older Adult Practicum

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5014

Credit Hours

Credit Hours Min
3

NRSE5016 - Adv Pathophysiology

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Pathophysiology

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5016

Credit Hours

Credit Hours Min
3

Course Description
This course is a study of the reaction of the body as a whole to disease throughout the life span. The focus is on alterations in biological processes which affect the body¿s dynamic equilibrium and a conceptual approach that is designed to integrate knowledge from the basic and clinical sciences. Alterations at the cellular and organ level are presented. These alterations include metabolic, infectious, immunologic, degenerative, and neoplastic processes.

Requisites

Simple Requisites

Prerequisite(s): Admission to graduate study or permission of instructor. Enrollment is restricted to the College of Nursing students.

NRSE5018 - Adv Clinical Pharmacology

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Clinical Pharmacology

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5018

Credit Hours

Credit Hours Min
3

Course Description
Provides an intense exploration of pharmacological agents used to treat common recurrent health problems of clients across the life-span. Indications, contraindications, and interactions of pharmacological agents commonly used in primary health care settings are presented. The professional role of the DNP in relation to prescriptive authority is examined.

Requisites

Simple Requisites

Prerequisites: None

NRSE5021 - Life Span Women's Health

General

College/School
Whitson-Hester School of Nurs

Course Title
Life Span Women's Health

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5021

Credit Hours

Credit Hours Min
2

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
This course focuses on nursing care of women experiencing health and developmental transitions. Biopsychosocial interactions during the childbearing cycle, as well as other health concerns of women which affect the family system such as infertility and family planning, are examined. The role of the nurse at an advanced level of practice in various settings including under-served, rural, and urban populations is explored. Nursing strategies for illness prevention, health promotion, and clinical management of acute and chronic situational health crises are examined. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

> **Prerequisites:** NRSE5000 Concep Sys for Adv Nurs Prac, NRSE5009 Adv. Health Assessment, and NRSE5010 Adv. Health Assmnt Practicum
>
> Corequisites: NRSE5022 Life Assess Cl Mgmt Wom Hlth.

NRSE5022 - Life Assess Cl Mgmt Wom Hlth

General

College/School
Whitson-Hester School of Nurs

Course Title
Life Assess Cl Mgmt Wom Hlth

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5022

Credit Hours

Credit Hours Min
2

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
The focus of this practicum is delivery of advanced nursing care to women. Various clinical settings with under-served, rural, and urban populations will be employed for clinical practice. The role of an advanced nurse generalist in case management is undertaken by the student, in collaboration with nursing faculty and clinical preceptors. The student will provide care, coordinate services, and collaborate with others as appropriate.

Requisites

Simple Requisites

> **Prerequisite(s):** NRSE5010 Adv. Health Assmnt Practicum. Enrollment is restricted to the College of Nursing students.

NRSE5023 - Hlth Prom Mgmt Chld & Ad

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Prom Mgmt Chld & Ad

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5023

Credit Hours

Credit Hours Min
2

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Prerequisites: NRSE 5009 and 5010. Enrollment is restricted to the College of Nursing students. Corequisites: NRSE 5016 and 5018. This course focuses on the delivery of advanced practice nursing care to children and adolescents in rural, urban, and underserved populations. (spring)

Requisites

Simple Requisites

> **Prerequisites:** NRSE5009 Adv. Health Assessment and NRSE5010 Adv. Health Assmnt Practicum. Enrollment is restricted to the College of Nursing students.
>
> **Corequisites:** NRSE5016 Adv Pathophysiology and NRSE5018 Adv Clinical Pharmacology.

NRSE5024 - Hlth Pr/Di & Cl Mgt/C&A Pr

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Pr/Di & Cl Mgt/C&A Pr

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5024

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the delivery of advanced practice nursing care to children and adolescents. (spring)

Requisites

Simple Requisites

> **Prerequisites:** Enrollment is restricted to the College of Nursing students.
>
> **Corequisite:** NRSE5023 Hlth Prom Mgmt Chld & Ad.

NRSE5029 - Supervised Research-ETSU

General

College/School
Whitson-Hester School of Nurs

Course Title
Supervised Research-ETSU

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5029

Credit Hours

Credit Hours Min
0

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite:** None

NRSE5030 - Scholarly Writing

General

College/School
Whitson-Hester School of Nurs

Course Title
Scholarly Writing

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5030

Credit Hours

Credit Hours Min
1

Course Description
This didactic course is designed to provide nursing graduate students with the knowledge and skills to master professional writing. Students focus on the components of academic writing that are required for the development of a dissertation or scholarly project proposal as well as future publications. The development of evidence tables, critical literature reviews and peer review will be covered.

Requisites

Simple Requisites

> **Prerequisite:** None

NRSE5040 - Telehealth/Intrprof Hlthcr

General

College/School
Whitson-Hester School of Nurs

Course Title
Telehealth/Intrprof Hlthcr

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5040

Credit Hours

Credit Hours Min
3

Course Description
This course provides an introduction to telehealth designed for students enrolled in health-related programs or healthcare professional seeking additional knowledge in telehealth to enhance the provision of quality of care. The course provides an introduction to the use of telehealth to improve access to care and to improve patient health outcomes. A special emphasis is placed on interprofessional collaboration and the use of technology-based modalities to optimize healthcare delivery especially to patients in rural and underserved populations

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE5100 - Pr/Pop Hlth/Dt Anl/Adv Nurs Pr

General

College/School
Whitson-Hester School of Nurs

Course Title
Pr/Pop Hlth/Dt Anl/Adv Nurs Pr

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5100

Credit Hours

Credit Hours Min
4

Course Description
This course will explore the ever-changing world of population health. Students will explore the role of age, gender, race, genetics, lifestyle, and environmental factors in regards to health and outcomes. Rates, prevalence and incidence of disease will be examined, and the role of technology in population health will be discussed. Students will use evidence-based research to identify needs of specific populations, and use best practice guidelines to propose ways to address these needs.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE5301 - Ped Health Assess & Msmt-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Ped Health Assess & Msmt-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5301

Credit Hours

Credit Hours Min
1

Course Description
Builds on knowledge of advanced practice health assessment skills to assist the advanced practice pediatric nurse in varying health assessment techniques and diagnostic interpretation for the pediatric patient. Developmental, age-appropriate, and opportunistic approaches are emphasized.

NRSE5302 - Ped. Pharmacotherapeutics-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Ped. Pharmacotherapeutics-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5302

Credit Hours

Credit Hours Min
2

Course Description
Builds on knowledge of advanced clinical pharmacology to assist the advanced practice pediatric nurse in application of pharmacotherapeutics specific to the pediatric patient. The impact of pediatric physiology on pharmacotherapeutics and the advanced practice pediatric nurse's role in prescribing safety is emphasized.

NRSE5303 - Psychopharmacology

General

College/School
Whitson-Hester School of Nurs

Course Title
Psychopharmacology

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5303

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to familiarize health profession students with the basic principles of psychopharmacology and to explore medications used to treat psychiatric disorders. The physiological basis of mental illness will be reviewed and the pharmacologic, pharmodynamic principles of medications used in mental health care examined.

Requisites

Simple Requisites

> **Prerequisite(s):** Admission to the master's nursing program or permission of instructor. Enrollment is restricted to the College of Nursing students.

NRSE5304 - Hlth Prom of Growing Child-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Prom of Growing Child-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5304

Credit Hours

Credit Hours Min
3

Course Description
Lifespan growth, behavior, and development from birth to adolescence are examined. Health promotion within the context of lifespan development is emphasized. Psychosocial, family, and attachment theories in relation to child and family health are explored.

NRSE5305 - Ped Pri Care I: Well Child-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Ped Pri Care I: Well Child-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5305

Credit Hours

Credit Hours Min
3

Course Description
Health promotion within the context of illness, disease, or injury prevention is examined. The importance of frequent wellness assessments and early intervention in relation to developmental risk and disability is emphasized. The role of the advanced practice pediatric nurse in care of the well child is explored.

NRSE5306 - Ped Pri Care II:Ep & Minor-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Ped Pri Care II:Ep & Minor-TTU	Doctoral
Course Subject Code	**Course Number**
NRSE	5306

Credit Hours

Credit Hours Min
3

Course Description

The role of the advanced practice pediatric nurse in care of the child with episodic and minor acute illness is explored. Pathophysiology, epidemiology, risk factors, screening and diagnostic tests, management, and patient education around episodic and minor acute illness is emphasized.

NRSE5307 - Ped Pri Care III:Chron Ill-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Ped Pri Care III:Chron Ill-TTU	Doctoral
Course Subject Code	**Course Number**
NRSE	5307

Credit Hours

Credit Hours Min
2

Course Description

The role of the advanced practice pediatric nurse in care of the child with chronic illness, disability, and complex conditions is explored. Pathophysiology, epidemiology, risk factors, screening and diagnostics, management and patient education around chronic illness, disability, and complex conditions is examined. The importance of continuity of care is emphasized.

NRSE5308 - Cont Iss in Adol Hlth Care-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Cont Iss in Adol Hlth Care-TTU	Doctoral
Course Subject Code	**Course Number**
NRSE	5308

Credit Hours

Credit Hours Min
2

Course Description

Current and contemporary issues in school-age and adolescent health care are addressed. The impact of environment, peer dynamic, psychosocial, and biophysical changes on these age groups is emphasized.

NRSE5309 - Ped Behav & Mntl Hlth Iss-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Ped Behav & Mntl Hlth Iss-TTU	Doctoral
Course Subject Code	**Course Number**
NRSE	5309

Credit Hours

Credit Hours Min
2

Course Description

Common pediatric behavioral and mental health issues are examined. Integrative management approaches are identified and evaluated. Models and systems of pediatric behavioral and mental health care are explored.

NRSE5310 - Abused or Neglected Child-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Abused or Neglected Child-TTU	Doctoral
Course Subject Code	**Course Number**
NRSE	5310

Credit Hours

Credit Hours Min
2

Course Description

Using a case-based approach, the abused or neglected child is discussed. Risk factors for child abuse or child neglect are identified. The short-term and long-term consequences are explored. Legal issues and role of the advanced practice nurse are emphasized.

NRSE5311 - APN Ped Pri Care Prac I-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
APN Ped Pri Care Prac I-TTU	Doctoral
Course Subject Code	**Course Number**
NRSE	5311

Credit Hours

Credit Hours Min
3

Course Description

Precepted practicum in pediatric primary care. Advanced practice clinical experiences in pediatric health promotion and disease and injury prevention. Management of well-child visits and patient and family education is emphasized.

NRSE5312 - APN Ped Pri Care Pract II-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
APN Ped Pri Care Pract II-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5312

Credit Hours

Credit Hours Min
3

Course Description
Precepted practicum in pediatric primary care. Advanced practice clinical experiences in differential diagnosis and management of episodic and minor acute illnesses are emphasized.

NRSE5313 - APN Ped Pri Care Pract III-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
APN Ped Pri Care Pract III-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5313

Credit Hours

Credit Hours Min
4

Course Description
Precepted practicum in pediatric primary care. Integration of advanced practice pediatric primary care for healthy and ill children along with management of children with chronic illness, disability, and complex child health conditions.

NRSE5314 - Pediatric Certification Prep

General

College/School
Whitson-Hester School of Nurs

Course Title
Pediatric Certification Prep

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5314

Credit Hours

Credit Hours Min
3

Course Description
Integration of pediatric primary care knowledge development and evidence-based advanced pediatric primary care concepts with application and preceptorship experiences. Includes preparation for the PNCB certification exam.

Requisites

Simple Requisites

> **Prerequisites:** Completion of NRSE5315 Hlth Promo: Growing Child, NRSE5305 Ped Pri Care I: Well Child-TTU, NRSE5306 Ped Pri Care II:Ep & Minor-TTU, NRSE5311 APN Ped Pri Care Prac I-TTU, NRSE5312 APN Ped Pri Care Pract II-TTU, NRSE5317 Adv Pediatric Nurs Pract III.

NRSE5315 - Hlth Promo: Growing Child

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Promo: Growing Child

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5315

Credit Hours

Credit Hours Min
2

Course Description
The role of the advanced practice pediatric nurse in health promotion of the growing child is explored. Lifespan, growth, behavior, and development from birth to adolescence is examined in the context of lifespan development and population-specific approach to pediatric health care visits in the primary care setting.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the graduate program.

NRSE5316 - Chrnc Illns, Disab, Cmplx Cond

General

College/School
Whitson-Hester School of Nurs

Course Title
Chrnc Illns, Disab, Cmplx Cond

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5316

Credit Hours

Credit Hours Min
2

Course Description
The role of the advanced practice pediatric nurse in care of the child with chronic illness, disability, and complete conditions is explored. Pathophysiology, epidemiology, risk factors, screening ad diagnostics, management and patient education around chronic illness, disability, and complex conditions is examined. The importance of continuity of care is emphasized.

Requisites

Simple Requisites

> **Prerequisites:** Completion of NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, NRSE5016 Adv Pathophysiology, NRSE5018 Adv Clinical Pharmacology, NRSE5315 Hlth Promo: Growing Child, NRSE5305 Ped Pri Care I: Well Child-TTU, NRSE5311 APN Ped Pri Care Prac I-TTU; or Permission of Instructor.
>
> **Co-requisite:** NRSE5317 Adv Pediatric Nurs Pract III.

NRSE5317 - Adv Pediatric Nurs Pract III

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Pediatric Nurs Pract III

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5317

Credit Hours

Credit Hours Min
3

Course Description
Precepted practicum in pediatric primary care. Integration of advanced practice primary care pediatric concepts for healthy and ill children including management of children with chronic illness, disability, and complex child health conditions.

Requisites

Simple Requisites

Prerequisites: Completion of NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, NRSE5016 Adv Pathophysiology, NRSE5018 Adv Clinical Pharmacology, NRSE5315 Hlth Promo: Growing Child, NRSE5305 Ped Pri Care I: Well Child-TTU, NRSE5311 APN Ped Pri Care Prac I-TTU; or Permission of Instructor.

Co-requisite: NRSE5316 Chrnc Illns, Disab, Cmplx Cond.

NRSE5404 - Adv Psych Fam Nsg Care I

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Psych Fam Nsg Care I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5404

Credit Hours

Credit Hours Min
3

Course Description
This course provides a foundation for the use of diagnostic reasoning and advanced therapeutics in the specialty care of individuals and families experiencing or at risk of experiencing psychiatric illnesses. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

Corequisites: NRSE5303 Psychopharmacology, NRSE5405 Adv Fam Psych Nsg Care Prac I.

NRSE5405 - Adv Fam Psych Nsg Care Prac I

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Fam Psych Nsg Care Prac I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5405

Credit Hours

Credit Hours Min
3

Course Description
This course provides a synthesis and application of specific knowledge and the development of advanced clinical judgment in the specialized care of adults and families experiencing a psychiatric disorder or at risk of experiencing a psychiatric disorder. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

Prerequisites: NRSE5009 Adv. Health Assessment, NRSE 5010, NRSE5016 Adv Pathophysiology, NRSE 5018.

Corequisites: NRSE5303 Psychopharmacology, NRSE5404 Adv Psych Fam Nsg Care I.

NRSE5408 - Adv Family Psych Nsg Care II

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Family Psych Nsg Care II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5408

Credit Hours

Credit Hours Min
3

Course Description
This course will build on foundational knowledge in the use of diagnostic reasoning and advanced therapeutics in the care of special populations, particularly children, adolescents, and geriatric patients, building on the previously acquired foundational knowledge of care of the adult patient. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

Prerequisites: NRSE5303 Psychopharmacology, NRSE5404 Adv Psych Fam Nsg Care I, NRSE5405 Adv Fam Psych Nsg Care Prac I.

Corequisites: NRSE5409 Adv Fam Psych Nsg Care Prac II.

NRSE5409 - Adv Fam Psych Nsg Care Prac II

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Fam Psych Nsg Care Prac II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5409

Credit Hours

Credit Hours Min
3

Course Description
This course provides the clinical experiences to acquire, synthesize and apply specific knowledge in the specialized care of children, adolescents and geriatric patients experiencing a psychiatric disorder, or at risk for developing a psychiatric disorder. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

Prerequisites: NRSE5303 Psychopharmacology, NRSE5404 Adv Psych Fam Nsg Care I, NRSE5405 Adv Fam Psych Nsg Care Prac I.

Corequisites: NRSE5408 Adv Family Psych Nsg Care II.

NRSE5410 - Intrpers Treatmnt Modalities

General

College/School
Whitson-Hester School of Nurs

Course Title
Intrpers Treatmnt Modalities

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5410

Credit Hours

Credit Hours Min
3

Course Description
This course provides students with a conceptual theory-base for implementing advanced practice psychiatric nursing psychotherapy interventions. (fall)

Requisites

Simple Requisites

Prerequisites: Enrollment is restricted to the College of Nursing students.

Corequisite: NRSE5411 Intrpers Trtmnt Modailt Prac

NRSE5411 - Intrpers Trtmnt Modailt Prac

General

College/School
Whitson-Hester School of Nurs

Course Title
Intrpers Trtmnt Modailt Prac

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5411

Credit Hours

Credit Hours Min
3

Course Description
This course provides students clinical experiences in implementing supervised selected therapy interventions for specific patients. The intervention is based on the assessment, diagnosis, and treatment of the patient¿s mental health condition, congruent with the analysis of the best evidence. (fall)

Requisites

Simple Requisites

Prerequisite(s): NRSE5404 Adv Psych Fam Nsg Care I. Enrollment is restricted to the College of Nursing students.

Corequisite(s): NRSE5410 Intrpers Treatmnt Modalities.

NRSE5500 - Exec Leadership Practicum

General

College/School
Whitson-Hester School of Nurs

Course Title
Exec Leadership Practicum

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5500

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
This executive leadership practicum provides an in-depth, individualized practicum experience with approved nurse administrator preceptors. Each credit is equal to 70 clock hours. Repeatable up to 7 hours.

Requisites

Simple Requisites

Prerequisites: Admission into DNP program.

NRSE5501 - Leadership in Nurs Admin

General

College/School
Whitson-Hester School of Nurs

Course Title
Leadership in Nurs Admin

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5501

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Leadership theories and concepts are explored, analyzed, and evaluation. the course focuses on personal leadership philosophy and how it impacts organizational members.

Requisites

Simple Requisites

> Prerequisite: Enrollment is restricted to the College of Nursing students.

NRSE5502 - Exec Ldrship Practicum I

General

College/School
Whitson-Hester School of Nurs

Course Title
Exec Ldrship Practicum I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5502

Credit Hours

Credit Hours Min
3

Course Description
Introduces the nurse executive role through collaboration with a nurse administrator preceptor.

Requisites

Simple Requisites

> Prerequisites: NRSE5501 Leadership in Nurs Admin and NRSE5510 Organ Theory & Nurs Admin or permission of instructor.

NRSE5503 - Exec Ldrship Practicum II

General

College/School
Whitson-Hester School of Nurs

Course Title
Exec Ldrship Practicum II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5503

Credit Hours

Credit Hours Min
3

Course Description
Continues to explore the role of the nurse executive while strengthening nursing leadership skills.

Requisites

Simple Requisites

> Prerequisites: NRSE5502 Exec Ldrship Practicum I, NRSE5510 Organ Theory & Nurs Admin, or permission of instructor.

NRSE5504 - Exec Leadership Pract III-ETSU

General

College/School
Whitson-Hester School of Nurs

Course Title
Exec Leadership Pract III-ETSU

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5504

Credit Hours

Credit Hours Min
3

Course Description
Provides opportunity to integrate leadership skills and best practice guidelines to improve organizational effectiveness and patient outcomes.

Requisites

Simple Requisites

> Prerequisites: NRSE5503 Exec Ldrship Practicum II and NRSE5510 Organ Theory & Nurs Admin or permission of instructor.

NRSE5510 - Organ Theory & Nurs Admin

General

College/School
Whitson-Hester School of Nurs

Course Title
Organ Theory & Nurs Admin

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5510

Credit Hours

Credit Hours Min
3

Course Description
Analyzes organizational theory and the role of the nurse administrator. Examines alternative forms of organizational structure, organizational culture, design parameters, and forces for and against change.

Requisites

Simple Requisites

> **Prerequisites:** Enrollment is restricted to the College of Nursing students.

NRSE5520 - Fiscal Mgmt in Nurs Admin-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Fiscal Mgmt in Nurs Admin-TTU

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5520

Credit Hours

Credit Hours Min
3

Course Description
Examines management of fiscal resources in nursing service settings.

Requisites

Simple Requisites

> **Prerequisites:** Enrollment is restricted to the College of Nursing students.

NRSE5530 - Hlth Care Organizations & Law

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Care Organizations & Law

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5530

Credit Hours

Credit Hours Min
3

Course Description
This interdisciplinary course is part of the Health Care Management Certificate Program that is totally online. The focus of the course is to provide an overview of the role of law in the health care system for health care administration.

Requisites

Simple Requisites

> **Prerequisite(s):** Permission of instructor. Enrollment is restricted to the College of Nursing students.

NRSE5550 - Human Resources Mgmt

General

College/School
Whitson-Hester School of Nurs

Course Title
Human Resources Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5550

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to offer a current, introduction to a wide array of Human Resource management (HRM) principles and activities. During this semester students will strive to relate state-of-the art HR management practices and principles and apply them in practical applications.

Requisites

Simple Requisites

> **Prerequisites:** Enrollment is restricted to the College of Nursing students.

NRSE5570 - Nurs Admin Prac II-ETSU

General

College/School
Whitson-Hester School of Nurs

Course Title
Nurs Admin Prac II-ETSU

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5570

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE5580 - Proj Mgmt Nrse Leaders

General

College/School
Whitson-Hester School of Nurs

Course Title
Proj Mgmt Nrse Leaders

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5580

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on all major aspects and components of project management

Requisites

Simple Requisites

> **Prerequisites:** Enrollment is restricted to the College of Nursing students.

NRSE5590 - Strategic Plan for Health Care

General

College/School
Whitson-Hester School of Nurs

Course Title
Strategic Plan for Health Care

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5590

Credit Hours

Credit Hours Min
3

Course Description
This course applies the concepts of strategic planning within the context of the health care industry. Issues associated with competing in a changing health care environment are explored with a focus on the development of solutions to problems associated with this change. The strategic management of health care delivery will be addressed from a variety of perspectives, ranging from those of the insurance industry, to public health facilities, to large health care networks, to small practices of health care providers.

Requisites

Simple Requisites

> **Prerequisites:** Enrollment is restricted to the College of Nursing students.

NRSE5603 - Acute Care Pharm

General

College/School
Whitson-Hester School of Nurs

Course Title
Acute Care Pharm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5603

Credit Hours

Credit Hours Min
4

Course Description
Prerequisites: NRSE 5009, NRSE 5010, NRSE 5016 and NRSE 5018. This course covers current pharmacotherapies used in designing care for adults with complex acute, chronic and critical conditions.

NRSE5604 - Adv Patho/Clin Reas I

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Patho/Clin Reas I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5604

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: NRSE 5009, 5010, 5016, and 5018; Corequisite: NRSE 5605. This course focuses on developing knowledge and using evidence-based practice concepts in the integration of pathophysiological and advanced assessment findings needed to delineate diagnoses and management of complex acute and chronic clinical problems in hospitalized adults.

Requisites

> No Requirements

NRSE5605 - Acute Disease Mgmt Pr I

General

College/School
Whitson-Hester School of Nurs

Course Title
Acute Disease Mgmt Pr I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5605

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: NRSE 5009, NRSE 5010, 5015, and 5018; Corequisite: NRSE 5604. This course provides students with the opportunity to apply advanced knowledge of complex disease processes and management issues to a hospitalized population of adults.

NRSE5608 - Adv Patho/Clin Reas II

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Patho/Clin Reas II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5608

Credit Hours

Credit Hours Min
3

Course Description

This course provides in-depth study of complex disease processes using an evidence-based approach to diagnose and manage acute and chronic clinical problems in critically ill adults.

Requisites

Simple Requisites

> Prerequisite: NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, NRSE 5010, and NRSE5018 Adv Clinical Pharmacology
>
> Corequisite: NRSE5609 Acute Disease Mgmt Pr II.

NRSE5609 - Acute Disease Mgmt Pr II

General

College/School
Whitson-Hester School of Nurs

Course Title
Acute Disease Mgmt Pr II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5609

Credit Hours

Credit Hours Min
3

Course Description

This course provides students with the opportunity to apply advanced knowledge of selected complex disease processes and management issues to a critical care population of adults.

Requisites

Simple Requisites

> Prerequisite: NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, NRSE 5015, and NRSE5018 Adv Clinical Pharmacology.
>
> Corequisite: NRSE5608 Adv Patho/Clin Reas II.

NRSE5610 - Diag Interpret/Thera Mod

General

College/School
Whitson-Hester School of Nurs

Course Title
Diag Interpret/Thera Mod

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5610

Credit Hours

Credit Hours Min
3

Course Description

Builds on advanced assessment skills to incorporate diagnostic testing and current therapies to provide complex care for adults with complex acute, chronic and critical conditions.

Requisites

Simple Requisites

> Corequisite: NRSE5611 Diag Interp/Thera Mod Pr

NRSE5611 - Diag Interp/Thera Mod Pr

General

College/School
Whitson-Hester School of Nurs

Course Title
Diag Interp/Thera Mod Pr

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5611

Credit Hours

Credit Hours Min
3

Course Description

This course applies advanced assessment skills, diagnostic testing and current therapies to manage care of adults with complex acute, chronic and critical conditions in acute care using evidence and incorporating acute care pharmacology.

Requisites

Simple Requisites

> Prerequisite: NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, NRSE 5015, and NRSE5018 Adv Clinical Pharmacology
>
> Corequisite: NRSE5610 Diag Interpret/Thera Mod.

NRSE5612 - Acute Care Pharm

General

College/School
Whitson-Hester School of Nurs

Course Title
Acute Care Pharm

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5612

Credit Hours

Credit Hours Min
3

Course Description
This course covers current pharmacotherapies used in designing care for adults with complex acute, chronic and critical conditions.

Requisites
Simple Requisites

> **Prerequisites:** NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, NRSE5016 Adv Pathophysiology, and NRSE5018 Adv Clinical Pharmacology

NRSE5613 - Acute Disease Mgmt Pr I

General

College/School
Whitson-Hester School of Nurs

Course Title
Acute Disease Mgmt Pr I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5613

Credit Hours

Credit Hours Min
2

Course Description
This course provides students with the opportunity to apply advanced knowledge of complex disease processes and management issues to a hospitalized population of adults.

Requisites
Simple Requisites

> **Corequisite:** NRSE5604 Adv Patho/Clin Reas I.

NRSE5614 - Acute Disease Mgmt Pr II

General

College/School
Whitson-Hester School of Nurs

Course Title
Acute Disease Mgmt Pr II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5614

Credit Hours

Credit Hours Min
2

Course Description
This course provides students with the opportunity to apply advanced knowledge of selected complex disease processes and management issues to a critical care population of adults.

Requisites
Simple Requisites

> **Corequisite:** NRSE5608 Adv Patho/Clin Reas II.

NRSE5615 - Internship/Acute Care NP Pract

General

College/School
Whitson-Hester School of Nurs

Course Title
Internship/Acute Care NP Pract

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5615

Credit Hours

Credit Hours Min
3

Course Description
This internship experience focuses on the synthesis of previously gained knowledge and skills to provide advanced nursing care for individuals, families and communities. Emphasis is placed on health promotion, disease prevention and clinical management of clients with common acute and chronic illness in acute care settings.

Requisites
Simple Requisites

> **Prerequisite:** Permission of Instructor.

NRSE5616 - Internship/Acute Care NP Pract

General

College/School
Whitson-Hester School of Nurs

Course Title
Internship/Acute Care NP Pract

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
5616

Credit Hours

Credit Hours Min
2

Course Description
This internship experience focuses on the synthesis of previously gained knowledge and skills to provide advanced nursing care for individuals, families and communities. Emphasis is placed on health promotion, disease prevention and clinical management of clients with common acute and chronic illness in acute care settings.

Requisites
Simple Requisites

> **Prerequisite:** Permission of Instructor.

NRSE5617 - Diag Interp/Thera Mod Pr

General

College/School
Whitson-Hester School of Nurs

Course Title
Diag Interp/Thera Mod Pr

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
5617

Credit Hours

Credit Hours Min
2

Course Description
This course applies advanced assessment skills, diagnostic testing and current therapies to manage care of adults with complex acute, chronic and critical conditions in acute care using evidence and incorporating acute care pharmacology.

Requisites

Simple Requisites

Prerequisite: NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, NRSE 5015, and NRSE5018 Adv Clinical Pharmacology.

Corequisite: NRSE5610 Diag Interpret/Thera Mod.

NRSE5701 - Pharmacology Wom. Health-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Pharmacology Wom. Health-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5701

Credit Hours

Credit Hours Min
2

Course Description
Application of advanced pharmacological concepts to address the health needs of the female client across the life span.

NRSE5702 - Wom Hlth Adv Prac I:GYN-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Wom Hlth Adv Prac I:GYN-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5702

Credit Hours

Credit Hours Min
3

Course Description
Knowledge development and integration of advanced care concepts utilizing evidence-based concepts in the diagnosis and management of the gynecological client across the life span.

NRSE5703 - Wm Hlth Adv Pr I:GYN Prac-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Wm Hlth Adv Pr I:GYN Prac-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5703

Credit Hours

Credit Hours Min
3

Course Description
Application of advanced knowledge of gynecological care providing assessment, diagnosis, and treatment management.

NRSE5704 - Adv Nursing Care Older Wm-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Nursing Care Older Wm-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5704

Credit Hours

Credit Hours Min
3

Course Description
Knowledge development and integration of preventive health guidelines and current gynecological and primary care concepts in the management of the health of the older female client.

NRSE5705 - Wom Hlth Adv Prac II:OB-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Wom Hlth Adv Prac II:OB-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5705

Credit Hours

Credit Hours Min
3

Course Description
Knowledge development and integration of advanced care concepts utilizing evidence-based concepts in the diagnosis and management of the obstetrical client.

NRSE5706 - Wom Hlth Adv Prac II Pract-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Wom Hlth Adv Prac II Pract-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5706

Credit Hours

Credit Hours Min
3

Course Description
Application of advanced knowledge of obstetrical care providing assessment, diagnosis, and treatment management.

NRSE5707 - Issues in Reprod. Health-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Issues in Reprod. Health-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5707

Credit Hours

Credit Hours Min
2

Course Description
Prerequisites: NRSE 5016, 5009, 5010, 5018. Integration of gynecological, obstetrical, and advanced assessment concepts to address the health needs of women experiencing infertility.

NRSE5708 - Complex Issues in Wom Hlth-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Complex Issues in Wom Hlth-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5708

Credit Hours

Credit Hours Min
2

Course Description
Application of advanced knowledge of selected complex disease processes and management issues in women's health.

NRSE5709 - Wom Hth Adv Prac III Pract-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Wom Hth Adv Prac III Pract-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5709

Credit Hours

Credit Hours Min
4

Course Description
Application of advanced assessment skills incorporating diagnostics and evidence based therapies to provide women's health care across the life span in both the healthy and seriously ill women (chronic and acute).

NRSE5710 - Primary Care Women's Hlth-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Primary Care Women's Hlth-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
5710

Credit Hours

Credit Hours Min
3

Course Description
Integration of pathophysiology, assessment, and diagnosis in the management of common primary health care needs of women.

NRSE5711 - Women's Hlth for Adv Prac IV

General

College/School
Whitson-Hester School of Nurs

Course Title
Women's Hlth for Adv Prac IV

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5711

Credit Hours

Credit Hours Min
2

Course Description
This cumulating clinical course provides students with the opportunity to apply advanced knowledge of complex female disease processes and management issues to patients across the lifespan in the clinical setting.

Requisites

Simple Requisites

Prerequisite: With permission from Concentration Coordinator.

NRSE5712 - Wmns Hlth/Adv Prac II:OB

General

College/School
Whitson-Hester School of Nurs

Course Title
Wmns Hlth/Adv Prac II:OB

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5712

Credit Hours

Credit Hours Min
4

Course Description

Knowledge development and integration of advanced care concepts utilizing evidence-based concepts in the diagnosis and management of the obstetrical client.

Requisites

Simple Requisites

Prerequisites: NRSE5016 Adv Pathophysiology, NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, and NRSE5018 Adv Clinical Pharmacology

Co-requisites: NRSE5715 Wmns Hlth/Adv Prac II:OB.

NRSE5713 - Complex Issues in Wmns Health

General

College/School
Whitson-Hester School of Nurs

Course Title
Complex Issues in Wmns Health

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5713

Credit Hours

Credit Hours Min
3

Course Description

Application of advanced knowledge of selected complex disease processes and management issues in women's health.

Requisites

Simple Requisites

Prerequisites: NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, NRSE5016 Adv Pathophysiology, and NRSE5018 Adv Clinical Pharmacology.

Corequisites: NRSE5716 Women's Hlth for Adv Prac III.

NRSE5714 - Wmns Hlth for Adv Pract I

General

College/School
Whitson-Hester School of Nurs

Course Title
Wmns Hlth for Adv Pract I

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5714

Credit Hours

Credit Hours Min
2

Course Description

Integration of knowledge development and advanced care concepts utilizing evidence-based concepts in the diagnosis, management and treatment of the gynecological client cross the life span in the clinical setting.

Requisites

Simple Requisites

Prerequisites: NRSE5016 Adv Pathophysiology, NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, and NRSE5018 Adv Clinical Pharmacology.

Co-requisites: NRSE5702 Wom Hlth Adv Prac I:GYN-TTU.

NRSE5715 - Wmns Hlth/Adv Prac II:OB

General

College/School
Whitson-Hester School of Nurs

Course Title
Wmns Hlth/Adv Prac II:OB

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5715

Credit Hours

Credit Hours Min
2

Course Description

Integration of knowledge development and advanced care concepts utilizing evidence-based concepts in the diagnosis, management, and treatment of the obstetric client across the life span in the clinical setting.

Requisites

Simple Requisites

Prerequisites: NRSE5016 Adv Pathophysiology, NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, and NRSE5018 Adv Clinical Pharmacology

Co-requisite: NRSE5712 Wmns Hlth/Adv Prac II:OB.

NRSE5716 - Women's Hlth for Adv Prac III

General

College/School
Whitson-Hester School of Nurs

Course Title
Women's Hlth for Adv Prac III

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5716

Credit Hours

Credit Hours Min
2

Course Description
Integration and application of advanced care concepts utilizing evidence-based concepts in the diagnosis, management, and treatment of the female client across the lifespan in the clinical setting.

Requisites

Simple Requisites

> **Prerequisites:** NRSE5016 Adv Pathophysiology, NRSE5009 Adv. Health Assessment, NRSE5010 Adv. Health Assmnt Practicum, and NRSE5018 Adv Clinical Pharmacology.
>
> **Co-requisite:** NRSE5713 Complex Issues in Wmns Health.

NRSE5900 - Independent Study

General

College/School
Whitson-Hester School of Nurs

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5900

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Independent study in consultation with a member of the graduate nursing faculty. Directed study and/or research in an area for which the student has special interest and adequate preparation. When Offered: Fall, Spring; variable

Requisites

Simple Requisites

> **Prerequisites:** Admission to the School of Graduate Studies.

NRSE5957 - Special Topics in NSG

General

College/School
Whitson-Hester School of Nurs

Course Title
Special Topics in NSG

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
5957

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6002 - Health Policy Leadership

General

College/School
Whitson-Hester School of Nurs

Course Title
Health Policy Leadership

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
6002

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to help students develop skill in analyzing health policy development, evaluating current health policy, and providing leadership to influence health policy at various governmental levels. A special focus on rural health policy is included.

Requisites

Simple Requisites

> **Prerequisites:** Enrollment is restricted to the College of Nursing students.

NRSE6004 - Advanced Quality Mgmt-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Advanced Quality Mgmt-TTU

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6004

Credit Hours

Credit Hours Min
3

Course Description
This course prepares nurse leaders to direct complex health care systems within a customer-focused, ethical framework using advanced quality management skills.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6014 - Measure/Clinical Outcome

General

College/School
Whitson-Hester School of Nurs

Course Title
Measure/Clinical Outcome

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
6014

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to help students develop skills in systematic evaluation, and development of clinical outcome measures in order to improve health.

Requisites

Simple Requisites

> **Prerequisites:** Permission of instructor. Enrollment is restricted to the College of Nursing students.

NRSE6015 - Advanced Wound Care

General

College/School
Whitson-Hester School of Nurs

Course Title
Advanced Wound Care

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
6015

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the processes of acute and chronic wound healing, comprehensive assessment, diagnosis and evidence-based treatment of wounds of varying etiologies across practice settings and the life span.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6016 - Adv Concept in Pathophysiology

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Concept in Pathophysiology

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6016

Credit Hours

Credit Hours Min
3

Course Description
This course explores knowledge emerging from recent research in pathophysiology, examines current research trends, and presents designs and processes that focus on the clinical application of research findings.

Requisites

Simple Requisites

> **Prerequisites:** Graduate-level pathophysiology and Graduate-level research.

NRSE6018 - Integ Appl Adv Prac Skil

General

College/School
Whitson-Hester School of Nurs

Course Title
Integ Appl Adv Prac Skil

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6018

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on development of advanced practice skills and their integration in the diagnosis and management of acute and chronic clinical problems in acute care settings.

Requisites

Simple Requisites

> **Prerequisites:** NRSE5605 Acute Disease Mgmt Pr I, NRSE5609 Acute Disease Mgmt Pr II, and NRSE5611 Diag Interp/Thera Mod Pr.

NRSE6019 - Collab Approach to Prac-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Collab Approach to Prac-TTU

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
6019

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to help the student understand the collaborative process, to develop skills in analyzing the politics of collaboration, and to evaluate related theoretical frameworks in order to provide leadership in the development of collaborative relationships. (summer)

Requisites

Simple Requisites

> **Prerequisite(s):** Admission to the doctoral program. Enrollment is restricted to the College of Nursing students.

NRSE6021 - Integ Appl Adv Prac Skil

General

College/School
Whitson-Hester School of Nurs

Course Title
Integ Appl Adv Prac Skil

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
6021

Credit Hours

Credit Hours Min
2

Course Description
This course focuses on development of advanced practice skills and their integration in the diagnosis and management of acute and chronic clinical problems in acute care settings.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6022 - Strategic Pln for Health Care

General

College/School
Whitson-Hester School of Nurs

Course Title
Strategic Pln for Health Care

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
6022

Credit Hours

Credit Hours Min
2

Course Description
Applies the concepts of strategic planning within the context of the health care industry. Issues associated with competing in a changing health care environment are explored with a focus on the development of solutions to problems associated with this change. The strategic management of health care delivery will be addressed from a variety of perspectives, ranging from those of the insurance industry, to public health facilities, to large health care networks, to small practices of health care providers.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6023 - Paltve/End-of-Life Care&APN

General

College/School
Whitson-Hester School of Nurs

Course Title
Paltve/End-of-Life Care&APN

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
6023

Credit Hours

Credit Hours Min
2

Course Description
Applies the concepts of culturally congruent palliative and end-of-life care within the context of the advance practice nurse. Issues associated with families and persons wo are severely ill or dying in the health care environment are explored with a focus on the APN (APN) and assessment, management and evaluation of ethical palliative and EOLC solutions to problems associated with being severely ill and dying.

Requisites

Simple Requisites

> **Prerequisites:** Program Coordinator Approval.

NRSE6024 - Adv Concept in Pathophysiology

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Concept in Pathophysiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
6024

Credit Hours

Credit Hours Min
2

Course Description
This course explores knowledge emerging from recent research in pathophysiology, examines current research trends, and presents designs and processes that focus on the clinical application of research findings.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6050 - Quality/Translation

General

College/School
Whitson-Hester School of Nurs

Course Title
Quality/Translation

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6050

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to provide DNP students with theoretical and applied knowledge in the translation of nursing science into practice with the goal of improving the outcomes, quality, efficiency and cost effectiveness of care.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6210 - Dev DNP Prac in Wom Health-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Dev DNP Prac in Wom Health-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6210

Credit Hours

Credit Hours Min
3

Course Description
Role transition and practice development in both the independent and collaborative practice setting.

NRSE6211 - Adv. Nur. Care Vuln. Wom.-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv. Nur. Care Vuln. Wom.-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6211

Credit Hours

Credit Hours Min
3

Course Description
Identification of vulnerability and incorporation of best practices in women's health to meet the special needs of vulnerable women.

NRSE6212 - Adv. Interv. for Wom. Hlth-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv. Interv. for Wom. Hlth-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6212

Credit Hours

Credit Hours Min
3

Course Description
Development of advanced practice skills and their integration in the diagnosis & management of acute and chronic clinical problems in women's health.

NRSE6213 - Integ. App. Women's Health-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Integ. App. Women's Health-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6213

Credit Hours

Credit Hours Min
3

Course Description
Integration of complementary and holistic care in women's health across the lifespan.

NRSE6310 - Ped. Health Care Deliv.Sys

General

College/School
Whitson-Hester School of Nurs

Course Title
Ped. Health Care Deliv.Sys

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6310

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the role of the advanced practice pediatric nurse in the larger context of pediatric health care by examining models of service delivered regionally, nationally, and internationally.

NRSE6311 - Adv Fam Sys Assess & Eval-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Fam Sys Assess & Eval-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6311

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on child health in the context of the family system. Building on knowledge of family system theory, the role of the advanced practice pediatric nurse in family health promotion is explored. Advanced family assessment skills are utilized to identify family system issues as barriers to optimal child health.

NRSE6312 - Epidem. At-Risk Famlies-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Epidem. At-Risk Famlies-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6312

Credit Hours

Credit Hours Min
3

Course Description
The principles of epidemiology for urban, rural, and underserved families and subsequent impact on child health are explored. Analysis of child health disparity in the context of the at-risk population is examined. The role of the advanced practice pediatric nurse is explored in relation to addressing barriers to equitable quality child healthcare.

NRSE6313 - Ldsp & Collab App Ped Hlth-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Ldsp & Collab App Ped Hlth-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6313

Credit Hours

Credit Hours Min
3

Course Description
Examines leadership theory and development of the advanced practice pediatric nurse in relation to planning, management, and delivery of child healthcare to improve pediatric health outcomes. Inter-professional collaborative approaches in management of children with complex healthcare delivery needs are emphasized.

NRSE6314 - Pediatric Palliative Care-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Pediatric Palliative Care-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6314

Credit Hours

Credit Hours Min
3

Course Description
Examines end-of-life care for pediatric patients from multiple perspectives. Concepts of pain management, bioethical considerations, and models of care are explored.

NRSE6315 - Genet Infl. Child-Fam Hlth-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Genet Infl. Child-Fam Hlth-TTU

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6315

Credit Hours

Credit Hours Min
3

Course Description
Principles of genetics and genomics will be applied to the context of child and family health. Genetic screening tools are examined for reliability and validity.

NRSE6316 - Prov School-Bsd Hlth Care

General

College/School
Whitson-Hester School of Nurs

Course Title
Prov School-Bsd Hlth Care

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6316

Credit Hours

Credit Hours Min
3

Course Description
Variables influencing provision of school-based health care by the advanced practice nurse will be explored. Assessment and evaluation of a school system for feasibility of school health services provisions is completed.

NRSE6317 - Int Apps-Ldrshp/Ped Hlthcr Del

General

College/School
Whitson-Hester School of Nurs

Course Title
Int Apps-Ldrshp/Ped Hlthcr Del

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6317

Credit Hours

Credit Hours Min
4

Course Description
Prerequisites: Completion of NRSE 5315, 5305, 5306, 5316, 5311, 5312, 5317 and successful DNP Proposal Defense. This course focuses on the role of the advanced practice pediatric nurse in the larger context of pediatric healthcare delivery models of service. Complexity science and other relevant leadership theories in context of DNP leadership development are explored. Leadership and its impact on interprofessional collaboration to influence pediatric health outcomes and complex healthcare delivery is emphasized.

NRSE6400 - Imprv MH Outcomes PrimCare-TTU

General

College/School
Whitson-Hester School of Nurs

Course Title
Imprv MH Outcomes PrimCare-TTU

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6400

Credit Hours

Credit Hours Min
3

Course Description
This course provides advanced practice nurses with the necessary knowledge base to provide care for adults and their families experiencing mental health problems encountered in the primary care setting.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the Graduate Nursing Program. enrollment is restricted to the College of Nursing students.

NRSE6412 - Clin Prev Mntl Hlt Svcs

General

College/School
Whitson-Hester School of Nurs

Course Title
Clin Prev Mntl Hlt Svcs

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6412

Credit Hours

Credit Hours Min
3

Course Description
Focuses on theoretical foundations in mental health promotion, mental illness prevention and maintenance of function across the health-illness continuum with the individual, family, and community.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6413 - Adv Communication Skills

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Communication Skills

Academic Level (Course Level)
Graduate

Course Subject Code
NRSE

Course Number
6413

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the theory, techniques, and application of communication skills for advanced communication skills of groups to improve mental health outcomes

Requisites

Simple Requisites

> **Prerequisites:** Enrollment is restricted to the College of Nursing students.

NRSE6414 - Neurobio Psych Disor

General

College/School
Whitson-Hester School of Nurs

Course Title
Neurobio Psych Disor

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6414

Credit Hours

Credit Hours Min
3

Course Description
This course will provide essential neurobiology of psychiatric disorders for the Psychiatric Mental Health Nurse Practitioner. The structural, biochemical, and molecular mechanisms of the normal nervous system in relationship to neuropsychiatric dysfunction and neurodegeneration will be emphasized.

Requisites

Simple Requisites

> **Prerequisites:** Enrollment is restricted to the College of Nursing students.

NRSE6415 - Mental Hlth Care Deliv Systems

General

College/School
Whitson-Hester School of Nurs

Course Title
Mental Hlth Care Deliv Systems

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6415

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the role of the advanced practice psychiatric nurse in the larger context of mental health care by examining models of service delivery regionally, nationally and internationally. Notes: Enrollment is restricted to the College of Nursing students.

NRSE6513 - Case Management

General

College/School
Whitson-Hester School of Nurs

Course Title
Case Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
6513

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the role of the advanced nurse practitioner considering emerging trends and theoretical models in health care delivery. The role of advanced practice nurses as case managers in the care of chronically ill populations is the central focus

Requisites

Simple Requisites

> **Prerequisite:** Graduate Status or Permission of Instructor. Enrollment is restricted to the College of Nursing students.

NRSE6610 - Patient Illness Experience

General

College/School
Whitson-Hester School of Nurs

Course Title
Patient Illness Experience

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6610

Credit Hours

Credit Hours Min
3

Course Description
Examines therapeutic interactions within the context of patients' illness experiences from a patient-centered care perspective. Particular emphasis is placed on theories and empirical work that distinguishes illness from disease and the role of narrative in enhancing healing relationships and environments.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6612 - Prin Nrs Prctnr Prac

General

College/School
Whitson-Hester School of Nurs

Course Title
Prin Nrs Prctnr Prac

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6612

Credit Hours

Credit Hours Min
3

Course Description
The establishment, maintenance and evaluation of a nurse practitioner practice will be discussed. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6613 - Adv Nrs Rural/Undrsv Popls

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Nrs Rural/Undrsv Popls

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NRSE

Course Number
6613

Credit Hours

Credit Hours Min
3

Course Description
This course examines the relationship between pathophysiologic processes and complex disease states across the life span, with special attention to conditions and areas of health disparities common to rural and underserved populations. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

> **Prerequisites:** Completion of all 5000 level clinical courses.

NRSE6614 - Adv Intrv DNP Prac

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Intrv DNP Prac

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6614

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on advanced procedural, technical and clinical nursing skills with intervention techniques for advanced practice. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6710 - Adv Family Psych Nrs I

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Family Psych Nrs I

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6710

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6711 - Health Care Informatics & Tech

General

College/School
Whitson-Hester School of Nurs

Course Title
Health Care Informatics & Tech

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6711

Credit Hours

Credit Hours Min
3

Course Description
This course covers applications of informatics and technology in individual health care, for health care providers, and within health care systems.

Requisites

Simple Requisites

> **Prerequisites:** Permission of the instructor.

NRSE6712 - Strategic Fiscal Mgmt

General

College/School
Whitson-Hester School of Nurs

Course Title
Strategic Fiscal Mgmt

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6712

Credit Hours

Credit Hours Min
3

Course Description
This course examines strategic fiscal management in nursing service settings with an emphasis on balancing fiscal accountability with quality. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6713 - Systems Mgmt

General

College/School
Whitson-Hester School of Nurs

Course Title
Systems Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NRSE

Course Number
6713

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the role of the nurse administrator/executive in systematic management within complex organizations. Management is viewed from a systems approach.

Requisites

Simple Requisites

> **Prerequisite:** Admission to DNP Program. Enrollment is restricted to the College of Nursing students.

NRSE6714 - Executive Leadership/Nursing

General

College/School
Whitson-Hester School of Nurs

Course Title
Executive Leadership/Nursing

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6714

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on current and emerging theories impacting the role of the nurse administrator/executive at an aggregate/systems/organizational level. Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

> **Prerequisites:** None

NRSE6715 - Contemp Prob Opp Ex Ld-ETSU

General

College/School
Whitson-Hester School of Nurs

Course Title
Contemp Prob Opp Ex Ld-ETSU

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6715

Credit Hours

Credit Hours Min
3

Course Description
This course examines contemporary problems and opportunities in executive leadership for the DNP at the aggregate/systems/organization level. Notes: Enrollment is restricted to the college of Nursing students.

Requisites

Simple Requisites

> **Prerequisite:** Admission to DNP Program.

NRSE6800 - DNP Residency Internship

General

College/School
Whitson-Hester School of Nurs

Course Title
DNP Residency Internship

Academic Level (Course Level)
Doctoral

Course Subject Code
NRSE

Course Number
6800

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description

Prerequisite: Admission to DNP program or permission of instructor. Enrollment is restricted to the College of Nursing students. This course is a practicum immersion where students integrate and synthesize the essentials and specialty requirements necessary to demonstrate competency in an area of specialized nursing practice. Includes at least 500 hours of supervised practice-related experiences.

NRSE6801 - DNP Project Identification

General

College/School

Whitson-Hester School of Nurs

Course Title

DNP Project Identification

Academic Level (Course Level)

Doctoral, Graduate

Course Subject Code

NRSE

Course Number

6801

Credit Hours

Credit Hours Min

3

Course Description

This course is a practicum immersion where students integrate and synthesize the essentials and specialty requirements necessary to demonstrate competency in an area of specialized nursing practice. This course serves to complete, in part, the 500 hours of supervised practice-related experiences required to complete program of study and prepare for subsequent residency completion courses.

Requisites

Simple Requisites

> **Prerequisite:** Admission into the DNP program or permission of instructor.

NRSE6802 - DNP Project Development

General

College/School

Whitson-Hester School of Nurs

Course Title

DNP Project Development

Academic Level (Course Level)

Doctoral, Graduate

Course Subject Code

NRSE

Course Number

6802

Credit Hours

Credit Hours Min

3

Course Description

This course is a practicum immersion where students integrate and synthesize the essentials and specialty requirements necessary to demonstrate competency in an area of specialized nursing practice. This course serves to complete, in part, the 500 hours of supervised practice-related experiences required to complete program of study and prepare for subsequent residency completion courses.

Requisites

Simple Requisites

> **Prerequisite:** Admission into the DNP program and completion of Residency 1.

NRSE6803 - DNP Project Implementation

General

College/School

Whitson-Hester School of Nurs

Course Title

DNP Project Implementation

Academic Level (Course Level)

Doctoral, Graduate

Course Subject Code

NRSE

Course Number

6803

Credit Hours

Credit Hours Min

3

Course Description

This course is a practicum immersion where students integrate and synthesize the essentials and specialty requirements necessary to demonstrate competency in an area of specialized nursing practice. This course serves to complete, in part, the 500 hours of supervised practice-related experiences required to complete program of study and prepare for subsequent residency completion courses.

Requisites

Simple Requisites

> **Prerequisites:** Admission into the DNP program and completion of Residency I and II.

NRSE6804 - DNP Project Evalua & Dissemn

General

College/School

Whitson-Hester School of Nurs

Course Title

DNP Project Evalua & Dissemn

Academic Level (Course Level)

Doctoral, Graduate

Course Subject Code

NRSE

Course Number

6804

Credit Hours

Credit Hours Min

3

Course Description

This course is a practicum immersion where students integrate and synthesize the essentials and specialty requirements necessary to demonstrate competency in an area of specialized nursing practice. This course serves to complete, in part, the 500 hours of supervised practice-related experiences required to complete program of study and prepare for subsequent residency completion courses.

Requisites

Simple Requisites

> **Prerequisites:** Admission into the DNP program and completion of Residency I and II and III.

NRSE6860 - Capstone

General

College/School
Whitson-Hester School of Nurs

Course Title
Capstone

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6860

Credit Hours

Credit Hours Min
3

Course Description
This course provides an opportunity for the student to apply advanced theoretical, policy, and specialty knowledge and skills to a clinical or systems-level problem. It is expected that students will propose a capstone project that will demonstrate advanced levels of systems thinking in designing, delivering and evaluating evidenced-based strategies to influence care provision or system changes and improve outcomes for individuals, groups, or populations. Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

Prerequisites: All DNP 5000 level coursework or permission of instructor.

Corequisites: NRSE6800 DNP Residency Internship.

NRSE6940 - Internship/Acute Care NP Pract

General

College/School
Whitson-Hester School of Nurs

Course Title
Internship/Acute Care NP Pract

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6940

Credit Hours

Credit Hours Min
3

Course Description
This internship experience focuses on the synthesis of previously gained knowledge and skills to provide advanced nursing care for individuals, families and communities. Emphasis is placed on health promotion, disease prevention and clinical management of clients with common acute and chronic illness in acute care settings.

Requisites

Simple Requisites

Prerequisite: Permission of Instructor.

NRSE6950 - Internship Adv Nursg Practice

General

College/School
Whitson-Hester School of Nurs

Course Title
Internship Adv Nursg Practice

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NRSE

Course Number
6950

Credit Hours

Credit Hours Min
3

Course Description
This internship experience focuses on the synthesis of previously gained knowledge and skills to provide advanced nursing care for individuals, families and communities. Emphasis is placed on health promotion, disease prevention and clinical management of clients with common acute and chronic illness in psychiatric care settings. Notes: Enrollment is restricted to the College of Nursing students.

Requisites

Simple Requisites

Prerequisites: NRSE5303 Psychopharmacology, NRSE5404 Adv Psych Fam Nsg Care I, NRSE5405 Adv Fam Psych Nsg Care Prac I, NRSE5408 Adv Family Psych Nsg Care II, NRSE5409 Adv Fam Psych Nsg Care Prac II, NRSE5410 Intrpers Treatmnt Modalities, NRSE5411 Intrpers Trtmnt Modailt Prac.

NURS5009 - Health Assessment Lifespan

General

College/School
Whitson-Hester School of Nurs

Course Title
Health Assessment Lifespan

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
5009

Credit Hours

Credit Hours Min
3

Course Description
Advanced health assessment focuses on the assessment of the total health status of individual and family clients throughout the life span. Emphasis is placed on the decision-making processes to differentiate normal from abnormal health status. Content includes predictable pathological findings and the mechanisms underlying them.

Requisites

Simple Requisites

Prerequisites: None

NURS5305 - Ped Prim Care I-Well Child

General

College/School
Whitson-Hester School of Nurs

Course Title
Ped Prim Care I-Well Child

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5305

Credit Hours

Credit Hours Min
3

Course Description
Health promotion within the context of illness, disease, or injury prevention is examined. The importance of frequent wellness assessments and early intervention in relation to developmental risk and disability is emphasized. The role of the advanced practice pediatric nurse in care of the well child is explored.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

Co-requisite: NURS5311 Ped Prim Care I-Well Child Pra.

NURS5311 - Ped Prim Care I-Well Child Pra

General

College/School
Whitson-Hester School of Nurs

Course Title
Ped Prim Care I-Well Child Pra

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5311

Credit Hours

Credit Hours Min
3

Course Description
Health promotion within the context of illness, disease, or injury prevention is examined. The importance of frequent wellness assessments and early intervention in relation to developmental risk and disability is emphasized. The role of the advanced practice pediatric nurse in care of the well child is explored.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

Co-requisite: NURS5305 Ped Prim Care I-Well Child.

NURS5306 - Ped Prim Care II-Ep/Mnr Ac Iln

General

College/School
Whitson-Hester School of Nurs

Course Title
Ped Prim Care II-Ep/Mnr Ac Iln

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5306

Credit Hours

Credit Hours Min
3

Course Description
The role of the advanced practice pediatric nurse in care of the child with episodic and minor acute illness is explored. Pathophysiology, epidemiology, risk factors, screening and diagnostic tests, management, and patient education around episodic and minor acute illness is emphasized.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5305 Ped Prim Care I-Well Child/NURS5311 Ped Prim Care I-Well Child Pra.

Corequisite: NURS5312 Adv Ped Nrs Pract II.

NURS5312 - Adv Ped Nrs Pract II

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Ped Nrs Pract II

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5312

Credit Hours

Credit Hours Min
3

Course Description
Precepted practicum in pediatric primary care. Advanced practice clinical experiences in differential diagnosis and management of episodic and minor acute illnesses are emphasized.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5305 Ped Prim Care I-Well Child/NURS5311 Ped Prim Care I-Well Child Pra.

Co-requisite: NURS5306 Ped Prim Care II-Ep/Mnr Ac Iln.

NURS5314 - Adv Pediatric Precept & Cert

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Pediatric Precept & Cert

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5314

Credit Hours

Credit Hours Min
3

Course Description
Integration of pediatric primary care knowledge development and evidence-based advanced pediatric primary care concepts with application and preceptorship experiences. Includes preparation for the PNCB certification exam.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5305 Ped Prim Care I-Well Child/NURS5311 Ped Prim Care I-Well Child Pra, NURS5306 Ped Prim Care II-Ep/Mnr Ac Iln/NURS5312 Adv Ped Nrs Pract II, NURS5316 Ped Primary Care III/NURS5317 Adv Ped Nurs Pract III.

NURS5315 - Hlth Promotio of Growing Child

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Promotio of Growing Child

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5315

Credit Hours

Credit Hours Min
2

Course Description
The role of the advanced practice pediatric nurse in health promotion of the growing child is explored. Lifespan, growth, behavior, and development from birth to adolescence is examined in the context of lifespan development and population-specific approach to pediatric health care visits in the primary care setting.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5316 - Ped Primary Care III

General

College/School
Whitson-Hester School of Nurs

Course Title
Ped Primary Care III

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5316

Credit Hours

Credit Hours Min
3

Course Description
The role of the advanced practice pediatric nurse in care of the child with chronic illness, disability, and complex conditions is explored. Pathophysiology, epidemiology, risk factors, screening and diagnostics, management and patient education around chronic illness, disability, and complex conditions is examined. The importance of continuity of care is emphasized.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5305 Ped Prim Care I-Well Child/NURS5311 Ped Prim Care I-Well Child Pra, NURS5306 Ped Prim Care II-Ep/Mnr Ac Iln/NURS5312 Adv Ped Nrs Pract II.
>
> **Co-requisite:** NURS5317 Adv Ped Nurs Pract III.

NURS5317 - Adv Ped Nurs Pract III

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Ped Nurs Pract III

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5317

Credit Hours

Credit Hours Min
3

Course Description
Precepted practicum in pediatric primary care. Integration of advanced practice primary care pediatric concepts for healthy and ill children including management of children with chronic illness, disability, and complex child health conditions.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5305 Ped Prim Care I-Well Child/NURS5312 Adv Ped Nrs Pract II.

NURS5350 - Hlth Care of Comm (RN-BSN)

General

College/School
Whitson-Hester School of Nurs

Course Title
Hlth Care of Comm (RN-BSN)

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
5350

Credit Hours

Credit Hours Min
4

Course Description
This course focuses on the nursing process and dynamics of family, community, national and international groups. This course encompasses knowledge of growth and development, culture, family and pathophysiology from the natural and social sciences and liberal arts. The epidemiological process is explored and applied to various diseases in a variety of populations. Emphasis is placed on the three levels of prevention as it holistically applies to community groups and problems.

Requisites

Simple Requisites

> **Requirements:** MSN Bridge status, RN Licensure.

NURS5604 - Adv Patho/Clin Reas I

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Patho/Clin Reas I

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5604

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on developing knowledge and using evidence-based practice concepts on the integration of pathophysiological concepts and advanced assessment findings needed to delineate diagnoses in management of complex acute and chronic clinical problems in hospitalized adults and older adults.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.
>
> **Co-requisite:** NURS5613 Acute Disease Mgmt Pr I.

NURS5608 - Adv Patho/Clin Reas II

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Patho/Clin Reas II

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5608

Credit Hours

Credit Hours Min
3

Course Description
This course provides in-depth study of complex disease processes to diagnosis and manage acute and chronic clinical problems in critically ill adults using current evidence.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5604 Adv Patho/Clin Reas I/NURS5613 Acute Disease Mgmt Pr I.
>
> **Corequisite:** NURS5614 Acute Disease Mgmt Pr II.

NURS5610 - Diag Interpret/Thera Mod

General

College/School
Whitson-Hester School of Nurs

Course Title
Diag Interpret/Thera Mod

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5610

Credit Hours

Credit Hours Min
3

Course Description
This course builds on advanced assessment skills to incorporate diagnostic testing and current therapies to provide complex care for adults and older adults with complex acute, chronic and critical conditions.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5604 Adv Patho/Clin Reas I/NURS5613 Acute Disease Mgmt Pr I, NURS5608 Adv Patho/Clin Reas II/NURS5614 Acute Disease Mgmt Pr II.
>
> **Co-requisite:** NURS5617 Diag Interpret/Thera Mod Pr.

NURS5612 - Acute Cr/Phamacotherapeutics

General

College/School
Whitson-Hester School of Nurs

Course Title
Acute Cr/Phamacotherapeutics

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
5612

Credit Hours

Credit Hours Min
3

Course Description
This course covers current pharmacotherapeutics used in designing care of adults and older adults with complex acute, chronic, and critical conditions.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5613 - Acute Disease Mgmt Pr I

General

College/School
Whitson-Hester School of Nurs

Course Title
Acute Disease Mgmt Pr I

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5613

Credit Hours

Credit Hours Min
2

Course Description
This course provides students with the opportunity to apply advanced knowledge of complex disease processes and management issues to a hospitalized population of adults and older adults.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

Co-requisite: NURS5604 Adv Patho/Clin Reas I.

NURS5614 - Acute Disease Mgmt Pr II

General

College/School
Whitson-Hester School of Nurs

Course Title
Acute Disease Mgmt Pr II

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5614

Credit Hours

Credit Hours Min
2

Course Description
This course provides students with the opportunity to apply advanced knowledge of selected complex disease processes and management issues to a critical care population of adults and older adults.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5604 Adv Patho/Clin Reas I/NURS5613 Acute Disease Mgmt Pr I.

NURS5616 - Int in Acute Care NP Practice

General

College/School
Whitson-Hester School of Nurs

Course Title
Int in Acute Care NP Practice

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5616

Credit Hours

Credit Hours Min
2

Course Description
This internship experience focuses on the synthesis of previously gained knowledge and skills to provide advanced nursing care for individuals, families, and communities. Emphasis is placed on health promotion, disease prevention and clinical management of clients with common acute and chronic illness in acute care settings.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5604 Adv Patho/Clin Reas I/NURS5613 Acute Disease Mgmt Pr I, NURS5608 Adv Patho/Clin Reas II/NURS5614 Acute Disease Mgmt Pr II, NURS5610 Diag Interpret/Thera Mod/NURS5617 Diag Interpret/Thera Mod Pr.

Co-Requisite: NURS6021 App - Adv Skills in Acute Care.

NURS5617 - Diag Interpret/Thera Mod Pr

General

College/School
Whitson-Hester School of Nurs

Course Title
Diag Interpret/Thera Mod Pr

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5617

Credit Hours

Credit Hours Min
2

Course Description
This course applies advanced assessment skills to incorporate diagnostic testing and current therapies to provide complex care for adults and older adults with complex acute, chronic and critical conditions.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6103 Adv Pathophysiology, NURS6013, NURS6104 Adv Pharmacology, NURS5604 Adv Patho/Clin Reas I/NURS5613 Acute Disease Mgmt Pr I, NURS5608 Adv Patho/Clin Reas II/NURS5614 Acute Disease Mgmt Pr II.
>
> **Co-requisite:** NURS5610 Diag Interpret/Thera Mod.

NURS5701 - Pharm for Women's Health

General

College/School
Whitson-Hester School of Nurs

Course Title
Pharm for Women's Health

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5701

Credit Hours

Credit Hours Min
2

Course Description
Knowledge development and integration of advanced care concepts utilizing evidence-based concepts in the diagnosis and management of the gynecological client across the life span.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5702 - Women's Health Adv Pract I:GYN

General

College/School
Whitson-Hester School of Nurs

Course Title
Women's Health Adv Pract I:GYN

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5702

Credit Hours

Credit Hours Min
3

Course Description
Knowledge development and integration of advanced care concepts utilizing evidence-based concepts in the diagnosis and management of the gynecological client across the life span.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5710 - Primary Care for Women's Hlth

General

College/School
Whitson-Hester School of Nurs

Course Title
Primary Care for Women's Hlth

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5710

Credit Hours

Credit Hours Min
3

Course Description
Integration of pathophysiology, assessment, and diagnosis in the management of common primary health care needs of women.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5711 - Women's Hlth/Adv Pra IV: Pract

General

College/School
Whitson-Hester School of Nurs

Course Title
Women's Hlth/Adv Pra IV: Pract

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5711

Credit Hours

Credit Hours Min
2

Course Description

This cumulating clinical course provides students with the opportunity to apply advanced knowledge of complex female disease processes and management issues to patients across the lifespan in the clinical setting.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5712 - Women's Health Adv Pract II:OB

General

College/School
Whitson-Hester School of Nurs

Course Title
Women's Health Adv Pract II:OB

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5712

Credit Hours

Credit Hours Min
4

Course Description

Knowledge development and integration of advanced care concepts utilizing evidence-based concepts in the diagnosis and management of the obstetrical client.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5713 - Complex Issues in Women's Hlth

General

College/School
Whitson-Hester School of Nurs

Course Title
Complex Issues in Women's Hlth

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5713

Credit Hours

Credit Hours Min
3

Course Description

Application of advanced knowledge of selected complex disease processes and management issues in women's health.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5714 - WmnsHlth/Adv Pract I:GYNPrctm

General

College/School
Whitson-Hester School of Nurs

Course Title
WmnsHlth/Adv Pract I:GYNPrctm

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5714

Credit Hours

Credit Hours Min
2

Course Description

Integration of knowledge development and advanced care concepts utilizing evidence-based concepts in the diagnosis, management and treatment of the gynecological client across the life span in the clinical setting.

Requisites

Simple Requisites

> **Prerequisites:** NURS 6101, 6102, 6013, 6104. NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6013, NURS6104 Adv Pharmacology.

NURS5715 - WmnsHlth/Adv Pract II:OBPrctm

General

College/School
Whitson-Hester School of Nurs

Course Title
WmnsHlth/Adv Pract II:OBPrctm

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5715

Credit Hours

Credit Hours Min
2

Course Description
Integration of knowledge development and advanced care concepts utilizing evidence-based concepts in the diagnosis and management and treatment of the obstetrical client across the life span in the clinical setting.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5716 - Women's Hlth/Adv Pract III:Pra

General

College/School
Whitson-Hester School of Nurs

Course Title
Women's Hlth/Adv Pract III:Pra

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
5716

Credit Hours

Credit Hours Min
2

Course Description
Integration and application of advanced care concepts utilizing evidence-based concepts in the diagnosis, management and treatment of the female client across the lifespan in the clinical setting.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS5900 - Independent Study

General

College/School
Whitson-Hester School of Nurs

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
5900

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Independent study in consultation with a member of the graduate nursing faculty. Directed study and/or research in an area for which the student has special interest and adequate preparation. When Offered: Fall, Spring; variable

Requisites

Simple Requisites

Prerequisites: Admission to the School of Graduate Studies.

NURS6000 - Theoretical Foundations

General

College/School
Whitson-Hester School of Nurs

Course Title
Theoretical Foundations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6000

Credit Hours

Credit Hours Min
3

Course Description
This course provides the student with the theoretical foundations for advanced nursing. The focus of the course is on the critical components of contemporary nursing knowledge; exploration of the nature of theory development in nursing; examination of relevance of concepts from basic and applied sciences; analysis and evaluation of nursing and related theories; and relevance of theory in terms of impact on professional nursing practice, and individuals, families, groups as clients in health care systems.

Requisites

Simple Requisites

Prerequisite: Admission to the MSN program or permission of Coordinator.

NURS6001 - Health Care Policy

General

College/School
Whitson-Hester School of Nurs

Course Title
Health Care Policy

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6001

Credit Hours

Credit Hours Min
3

Course Description
The primary focus of this course is the analysis of healthcare systems. Public and private healthcare delivery systems are examined. Students explore future challenges and processes to improve systems.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the MSN program or permission of Coordinator.

NURS6002 - Advanced Nursing Research

General

College/School
Whitson-Hester School of Nurs

Course Title
Advanced Nursing Research

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6002

Credit Hours

Credit Hours Min
3

Course Description
This course involves the systematic examination and application of the research process. The concept of evidenced-based practice and its application to nursing is critically examined.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the MSN program or permission of Coordinator.

NURS6003 - Adv Role Development

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Role Development

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6003

Credit Hours

Credit Hours Min
3

Course Description
This course provides students with an in-depth understanding of the legal, historical, political, social, and ethical aspects of advanced nursing. Traditional and emerging roles for advanced nursing are examined.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the MSN program.

NURS6021 - App - Adv Skills in Acute Care

General

College/School
Whitson-Hester School of Nurs

Course Title
App - Adv Skills in Acute Care

Academic Level (Course Level)
Doctoral, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6021

Credit Hours

Credit Hours Min
2

Course Description
Transition into the NP role and the development of advanced practice skills and their integration in the diagnosis and management of acute and chronic clinical problems in acute care settings in adults and older adults.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS5604 Adv Patho/Clin Reas I/NURS5613 Acute Disease Mgmt Pr I, NURS5608 Adv Patho/Clin Reas II/NURS5614 Acute Disease Mgmt Pr II, NURS5610 Diag Interpret/Thera Mod/NURS5617 Diag Interpret/Thera Mod Pr.
>
> **Co-Requisites:** NURS5616 Int in Acute Care NP Practice

NURS6023 - Palliative Care & the APN

General

College/School
Whitson-Hester School of Nurs

Course Title
Palliative Care & the APN

Academic Level (Course Level)
Doctoral, Graduate

Course Subject Code
NURS

Course Number
6023

Credit Hours

Credit Hours Min
2

Course Description
Applies the concepts of culturally congruent palliative and end-of-life care within the context of the advance practice nurse. Issues associated with families and persons who are severely ill or dying in the health care environment are explored with a focus on the APN (APN) and assessment, management, and evaluation of ethical palliative and EOLC solutions to problems associated with being severely ill and dying.

Requisites

Simple Requisites

> **Prerequisites:** None

NURS6101 - Adv Health Assessment

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Health Assessment

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6101

Credit Hours

Credit Hours Min
3

Course Description
This course prepares the advanced practice nurse to conduct focused and comprehensive health assessments of clients across the lifespan. The process of diagnostic reasoning is emphasized as the primary means of collecting and analyzing data obtained from the client history, physical examination, and diagnostic procedures.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the MSN program.

NURS6102 - Adv Health Assmt/Clinical

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Health Assmt/Clinical

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6102

Credit Hours

Credit Hours Min
1

Course Description
This clinical course emphasizes the application of advanced assessment techniques to perform focused and comprehensive health assessments of clients across the lifespan. Clinical analysis and synthesis of physical assessment data and diagnostic reasoning skills are developed.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the RODP-MSN program or permission of coordinator.
>
> **Corequisite:** NURS6101 Adv Health Assessment

NURS6103 - Adv Pathophysiology

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Pathophysiology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6103

Credit Hours

Credit Hours Min
3

Course Description
An in-depth scientific knowledge base relevant to selected pathophysiological states confronted by advanced practice nurses is explored. This course provides a basis for the foundation of clinical decisions related to selected diagnostic tests and the initiation of therapeutic regimens. Pathophysiology across the lifespan is correlated to clinical diagnoses and management.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the MSN program.

NURS6104 - Adv Pharmacology

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Pharmacology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6104

Credit Hours

Credit Hours Min
3

Course Description
This course provides advanced pharmacology and therapeutics used in the treatment of selected health conditions commonly encountered by the advanced practice nurse. Emphasis focuses on the decision making process utilized to prescribe and monitor pharmacotherapeutics appropriate to the client situation.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the MSN program.

NURS6204 - Curriculum Design/Ed Theory

General

College/School
Whitson-Hester School of Nurs

Course Title
Curriculum Design/Ed Theory

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6204

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

NURS6205 - Eval Methods in Nursing Edu

General

College/School
Whitson-Hester School of Nurs

Course Title
Eval Methods in Nursing Edu

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6205

Credit Hours

Credit Hours Min
2

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

NURS6207 - Clinical Focus-Practicum

General

College/School
Whitson-Hester School of Nurs

Course Title
Clinical Focus-Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6207

Credit Hours

Credit Hours Min
2

Course Description
This practicum experience focuses on the synthesis of previously gained knowledge and skills in the provision of advanced nursing care to individuals, families and communities. Emphasis is placed on management of clients within a clinical focus area.

Requisites

Simple Requisites

> **Prerequisite:** NURS6103 Adv Pathophysiology, 3 credit hour course in selected clinical focus area.

NURS6209 - Nursing Education Practicum

General

College/School
Whitson-Hester School of Nurs

Course Title
Nursing Education Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6209

Credit Hours

Credit Hours Min
4

Course Description
This practicum experience is designed to integrate theory in a reality context of the teaching role. Opportunities are provided to participate in all phases of the teaching role, including clinical instruction in an area of specialization, and to experiment with different teaching methods.

Requisites

Simple Requisites

> **Prerequisite:** All MSN coursework.

NURS6210 - Innovative Teaching Strategies

General

College/School
Whitson-Hester School of Nurs

Course Title
Innovative Teaching Strategies

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6210

Credit Hours

Credit Hours Min
2

Course Description
This course is designed to introduce students to foundational education concepts, principles, and theories while exploring creative teaching and student learning approaches. Students will examine concepts of learning styles, student engagement, evolving technology, and adult learning.

Requisites

Simple Requisites

> **Prerequisites:** NURS6000 Theoretical Foundations, NURS6001 Health Care Policy, NURS6003 Adv Role Development, NURS6101 Adv Health Assessment, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS6211 - Trends in Healthcare Mgmt

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Trends in Healthcare Mgmt	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
NURS	6211

Credit Hours

Credit Hours Min
2

Course Description
This course is designed to equip the student with an overview of advanced nursing knowledge in current trends, best practice guidelines, and available resources related to the care of those with chronic and acute diseases. Consideration will be given to major chronic and acute health problems and the factors that influence care management across the life span.

Requisites

Simple Requisites

> **Prerequisites:** None.

NURS6212 - Preparation for Certification

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Preparation for Certification	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
NURS	6212

Credit Hours

Credit Hours Min
1

Course Description
This course will provide a survey of various concepts surrounding the certification exam for nurse educators.

Requisites

Simple Requisites

> **Prerequisites:** All MSN coursework, excluding NURS6990 Scholarly Synthesis, NURS6207 Clinical Focus-Practicum, NURS6209 Nursing Education Practicum.

NURS6301 - Nursing Administration I

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Nursing Administration I	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
NURS	6301

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Admission to the MSN program. Comprehensive analysis of concepts required for effective performance of the nurse executive's role in organizations. Management as a function of the total organizational system is evaluated. Organizational designs and interpersonal relationships in the healthcare organization are critiqued.

Requisites

Simple Requisites

> **Prerequisite Courses**
> **Type**
> Prerequisite
>
> > **Complete ALL of the following Courses:**
> > - NURS6000 - Theoretical Foundations
> >   **AND** NURS6001 - Health Care Policy
> >   **AND** NURS6002 - Advanced Nursing Research
> >   **AND** NURS6003 - Adv Role Development
>
> **Additional Comments:**

NURS6302 - Nursing Administration II

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Nursing Administration II	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
NURS	6302

Credit Hours

Credit Hours Min
3

Tennessee Technological University

Course Description
Prerequisite: NURS 6301. The primary focus of this course is a synthesis of concepts used for effective performance of the nurse executive's role in organizations. The use of human and financial resources in organizational development is explored.

Requisites
Simple Requisites

Prerequisites: NURS 6000, NURS 6001, NURS 6002, NURS 6003, and NURS 6301.

NURS6303 - Health Care Finance

General
College/School
Whitson-Hester School of Nurs

Course Title
Health Care Finance

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6303

Credit Hours
Credit Hours Min
3

Course Description
This course will enable you to learn the basics of current finance theory and tools to practice in mnaging healthcare on a day-to-day basis.

Requisites
Simple Requisites

Prerequisite: NURS6000 Theoretical Foundations.

NURS6304 - Human Res Mgmt

General
College/School
Whitson-Hester School of Nurs

Course Title
Human Res Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6304

Credit Hours
Credit Hours Min
3

Course Description
Prerequisite: NURS 6301. Personnel and human resource issues including labor management in nursing and health care settings.

Requisites
Simple Requisites

Prerequisite Courses
Type
Prerequisite

Complete ALL of the following Courses:
- NURS6000 - Theoretical Foundations
  AND NURS6001 - Health Care Policy
  AND NURS6002 - Advanced Nursing Research
  AND NURS6003 - Adv Role Development
  AND NURS6301 - Nursing Administration I

Additional Comments:

NURS6305 - Quality Mgmt in Nursing & Hlth

General
College/School
Whitson-Hester School of Nurs

Course Title
Quality Mgmt in Nursing & Hlth

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6305

Credit Hours
Credit Hours Min
3

Course Description
This course provides a multidisciplinary background in the science of health care quality management. The history and evolution of the quality movement, theories and thought leaders, current quality of care issues, research and innovations, intervention strategies, and instruments will be covered; as well as an analysis of quality management system models in health care. The student will learn to develop and plan for execution of quality improvement plans and will use a quality indicator assessment program, such as Agency for Healthcare Research and Quality (AHRQ) or National Database for Nursing Quality Indicators (NDNQI), as the framework to develop a paper that identifies quality indicators, their measurements and the nursing interventions to improve the quality measurement. Value based purchasing will be defined and interventions to optimize value based purchasing will be discussed.

Requisites
Simple Requisites

Prerequisite: NURS6301 Nursing Administration I, NURS6302 Nursing Administration II.

NURS6307 - Nursing Management Practicum

General
College/School
Whitson-Hester School of Nurs

Course Title
Nursing Management Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6307

Course Title
Intro-Healthcare Informatics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Credit Hours

Credit Hours Min
2

Course Subject Code
NURS

Course Number
6401

Course Description

This practicum experience integrates theory into a reality context of the nurse manager's role. Students will participate in various functions and phases of the nurse manager role. Students, faculty, and preceptors will evaluate the student's strengths and weaknesses related to the skills and competencies of nursing management. Course includes 120 clock hours of clinical time.

Credit Hours

Credit Hours Min
3

Course Description

Prerequisite: Digital Literacy. This course is the foundation of informatics study. It provides the theoretical framework for information management within various healthcare settings. Topics will include an overview of healthcare information systems and applications and national healthcare information management initiatives.

Requisites

Simple Requisites

> **Prerequisite:** NURS6000 Theoretical Foundations, NURS6001 Health Care Policy, NURS6002 Advanced Nursing Research, NURS6003 Adv Role Development, NURS6301 Nursing Administration I, NURS6302 Nursing Administration II, NURS6304 Human Res Mgmt.
>
> **Pre-or co-requisite:** NURS6305 Quality Mgmt in Nursing & Hlth.

Requisites

Simple Requisites

> **Prerequisite:** Digital Literacy.

NURS6402 - Healthcare Info Sys & Tech

NURS6309 - Nursing Admin Practicum

General

College/School
Whitson-Hester School of Nurs

General

College/School
Whitson-Hester School of Nurs

Course Title
Nursing Admin Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Title
Healthcare Info Sys & Tech

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6309

Course Subject Code
NURS

Course Number
6402

Credit Hours

Credit Hours Min
4

Credit Hours

Credit Hours Min
3

Course Description

This practicum experience is designed to integrate theory in a reality context of the administrator's role. Opportunities are provided to participate in all phases of the executive role in different administrative settings.

Course Description

This course focuses the healthcare professional on the foundations of information system hardware and software interaction inclusive of the structure and function of networks and the Internet. Strategic planning tactics for technology assessment and integration will prepare students to lead technology integration projects in practice. Additional topics will include computer hardware found in healthcare information systems, interface standards, as well as human-computer interaction, such as ergonomics and workflow analysis.

Requisites

Simple Requisites

> **Prerequisite:** NURS6301 Nursing Administration I, NURS6302 Nursing Administration II, NURS6303 Health Care Finance, NURS6304 Human Res Mgmt, NURS6305 Quality Mgmt in Nursing & Hlth.
>
> **Pre-or co-requisite:** NURS6990 Scholarly Synthesis.

Requisites

Simple Requisites

> **Corequisite:** Corequisite by instructor/advisor permission only. NURS6401 Intro-Healthcare Informatics.

NURS6401 - Intro-Healthcare Informatics

NURS6403 - Proj Mgt Dec-Anlys HC Info Sys

General

College/School
Whitson-Hester School of Nurs

General

College/School
Whitson-Hester School of Nurs

Course Title
Proj Mgt Dec-Anlys HC Info Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6403

Credit Hours

Credit Hours Min
3

Course Description

This course will explore the project management concepts and skills related to the analysis and design of information systems. Topics will include project management, systems life cycle and solution design, vendor and system selection, and evaluating solutions against strategic objectives.

Requisites

Simple Requisites

> **Prerequisite:** NURS6401 Intro-Healthcare Informatics.

NURS6404 - Proj Mgt Imp & Eval HC Inf Sys

General

College/School
Whitson-Hester School of Nurs

Course Title
Proj Mgt Imp & Eval HC Inf Sys

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6404

Credit Hours

Credit Hours Min
3

Course Description

This course will explore the project management concepts and skills related to the implementation and evaluation of information systems. Topics will include project management, systems testing, implementation strategies, and solution valuation.

Requisites

Simple Requisites

> **Prerequisite:** NURS6403 Proj Mgt Dec-Anlys HC Info Sys.

NURS6406 - Healthcare Data Analysis

General

College/School
Whitson-Hester School of Nurs

Course Title
Healthcare Data Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6406

Credit Hours

Credit Hours Min
3

Course Description

This course presents the concepts related to complex data analysis within the healthcare environment and will focus on healthcare practice outcomes for quality improvement. Principles of data collection, organization, statistical analysis and interpretation will be presented. Students will use data analysis as a tool for problem identification and data mining.

Requisites

Simple Requisites

> **Prerequisite:** MS NURS6002 Advanced Nursing Research and NURS6402 Healthcare Info Sys & Tech.
>
> **MPS Prerequisite:** STAT 5140 and NURS6402 Healthcare Info Sys & Tech.

NURS6407 - Informatics Applications I

General

College/School
Whitson-Hester School of Nurs

Course Title
Informatics Applications I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6407

Credit Hours

Credit Hours Min
2

Course Description

This applications course integrates informatics concepts with tools used in healthcare informatics practice. Topics include database design, concept mapping, workflow analysis, and solution modeling.

Requisites

Simple Requisites

> **Prerequisite:** NURS6402 Healthcare Info Sys & Tech.

NURS6409 - Informatics Applications II

General

College/School
Whitson-Hester School of Nurs

Course Title
Informatics Applications II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6409

Credit Hours

Credit Hours Min
2

Course Description

This applications course integrates further informatics concepts with tools used in healthcare informatics practice. Topics include web applications, website and media design, and data presentation.

Requisites

Simple Requisites

Prerequisite: NURS6404 Proj Mgt Imp & Eval HC Inf Sys.

NURS6410 - Informatics Practicum

General

College/School
Whitson-Hester School of Nurs

Course Title
Informatics Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6410

Credit Hours

Credit Hours Min
4

Course Description

This practicum provides students with the opportunity to gain informatics-related experiences in the healthcare setting. Students will complete a minimum of 200 hours in the clinical setting functioning under the supervision of an informatics professional. Specific learning objectives will be developed based upon the clinical placement. Students will be eligible to write the ANCC certification exam following this practicum course.

Requisites

Simple Requisites

Prerequisites: None

NURS6501 - Adult Health Nursing I

General

College/School
Whitson-Hester School of Nurs

Course Title
Adult Health Nursing I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6501

Credit Hours

Credit Hours Min
3

Course Description

This course focuses on the theoretical and conceptual basis for nursing management of the acutely ill client from social, cultural, psychological, physical, spiritual and economic perspectives.

Requisites

Simple Requisites

Prerequisite: NURS6000 Theoretical Foundations.

NURS6503 - Advanced Adult Health Nurs II

General

College/School
Whitson-Hester School of Nurs

Course Title
Advanced Adult Health Nurs II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6503

Credit Hours

Credit Hours Min
3

Course Description

This course focuses on the theoretical and conceptual basis for nursing management of clients experiencing chronic illness from social, cultural, psychological, physical, spiritual, and economic perspectives.

Requisites

Simple Requisites

Prerequisites: NURS6000 Theoretical Foundations, NURS6103 Adv Pathophysiology, NURS6501 Adult Health Nursing I.

NURS6505 - Advanced Adult Health Nursing

General

College/School
Whitson-Hester School of Nurs

Course Title
Advanced Adult Health Nursing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6505

Credit Hours

Credit Hours Min
3

Course Description

This course focuses on the theoretical and conceptual basis of the advanced practice nurse role in the delivery of care to adult populations experiencing acute and chronic illness from a social, cultural, psychological, physical, spiritual, and economic perspective.

Requisites

Simple Requisites

Prerequisite: Admission to MSN program.

> **Pre- or co-requisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, and NURS6104 Adv Pharmacology.

NURS6511 - Psy Nursing Care I

General

College/School
Whitson-Hester School of Nurs

Course Title
Psy Nursing Care I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6511

Credit Hours

Credit Hours Min
3

Course Description
This course will provide a foundation in the specialty care of individuals and families experiencing a psychiatric disorder.

Requisites

Simple Requisites

> **Prerequisite:** NURS6103 Adv Pathophysiology.

NURS6513 - Psychiatric Nursing Care II

General

College/School
Whitson-Hester School of Nurs

Course Title
Psychiatric Nursing Care II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6513

Credit Hours

Credit Hours Min
3

Course Description
This course provides students with a conceptual theory-base for implementing advanced practice psychiatric nursing psychotherapy interventions.

Requisites

Simple Requisites

> **Prerequisite:** NURS6103 Adv Pathophysiology.

NURS6515 - Adv Psyc/Mental Health Nursing

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Psyc/Mental Health Nursing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6515

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on advanced principles and concepts related to mental health nursing. The course emphasizes the roles and functions of the advanced practice nurse in meeting the needs of individuals/families/groups/communities who are experiencing alterations in psychosocial functioning. It includes management strategies from the domains of nursing, medicine and pharmacological therapeutics. Evidence-based practices, research, culture diversity, ethics and legal issues are integrated into this course.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the MSN program.
>
> **Pre- or co-requisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, and NURS6104 Adv Pharmacology.

NURS6522 - Critical Care I

General

College/School
Whitson-Hester School of Nurs

Course Title
Critical Care I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6522

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on advanced concepts of critical care related to multi-organ/system function and dysfunction. Nursing care relating to physiology, assessment, pathophysiology, system failure, and clinical management of the cardiovascular system, pulmonary system, renal system, and endocrine system are addressed. Core concepts of complex pathophysiology, current treatment modalities, and advanced nursing roles are integrated in discussions of providing care to critically ill patients.

Requisites

Simple Requisites

Prerequisite: NURS6103 Adv Pathophysiology.

NURS6523 - Critical Care II

General

College/School
Whitson-Hester School of Nurs

Course Title
Critical Care II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6523

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on advanced concepts of critical care related to multi-organ/system function and dysfunction. Nursing care relating to physiology, assessment, pathophysiology, system failure, and clinical management of the defense systems (infection, sepsis, organ/bone marrow transplant), shock, trauma, neurological system, hepatic system and gastrointestinal systems are addressed. Integrative core concepts with more complex pathophysiology and advanced treatment modalities of advanced nursing care are integrated to provide care to critically ill patients.

Requisites

Simple Requisites

Prerequisite: NURS6103 Adv Pathophysiology.

NURS6525 - Adv Critical Care Nursing

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Critical Care Nursing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6525

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on advanced concepts related to multi-organ/system function and disfunction. Physiology, assessment, pathophysiology, system failure, and clinical management of major body systems are addressed.

Requisites

Simple Requisites

Prerequisite: Admission to the MSN program.

Pre- or co-requisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS6541 - Women's Hlth/Perinatal Nurs I

General

College/School
Whitson-Hester School of Nurs

Course Title
Women's Hlth/Perinatal Nurs I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6541

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on evidence-based care of the women experiencing common health alterations and developmental transitions. Nursing strategies will include health promotion, prevention of disease, maintenance, and restoration.

Requisites

Simple Requisites

Prerequisite: NURS6103 Adv Pathophysiology.

NURS6543 - Women's Hlth/Perinatal Nurs II

General

College/School
Whitson-Hester School of Nurs

Course Title
Women's Hlth/Perinatal Nurs II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6543

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on evidence-based management and care of the pre-gestational, antepartum, intrapartum, and the puerpieum woman. Focus will include selected alterations of pregnancy. In addition, management and care of the adaptive transitional stages of the newborn and parenting education are explored.

Requisites

Simple Requisites

> **Prerequisite:** NURS6103 Adv Pathophysiology, NURS6541 Women's Hlth/Perinatal Nurs I.

NURS6545 - Adv Women's Hlth/Perinatal Nrs

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Women's Hlth/Perinatal Nrs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6545

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the care of women's health issues and the pre, peri, and post natal care of both mother and newborn. Nursing strategies for illness prevention, health promotion, and clinical management of both acute and chronic conditions are addressed.

Requisites

Simple Requisites

> **Prerequisite:** Admission to the MSN program.
>
> **Pre- or co-requisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, and NURS6104 Adv Pharmacology.

NURS6601 - FNP I Women's Health

General

College/School
Whitson-Hester School of Nurs

Course Title
FNP I Women's Health

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6601

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: NURS 6101, NURS 6102, NURS 6103, NURS 6104. Corequisite: NURS 6602. This course focuses on advanced practice nursing and health care management of women in diverse populations. Course content includes bio-psychosocial interactions, affecting women throughout the lifespan.

Requisites

> No Requirements

NURS6602 - FNP I Women's Health Clinical

General

College/School
Whitson-Hester School of Nurs

Course Title
FNP I Women's Health Clinical

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6602

Credit Hours

Credit Hours Min
2

Course Description
Prerequisite: NURS 6101, NURS 6102, NURS 6103, NURS 6104. Corequisite: NURS 6601. The focus of this clinical course is delivery of advanced nursing care to women. Various clinical settings with diverse populations will be employed for clinical practice.

Requisites

> No Requirements

NURS6603 - FNP II Adult Health

General

College/School
Whitson-Hester School of Nurs

Course Title
FNP II Adult Health

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6603

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: NURS 6101, NURS 6102, NURS 6103, NURS 6104. Corequisite: NURS 6604. This course focuses on advanced practice nursing and healthcare management of adults and older adults in diverse populations. Course content includes developmental, physiological, pathological, and psychosocial changes relative to health maintenance, acute and chronic illnesses and life transitions.

Requisites

> No Requirements

NURS6604 - FNP II Adult Health Clinical

General

College/School
Whitson-Hester School of Nurs

Course Title
FNP II Adult Health Clinical

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6604

Credit Hours

Credit Hours Min
4

Course Description
Prerequisite: NURS 6101, NURS 6102, NURS 6103, NURS 6104. Corequisite: NURS 6603. This clinical course is designed to provide the student with opportunities to deliver advanced nursing care to adults and older adults. The student is expected to complete health assessments of adults and older adults and develop comprehensive plans of care.

Requisites

No Requirements

NURS6605 - FNP III Pediatrics

General

College/School
Whitson-Hester School of Nurs

Course Title
FNP III Pediatrics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6605

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: NURS 6101, NURS 6102, NURS 6103, NURS 6104. Corequisite: NURS 6606. The focus of this course is on advanced nursing and healthcare management of children and adolescents. Course content includes developmental, physiological, pathological, and psychosocial changes relative to health maintenance, acute and chronic illnesses, and developmental transitions within the family context.

Requisites

No Requirements

NURS6606 - FNP III Pediatrics Clinical

General

College/School
Whitson-Hester School of Nurs

Course Title
FNP III Pediatrics Clinical

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6606

Credit Hours

Credit Hours Min
2

Course Description
Prerequisite: NURS 6101, NURS 6102, NURS 6103, NURS 6104. Corequisite: NURS 6605. This clinical course is designed to provide the student with opportunities to deliver advanced nursing care to children and adolescents in families and communities. In collaboration with nursing faculty and clinical preceptors various primary care settings will be employed for clinical practice.

Requisites

No Requirements

NURS6609 - FNP Practicum

General

College/School
Whitson-Hester School of Nurs

Course Title
FNP Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6609

Credit Hours

Credit Hours Min
4

Course Description
Prerequisite: NURS 6000, NURS 6101, NURS 6102, NURS 6103, NURS 6104, NURS 6605, NURS 6606. This practicum experience focuses on the synthesis of previously gained knowledge and skills in the provision of advanced nursing care to individuals, families and communities. Emphasis is placed on health promotion, disease prevention and clinical management of clients with common acute and chronic illness.

NURS6610 - Adult Health Primary Care I

General

College/School
Whitson-Hester School of Nurs

Course Title
Adult Health Primary Care I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6610

Credit Hours

Credit Hours Min
3

Course Description

This course focuses on care of young and middle adults through primary and secondary prevention, diagnosis and treatment of common clinical problems using evidence in primary care settings including developmental, physiological, pathological and psychosocial changes relative to health maintenance in both acute and chronic illnesses.

Requisites

Simple Requisites

Prerequisites: NURS6104 Adv Pharmacology; NURS5009 Health Assessment Lifespan/NURS6101 Adv Health Assessment; NURS6102 Adv Health Assmt/Clinical; NURS6103 Adv Pathophysiology.

Corequisite: NURS6611 Adult Hlth Primary Care I Pra.

NURS6611 - Adult Hlth Primary Care I Pra

General

College/School
Whitson-Hester School of Nurs

Course Title
Adult Hlth Primary Care I Pra

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6611

Credit Hours

Credit Hours Min
3

Course Description

This course focuses on care of young and middle-aged adults in underserved, rural and urban populations, and is designed to provide opportunities to apply theoretical and/or scientific knowledge to health promotion, diagnosis and management. Students will apply their knowledge of advanced assessment, pathophysiology, and evidence-based practice in a clinical setting.

Requisites

Simple Requisites

Prerequisites: NURS6104 Adv Pharmacology; NURS5009 Health Assessment Lifespan/NURS6101 Adv Health Assessment; NURS6102 Adv Health Assmt/Clinical;NURS6103 Adv Pathophysiology.

Corequisite: NURS6610 Adult Health Primary Care I.

NURS6612 - Adult Health Primary Care II

General

College/School
Whitson-Hester School of Nurs

Course Title
Adult Health Primary Care II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6612

Credit Hours

Credit Hours Min
3

Course Description

This course focuses on care of older adults through primary and secondary prevention, diagnosis and treatment of common clinical problems using evidence in primary care settings including developmental, physiological, pathological and psychosocial changes relative to health maintenance in both acute and chronic illnesses. This course places emphasis on the geriatric population.

Requisites

Simple Requisites

Prerequisites: NURS 6104; NURS5009 Health Assessment Lifespan/NURS6101 Adv Health Assessment; NURS 6102; NURS 6103, NURS 6610/NURS6611 Adult Hlth Primary Care I Pra.

Corequisite: NURS6613 Adult Hlth II PrimycarePrctcm.

NURS6613 - Adult Hlth II PrimycarePrctcm

General

College/School
Whitson-Hester School of Nurs

Course Title
Adult Hlth II PrimycarePrctcm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6613

Credit Hours

Credit Hours Min
3

Course Description

This course focuses on care of older adults, including the underserved, rural, and urban settings emphasizing clinical prevention and the treatment of acute/chronic illness. It is designed to provide opportunities to apply theoretical and/or scientific knowledge to health promotion, diagnosis and management. Students will apply their knowledge of advanced assessment, pathophysiology, and evidenced-based practice in a clinical setting.

Requisites

Simple Requisites

Prerequisites: NURS6104 Adv Pharmacology; NURS5009 Health Assessment Lifespan/NURS6101 Adv Health Assessment; NURS6102 Adv Health Assmt/Clinical; NURS6103 Adv Pathophysiology; NURS6610 Adult Health Primary Care I/NURS6611 Adult Hlth Primary Care I Pra.

Corequisites: NURS6612 Adult Health Primary Care II.

NURS6614 - Primary Care Ped & Wmn Hlth

General

College/School
Whitson-Hester School of Nurs

Course Title
Primary Care Ped & Wmn Hlth

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6614

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on care of women during developmental transitions in their overall health and wellness, including family planning and infertility issues, as well as pregnancy and menopausal issues. This course also focuses on advanced nursing and healthcare management of children and adolescents. Course content includes developmental, physiological, pathological, and psychosocial changes relative to health maintenance, acute and chronic illnesses, and developmental transitions within the family context.

Requisites

Simple Requisites

> **Prerequisites:** NURS 6104; NURS5009 Health Assessment Lifespan/NURS6101 Adv Health Assessment; NURS 6102; NURS 6103; NURS 6610/NURS6611 Adult Hlth Primary Care I Pra.
>
> **Corequisite:** NURS6615 Primary Care/Family: Practicum.

NURS6615 - Primary Care/Family: Practicum

General

College/School
Whitson-Hester School of Nurs

Course Title
Primary Care/Family: Practicum

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6615

Credit Hours

Credit Hours Min
3

Course Description
This course addresses primary health care needs of the entire family with a focus on children, adolescents, and women in rural, urban and underserved populations. Strategies for prevention, health promotion, and evidenced-based clinical management of both acute and chronic health concerns are examined across the lifespan of the client and family health populations.

Requisites

Simple Requisites

> **Prerequisites:** NURS6104 Adv Pharmacology; NURS6101 Adv Health Assessment; NURS6102 Adv Health Assmt/Clinical; NURS6103 Adv Pathophysiology; NURS6610 Adult Health Primary Care I/NURS6611 Adult Hlth Primary Care I Pra.
>
> **Corequisite:** NURS6614 Primary Care Ped & Wmn Hlth.

NURS6616 - Final FNP Preceptorship

General

College/School
Whitson-Hester School of Nurs

Course Title
Final FNP Preceptorship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6616

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the integration of previously gained knowledge and skills in the care of individuals, families and communities, including the underserved, rural, and urban settings emphasizing clinical prevention and the treatment of acute/chronic illness. It is designed to provide opportunities to apply theoretical and/or scientific knowledge to health promotion, diagnosis and management.

Requisites

Simple Requisites

> **Prerequisites:** NURS6104 Adv Pharmacology; NURS5009 Health Assessment Lifespan/NURS6101 Adv Health Assessment; NURS6102 Adv Health Assmt/Clinical; NURS6103 Adv Pathophysiology; NURS6610 Adult Health Primary Care I/NURS6611 Adult Hlth Primary Care I Pra; NURS6612 Adult Health Primary Care II/NURS6613 Adult Hlth II PrimycarePrctcm; NURS6614 Primary Care Ped & Wmn Hlth/NURS6615 Primary Care/Family: Practicum.

NURS6631 - Pediatric Nursing I

General

College/School
Whitson-Hester School of Nurs

Course Title
Pediatric Nursing I

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6631

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on health maintenance and health promotion for well children and their families.

Requisites

Simple Requisites

> **Prerequisite:** NURS6000 Theoretical Foundations, NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical.

NURS6633 - Pediatric Nursing II

General

College/School
Whitson-Hester School of Nurs

Course Title
Pediatric Nursing II

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6633

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to provide the advanced practice nurse with the necessary knowledge base to provide care for children and their families experiencing minor acute illness and chronic illness/disabilities. Content will emphasize common minor acute illnesses and chronic illness/disabilities typically seen in the ambulatory clinic site.

Requisites

Simple Requisites

> **Prerequisite:** NURS6000 Theoretical Foundations, NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical.

NURS6635 - Adv Pediatric Nursing

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Pediatric Nursing

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
NURS

Course Number
6635

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on health maintenance and health promotion for children and their families. Care for children and families experiencing both acute and chronic illness/disabilities are addressed.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, and NURS6104 Adv Pharmacology.

NURS6710 - Adv Family Psy Nursing I

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Family Psy Nursing I

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
NURS

Course Number
6710

Credit Hours

Credit Hours Min
3

Course Description
This course is the first of three in the sequence of intervention and case management courses. It provides the foundation for the diagnosis and management of common psychiatric illnesses, behavioral health and developmental problems, and substance use disorders across the lifespan.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.
>
> **Corequisite:** NURS6711 Adv Family Psy Nurs I: Pract.

NURS6711 - Adv Family Psy Nurs I: Pract

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Family Psy Nurs I: Pract

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
NURS

Course Number
6711

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on care of adults in underserved, rural, and urban populations, and is designed to provide opportunities to apply theoretical and/or scientific knowledge to health promotion, diagnosis and management of identified mental illnesses. Students will apply their knowledge of advanced assessment, pathophysiology, and evidence-based practice in a clinical setting.

Requisites

Simple Requisites

> **Prerequisites:** NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology.

NURS6712 - Adv Fam Psy Nursing II

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Fam Psy Nursing II

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6712

Credit Hours

Credit Hours Min
3

Course Description
This course provides an approach to advance nursing in the specialty care of individuals and families experiencing a psychiatric disorder utilizing different psychiatric health care delivery models.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS6710 Adv Family Psy Nursing I/NURS6711 Adv Family Psy Nurs I: Pract.

Corequisite: NURS6713 Adv Fam Psy Nurs II: Pract.

NURS6713 - Adv Fam Psy Nurs II: Pract

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Fam Psy Nurs II: Pract

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6713

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on the advance nursing care of individuals and families experiencing a psychiatric disorder. Students will apply their knowledge of advanced assessment, pathophysiology and evidence-based practice in a clinical setting.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6012, NURS6013, NURS6103 Adv Pathophysiology, NURS6710 Adv Family Psy Nursing I/NURS6711 Adv Family Psy Nurs I: Pract.

Corequisite: NURS6712 Adv Fam Psy Nursing II.

NURS6714 - Adv Fam Psy Nursing III

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Fam Psy Nursing III

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6714

Credit Hours

Credit Hours Min
3

Course Description
This course focuses on management of common psychiatric illnesses in both adults and children.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS6710 Adv Family Psy Nursing I/NURS6711 Adv Family Psy Nurs I: Pract, NURS6712 Adv Fam Psy Nursing II/NURS6713 Adv Fam Psy Nurs II: Pract.

Corequisite: NURS6715 Adv Fam Psy Nurs III: Pract.

NURS6715 - Adv Fam Psy Nurs III: Pract

General

College/School
Whitson-Hester School of Nurs

Course Title
Adv Fam Psy Nurs III: Pract

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
NURS

Course Number
6715

Credit Hours

Credit Hours Min
3

Course Description
this course incorporates psychotherapeutic and psychopharmacological intervention in the identification and management of complex psychiatric/mental health issues for diverse clients across the lifespan. Students will apply their knowledge of advanced assessment, pathophysiology and evidence-based practice in a clinical setting.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS6710 Adv Family Psy Nursing I/NURS6711 Adv Family Psy Nurs I: Pract, NURS6712 Adv Fam Psy Nursing II/NURS6713 Adv Fam Psy Nurs II: Pract.

Corequisite: NURS6714 Adv Fam Psy Nursing III.

NURS6716 - Final Psy Nurs Preceptorship

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Final Psy Nurs Preceptorship	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
NURS	6716

Credit Hours

Credit Hours Min
3

Course Description

This course builds on and synthesizes knowledge gained in the previous semesters. Psychotherapeutic and psychopharmacological interventions are integrated in the identification and management of complex psychiatric/mental health issues for diverse clients across the lifespan.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS6710 Adv Family Psy Nursing I/NURS6711 Adv Family Psy Nurs I: Pract, NURS6712 Adv Fam Psy Nursing II/NURS6713 Adv Fam Psy Nurs II: Pract, NURS6714 Adv Fam Psy Nursing III/NURS6715 Adv Fam Psy Nurs III: Pract.

NURS6910 - Role Trans to Cert/Practice

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Role Trans to Cert/Practice	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
NURS	6910

Credit Hours

Credit Hours Min
2

Course Description

The primary goal of this course is to prepare the FNP student for the AANP or ANCC Certification exam. Topics such as test plan and format, registration process, test taking strategies, and post exam procedures arc addressed. Students will explore common primary care diagnoses tested on the certification exams and take standardized tests to identify areas of weakness. All students will submit a post-graduation preparation plan that is approved by the instructors.

Requisites

Simple Requisites

Prerequisites: NURS6104 Adv Pharmacology; NURS5009 Health Assessment Lifespan/NURS6101 Adv Health Assessment; NURS6102 Adv Health Assmt/ Clinical; NURS6103 Adv Pathophysiology; NURS6610 Adult Health Primary Care I/NURS6611 Adult Hlth Primary Care I Pra; NURS6612 Adult Health Primary Care II/NURS6613 Adult Hlth II PrimycarePrctcm; NURS6614 Primary Care Ped & Wmn Hlth/NURS6615 Primary Care/Family: Practicum.

NURS6911 - Trans to Cert/Prac-Psy Nrs Pra

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Trans to Cert/Prac-Psy Nrs Pra	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
NURS	6911

Credit Hours

Credit Hours Min
2

Course Description

The primary goal of this course is to prepare the PMHNP student for the ANCC Certification exam. Topics such as test plan and format, registration process, test taking strategies, and post exam procedures are addressed. Students will explore common psychiatric mental health diagnoses tested on certification exams and take standardized tests to identify areas of weakness. All students will submit a post-graduation preparation plan that is approved by the instructors.

Requisites

Simple Requisites

Prerequisites: NURS6101 Adv Health Assessment, NURS6102 Adv Health Assmt/Clinical, NURS6103 Adv Pathophysiology, NURS6104 Adv Pharmacology, NURS6710 Adv Family Psy Nursing I/NURS6711 Adv Family Psy Nurs I: Pract, NURS6712 Adv Fam Psy Nursing II/NURS6713 Adv Fam Psy Nurs II: Pract, NURS6714 Adv Fam Psy Nursing III/NURS6715 Adv Fam Psy Nurs III: Pract.

NURS6990 - Scholarly Synthesis

General

College/School
Whitson-Hester School of Nurs

Course Title	**Academic Level (Course Level)**
Scholarly Synthesis	Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
NURS	6990

Credit Hours

Credit Hours Min

3

Course Description

As a culminating experience, this course provides the student with the opportunity to synthesize knowledge in the major or concentration area of study.

Requisites

Simple Requisites

Prerequisite: All MSN coursework.

Corequisite: Based on area of concentration NURS6209 Nursing Education Practicum and NURS6309 Nursing Admin Practicum.

Physics Department

No graduate degree is offered in Physics but courses may be used (with advisory committee approval) as electives in other fields of study.

Courses

PHYS5900 - Selected Topics in Physics

General

College/School

Arts and Sciences

Course Title	Academic Level (Course Level)
Selected Topics in Physics	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
PHYS	5900

Credit Hours

Credit Hours Min	Credit Hours Max
3	9

Credit Hours Operator

TO

Course Description

Topics covered will be chosen on the basis of student interest and need.

Requisites

Simple Requisites

Prerequisites: None

Professional Studies Department

The Master of Professional Studies (MPS) – This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas and offers students the chance to complete a graduate certificate within each of the concentration areas: Healthcare Administration—provides the healthcare professional with leadership and strategic management tools to lead and serve one of the nation's largest service industries. The focus of the program is to provide the healthcare professional with the opportunity to develop important skills in healthcare, leadership, finance, informatics, research and administration in the various components of healthcare delivery systems that include hospitals, nursing homes, group medical practices, personal care homes, retirement centers, health maintenance organizations, medical sales, and insurance companies. A graduate certificate is available in Healthcare Informatics for the Healthcare Administration students.

Human Resources Leadership — prepares you for a leadership role in the area of human resources. The interdisciplinary approach is appropriate because of the many skills and knowledge areas that are needed for success in this field.

Public Safety — provides the public safety professional with leadership and strategic management tools to lead and serve in one of the nations growing professions.

Strategic Leadership — prepares you to lead in today's rapidly changing professional environment. The interdisciplinary approach focuses on the areas of leadership, communication, strategic planning and assessment, organizational structure and research/data analysis.

Teaching English to Speakers of Other Languages (TESOL) — prepares you to meet an ongoing demand for both initial preparation and continuing education for individuals who plan to teach or a currently teaching English as a second/foreign language in various educational settings.

Training and Development — equips leaders for the growing and evolving field of workplace learning and performance. The program will prepare you to manage, deliver and assess on-site performance-based training, instructional design, and address the needs of human resource managers and other professionals who are increasingly relying on technology to deliver workforce education.

Corporate Communication — prepares you to excel in the fast-paced professional environment that surrounds the communication field. This program strengthens the corporate leader in developing organizational and interpersonal communication skills and leadership skills.

Media and Strategic Communication — prepares you to lead in the exciting field are of media and communication. The professional will acquire skills in the area of event planning and promotion, public relations, marketing, and other key communication areas.

In addition, the MPS program offers a 15 hour Graduate Certificate within each concentration area allowing students to achieve an additional milestone en route to their degree.

Programs

HCI2-CER - Healthcare Informatics Certificate, M.P.S.

Program Overview

Program Long Title

Healthcare Informatics Certificate, M.P.S.

College/School

Interdisciplinary Studies

Department(s)

Business, Professional Studies

Catalog Full Description

Graduate Certificates Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards

completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Certificate requires 15 credit hours.

Admission Requirements

Admission Requirements
For Full Standing: The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale.

And, applicants must meet one of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE® General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio.

The portfolio is to include:

- a resume;

- a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

- two (2) sealed letters of professional reference.

Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognition's. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree. Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Graduate Certificates Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Certificate requires 15 credit hours.

Certificate Course Requirements
Type
Completion Requirement

Certificate Requirements

Note, the student's advisor may allow for a course substitution in certificate requirements.

Complete ALL of the following Courses:
- PRST6530 - Healthcare Systems Economics
- PRST6540 - Health Informatics
- PRST6550 - Comp-Based Dec Modlng-Hlth Adm
- PRST6560 - Bio Sciences for Hlthcr Admin
- PRST6570 - Public Health

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the student's junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study.

The MPS Fast-track program applies to all MPS concentrations. Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program.

Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of "B" in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors whom meet the following admissions requirements:

• Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

• Overall undergraduate GPA of 3.0 or better;

• GPA of 3.25 in undergraduate major;

• Recommendation from the student's undergraduate advisor Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

HRL-CER - Human Resource Leadership Certificate, M.P.S.

Program Overview

Program Long Title
Human Resource Leadership Certificate, M.P.S.

College/School	Department(s)
Interdisciplinary Studies	Professional Studies

Catalog Full Description
Human Resource professionals are increasingly becoming an integral part of an organization's strategic planning process. Company executives turn to HR professionals for policy directives and creative ways to use human capital for improved performance results.

The Human Resources Leadership Certificate through the School of Professional Studies focuses on a variety of workplace factors (economic, environmental, ethical, legal, political and administrative) and the impact they can have on organizational productivity, performance, and behavior.

The objective of this program is to help students develop a strong foundation in HR principles and procedures, as well as develop critical thinking skills required to make good decisions and solve problems concerning the human side of business.

An interdisciplinary studies approach to this field is a perfect fit - succeeding in human resources requires a variety of skills, abilities, experiences, knowledge and the excellent graduate-level degree education students will receive through the flexible and rewarding program.

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Certificate requires 15 credit hours.

Admission Requirements

Admission Requirements
For Full Standing: The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale.

And, applicants must meet one of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE® General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio.

The portfolio is to include:

- a resume;
- a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and
- two (2) sealed letters of professional reference.

Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognition's. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree. Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The student will complete 15 credit hours of coursework (course options are listed below) to earn the Graduate Certificate in Human Resources Leadership.

**Certificate Requirements
Type**
Completion Requirement

Certificate Requirements

Complete at least 5 of the following courses:
- PRST6040 - Human Resources Mgmt
- PRST6105 - Project Planning & Scheduling
- PRST6200 - Globalization & the Profession
- PRST6421 - Strategic Org Prog Plan/Eval
- PRST6700 - Conflict Management and Negotiation
- PRST6721 - Managing Emergency Volunteers
- PRST6781 - Science of Contact Tracing
- PRST6800 - Organizational Skills/Dvlpmnt
- PRST6810 - Masters of Prof Studies Internships
- PRST6910 - Employment & Human Resources
- PRST6920 - Diversity in the Workplace
- PRST6930 - Compensation and Benefits
- PRST6940 - Recruitmnt/Selectn/Retentn

Optional Special Topics Course

> Some students may be advised to participate in a special topics course as part of the 15 hour requirement.
>
> **Earn at least 3 credits from the following:**
> - PRST/Special Topics
>
> **Additional Comments:**

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the student's junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study.

The MPS Fast-track program applies to all MPS concentrations. Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program.

Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of "B" in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors whom meet the following admissions requirements:

• Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

• Overall undergraduate GPA of 3.0 or better;

• GPA of 3.25 in undergraduate major;

• Recommendation from the student's undergraduate advisor Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

MPS-CCOM - Professional Studies, Corporate Communication Concentration, M.P.S.

Program Overview

Program Long Title
Professional Studies, Corporate Communication Concentration, M.P.S.

College/School	Department(s)
Interdisciplinary Studies	Professional Studies

Catalog Full Description
The Master of Professional Studies (MPS) - This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas and offers students the chance to complete a graduate certificate within each of the concentration areas: Healthcare Administration provides the healthcare professional with leadership and strategic management tools to lead and serve one of the nations largest service industries. The focus of the program is to provide the healthcare professional with the opportunity to develop important skills in healthcare, leadership, finance, informatics, research and administration in the various components of healthcare delivery systems that include hospitals, nursing homes, group medical practices, personal care homes, retirement centers, health maintenance organizations, medical sales, and insurance companies. A graduate certificate is available in Healthcare Informatics for the Healthcare Administration students.

Corporate Communication prepares you to excel in the fast-paced professional environment that surrounds the communication field. This program strengthens the corporate leader in developing organizational and interpersonal communication skills and leadership skills.

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 18 hours
- **Total Degree Requirement:** 30 hours

Admission Requirements

Admission Requirements

The minimum admission requirements are:

1. A bachelors degree from an accredited institution
2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale

And, applicants must meet **one** of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study
2. A score of 146 on the verbal portion of the GRE General Test (GRE) and 144 quantitative portion.
3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.
4. Five (5) or more years of professional work experience demonstrated through a portfolio. The portfolio is to include:
   - a resume;
   - a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and
   - two (2) sealed letters of professional reference.
   - Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognitions. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Masters degree.

Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration.

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the

departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours).The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The MPS in Corporate Communication prepares the professional to excel in the field of corporate communication. This concentration provides a focus on the areas of communication including organizational and interpersonal communication and leadership.

- **Required Core Courses:** 12 hours

- **Required Concentration Courses:** 18 hours

- **Total Degree Requirement:** 30 hours

MPS in Corporate Communication
Type
Completion Requirement

Required Core Courses (12 hours)

Complete ALL of the following Courses:
- PRST6100 - Prof Environmntl Issues/Ethics
- PRST6110 - Leadership and Communication
  OR COMM6110 - Leadership and Communication
- PRST6300 - Research Methods
- PRST6998 - Professional Project
  OR COMM6998 - Professional Project
  OR JOUR6998 - Professional Project

Required Concentration Courses (choose 18 hours)

Complete at least 6 of the following courses:
- COMM5420 - Adv Organizational Comm
- COMM4430 - Adv Interpersonal Comm
- COMM4620 - Advanced Public Speaking
- COMM4630 - Persuasion
- COMM5603 - Spec Top:Speech Communication
- COMM6200 - Communication Strategies for Virtual Teams
- COMM6610 - Special Topics
- JOUR6770 - Media Law and Ethics
- PRST6700 - Conflict Management and Negotiation
- PRST6200 - Globalization & the Profession
- PRST6720 - Crisis Response Management
- PRST6751 - Global Terrorism-Pndmc/Epidmcs
- PRST6790 - Special Topics

- PRST6791 - Special Topics
- PRST6792 - Special Topics
- PRST6793 - Special Topics
- PRST6794 - Special Topics
- PRST6795 - Special Topics
- PRST6796 - Special Topics
- PRST6797 - Special Topics
- PRST6798 - Special Topics
- PRST6799 - Special Topics
- PRST6800 - Organizational Skills/Dvlpmnt

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the students junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study. The MPS Fast-track program applies to all MPS concentrations.

Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the students undergraduate advisor and the Director of the MPS program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of B in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors whom meet the following admissions requirements:

- Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

- Overall undergraduate GPA of 3.0 or better;

- GPA of 3.25 in undergraduate major;

- Recommendation from the students undergraduate advisor

Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

MPS-HCA - Professional Studies, Healthcare Administration Concentration, M.P.S.

Program Overview

Program Long Title
Professional Studies, Healthcare Administration Concentration, M.P.S.

College/School	Department(s)
Interdisciplinary Studies	Professional Studies

Catalog Full Description

The Master of Professional Studies (MPS) - This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas and offers students the chance to complete a graduate certificate within each of the concentration areas: Healthcare Administration provides the healthcare professional with leadership and strategic management tools to lead and serve one of the nation's largest service industries. The focus of the program is to provide the healthcare professional with the opportunity to develop important skills in healthcare, leadership, finance, informatics, research and administration in the various components of healthcare delivery systems that include hospitals, nursing homes, group medical practices, personal care homes, retirement centers, health maintenance organizations, medical sales, and insurance companies. A graduate certificate is available in Healthcare Informatics for the Healthcare Administration students.

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

In addition, the MPS program offers a 12-hour Graduate Certificate within each concentration area allowing students to achieve an additional milestone in route to their degree.

Graduate Certificates

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (12 hours) as listed in this catalog. Upon completion of the 12 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 12-hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Admission Requirements

Admission Requirements
For Full Standing

The minimum admission requirements are:

1. A bachelors degree from an accredited institution
2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale

And, applicants must meet **one** of the following conditions:

- 3.0 grade point average in their undergraduate major course of study
- A score of 146 on the verbal portion of the GRE General Test (GRE) and 144 quantitative portion.
- A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.
- Five (5) or more years of professional work experience demonstrated through a portfolio. The portfolio is to include:
  - a resume;
  - a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

  - two (2) sealed letters of professional reference.
  - Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognitions. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the MPS degree.

Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration.

Provisional Admission

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

MPS in Healthcare Administration
Type
Completion Requirement

Required Core Courses (12 hours)

Complete ALL of the following Courses:
- PRST6100 - Prof Environmntl Issues/Ethics
- PRST6110 - Leadership and Communication
- PRST6300 - Research Methods
- PRST6998 - Professional Project

Required Concentration Courses (choose 18 hours)

Earn at least 15 credits from the following:
- PRST6200 - Globalization & the Profession
- PRST6421 - Strategic Org Prog Plan/Eval
- PRST6530 - Healthcare Systems Economics

- PRST6540 - Health Informatics
- PRST6550 - Comp-Based Dec Modlng-Hlth Adm
- PRST6560 - Bio Sciences for Hlthcr Admin
- PRST6570 - Public Health
- PRST6721 - Managing Emergency Volunteers
- PRST6751 - Global Terrorism-Pndmc/Epidmcs
- PRST6781 - Science of Contact Tracing
- PRST6790 - Special Topics
- PRST6791 - Special Topics
- PRST6792 - Special Topics
- PRST6793 - Special Topics
- PRST6794 - Special Topics
- PRST6795 - Special Topics
- PRST6796 - Special Topics
- PRST6797 - Special Topics
- PRST6798 - Special Topics
- PRST6799 - Special Topics
- PRST6810 - Masters of Prof Studies Internships

Advisor Guided Elective (3 hours)

Any PRST 6000 level course or course approved by advisor

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the students junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study. The MPS Fast-track program applies to all MPS concentrations.

Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of B in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors who meet the following admissions requirements:

- Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;
- Overall undergraduate GPA of 3.0 or better;
- GPA of 3.25 in undergraduate major;
- Recommendation from the students undergraduate advisor

Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

MPS-HRL - Professional Studies, Human Resources Leadership Concentration, M.P.S

Program Overview

Program Long Title
Professional Studies, Human Resources Leadership Concentration, M.P.S

College/School	Department(s)
Interdisciplinary Studies	Professional Studies

Catalog Full Description
The Master of Professional Studies (MPS) - This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas and offers students the chance to complete a graduate certificate within each of the concentration areas.

Human Resources Leadership prepares you for a leadership role in the area of human resources. The interdisciplinary approach is appropriate because of the many skills and knowledge areas that are needed for success in this field.

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

In addition, the MPS program offers a 15 hour Graduate Certificate within each concentration area allowing students to achieve an additional milestone en route to their degree.

Graduate Certificates

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Admission Requirements

Admission Requirements
For Full Standing

The minimum admission requirements are:

1. A bachelors degree from an accredited institution
2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale

And, applicants must meet **one** of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio. The portfolio is to include:

   ◦ a resume;

   ◦ a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

   ◦ two (2) sealed letters of professional reference.

   ◦ Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognitions. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Masters degree.

Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration.

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Required Core Courses:** 12 hours

- **Required Concentration Courses:** 15 hours

- **Advisor Guided Elective:** 3 hours

- **Total Degree Requirement:** 30 hours

MPS in Human Resources Leadership
Type
Completion Requirement

Required Core Courses (12 hours)

Complete ALL of the following Courses:
- PRST6100 - Prof Environmntl Issues/Ethics
- PRST6110 - Leadership and Communication
- PRST6300 - Research Methods
- PRST6998 - Professional Project

Required Concentration Courses (choose 15 hours)

Earn at least 15 credits from the following:
- PRST6040 - Human Resources Mgmt
- PRST6105 - Project Planning & Scheduling
- PRST6200 - Globalization & the Profession
- PRST6310 - Leadership in Organization
- PRST6421 - Strategic Org Prog Plan/Eval
- PRST6500 - Foundations of Leadership
- PRST6700 - Conflict Management and Negotiation
- PRST6721 - Managing Emergency Volunteers
- PRST6781 - Science of Contact Tracing
- PRST6790 - Special Topics
- PRST6791 - Special Topics
- PRST6792 - Special Topics
- PRST6793 - Special Topics
- PRST6794 - Special Topics
- PRST6795 - Special Topics
- PRST6796 - Special Topics
- PRST6797 - Special Topics
- PRST6798 - Special Topics
- PRST6799 - Special Topics
- PRST6800 - Organizational Skills/Dvlpmnt
- PRST6910 - Employment & Human Resources
- PRST6920 - Diversity in the Workplace
- PRST6930 - Compensation and Benefits
- PRST6940 - Recruitmnt/Selectn/Retentn

Advisor Guided Elective (3 hours)

Any PRST 6000 level course or course approved by advisor

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the students junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study. The MPS Fast-track program applies to all MPS concentrations.

Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of B in the graduate courses in order to apply them to the MPS

program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors who meet the following admissions requirements:

- Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;
- Overall undergraduate GPA of 3.0 or better;
- GPA of 3.25 in undergraduate major;
- Recommendation from the students undergraduate advisor

Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

MPS-MSCO - Professional Studies, Media and Strategic Communication Concentration, M.P.S.

Program Overview

Program Long Title
Professional Studies, Media and Strategic Communication Concentration, M.P.S.

College/School
Interdisciplinary Studies

Department(s)
Professional Studies

Catalog Full Description
The Master of Professional Studies (MPS) - This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas.

Media and Strategic Communication prepares you to lead in the exciting field are of media and communication. The professional will acquire skills in the area of event planning and promotion, public relations, marketing, and other key communication areas.

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 18 hours
- **Total Degree Requirement:** 30 hours

Admission Requirements

Admission Requirements
The minimum admission requirements are:

1. A bachelors degree from an accredited institution
2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale

And, applicants must meet **one** of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

1. A score of 146 on the verbal portion of the GRE General Test (GRE) and 144 quantitative portion.

2. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.
3. Five (5) or more years of professional work experience demonstrated through a portfolio. The portfolio is to include:

   ◦ a resume;
   ◦ a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and
   ◦ two (2) sealed letters of professional reference.
   ◦ Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognitions. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree.

Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration.

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The Media and Strategic Communication concentration prepares you to lead in the exciting areas of event planning and programming, public relations, marketing and other strategic areas.

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 18 hours
- **Total Degree Requirement:** 30 hours

MPS in Media and Strategic Communication
Type
Completion Requirement

Required Core Courses (12 hours)

Complete ALL of the following Courses:
- PRST6100 - Prof Environmntl Issues/Ethics

- PRST6110 - Leadership and Communication
  OR COMM6110 - Leadership and Communication
- PRST6300 - Research Methods
- PRST6998 - Professional Project
  OR COMM6998 - Professional Project
  OR JOUR6998 - Professional Project

Required Concentration Courses (choose 18 hours)

Earn at least 18 credits from the following:
- COMM5630 - Persuasion
- JOUR5460 - Pub Relations-Cases/Pract
- JOUR5500 - Adv Multimedia Storytelling
- JOUR5820 - Advanced Reporting
- JOUR5030 - Field Exp/Event Mgmt/Promotion
- JOUR5830 - Feature Writing
- JOUR5843 - Special Problems
  OR JOUR5846 - Special Problems
  OR JOUR5849 - Special Problems
- JOUR5930 - Advanced Copy Editing
- JOUR6450 - PR Management
- JOUR6770 - Media Law and Ethics
- JOUR6870 - Social Media Campaigns
- MKT6100 - Strategic Marketing
- MKT6500 - Advanced Marketing Analysis
- PRST6200 - Globalization & the Profession
- PRST6720 - Crisis Response Management
- PRST6790 - Special Topics
- PRST6791 - Special Topics
- PRST6792 - Special Topics
- PRST6793 - Special Topics
- PRST6794 - Special Topics
- PRST6795 - Special Topics
- PRST6796 - Special Topics
- PRST6797 - Special Topics
- PRST6798 - Special Topics
- PRST6799 - Special Topics
- PRST6800 - Organizational Skills/Dvlpmnt

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the students junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study. The MPS Fast-track program applies to all MPS concentrations.

Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of B in the graduate courses in order to apply them to the MPS

program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors who meet the following admissions requirements:

- Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;
- Overall undergraduate GPA of 3.0 or better;
- GPA of 3.25 in undergraduate major;
- Recommendation from the student's undergraduate advisor

Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

MPS-PMP - Professional Studies, Project Management for the Professional Concentration, M.P.S.

Program Overview

Program Long Title
Professional Studies, Project Management for the Professional Concentration, M.P.S.

College/School
Interdisciplinary Studies

Department(s)
Professional Studies

Catalog Full Description
The Master of Professional Studies (MPS) - This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas and offers students the chance to complete a graduate certificate within each of the concentration areas.

Project Management for the Professional program prepares students to meet the growing demands for project management with courses grounded in the methodologies, strategies, skills, and tactics critical for success. The program is a combination of theory and practice and accepts students from a variety of backgrounds providing professionals the opportunity to transition from one career to another. Students completing the program receive training from PMI certified instructors as well as 20+ year veterans of industry. The program does not require a calculus background.

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

In addition, the MPS program offers a 15 hour Graduate Certificate within each concentration area allowing students to achieve an additional milestone en route to their degree.

Graduate Certificates

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing

the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Admission Requirements

Admission Requirements

Admission Requirements

For Full Standing

The minimum admission requirements are:

1. A bachelor's degree from an accredited institution
2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale

And, applicants must meet **one** of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study
2. A score of 146 on the verbal portion of the GRE General Test (GRE) and 144 quantitative portion.
3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.
4. Five (5) or more years of professional work experience demonstrated through a portfolio. The portfolio is to include:
   ◦ a resume;
   ◦ a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and
   ◦ two (2) sealed letters of professional reference.
   ◦ Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognitions. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree.

Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration.

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

Project Management for the Professional Type
Completion Requirement

Required Core Courses (12 hours)

Complete ALL of the following Courses:
- PRST6100 - Prof Environmntl Issues/Ethics
- PRST6110 - Leadership and Communication
- PRST6300 - Research Methods
- PRST6998 - Professional Project

Required Concentration Courses (choose 12 hours)

Complete ALL of the following Courses:
- PRST6820 - Intro: Project Mgmt Expec/Meth
- PRST6830 - Project Mgmt Process/Dev Strat
- PRST6840 - Project Mgmt: Schedule & Fin
- PRST6850 - PM: Risk, Assessment & Quality

Project Management Elective Courses (6 credit hours)

Earn at least 6 credits from the following:
- PRST6860 - Proj Mgt: Conflict Mgt in Proj
- PRST6870 - Project Mgmt for IT Profession
- PRST6880 - Project Mgmt for Hlthcare Admn
- PRST6800 - Organizational Skills/Dvlpmnt
- PRST6810 - Masters of Prof Studies Internships

See advisor for additional courses that may be substituted for the above elective(s).

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the students junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study. The MPS Fast-track program applies to all MPS concentrations.

Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of B in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors who meet the following admissions requirements:

- Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

- Overall undergraduate GPA of 3.0 or better;

- GPA of 3.25 in undergraduate major;

- Recommendation from the student's undergraduate advisor

Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

MPS-PS - Professional Studies, Public Safety Concentration, M.P.S.

Program Overview

Program Long Title
Professional Studies, Public Safety Concentration, M.P.S.

College/School	Department(s)
Interdisciplinary Studies	Professional Studies

Catalog Full Description
The Master of Professional Studies (MPS) - This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas and offers students the chance to complete a graduate certificate within each of the concentration areas.

Public Safety provides the public safety professional with leadership and strategic management tools to lead and serve in one of the nation's growing professions.

Degree Requirements

- **Required Core Courses:** 12 hours

- **Required Concentration Courses:** 15 hours

- **Advisor Guided Elective:** 3 hours

- **Total Degree Requirement:** 30 hours

In addition, the MPS program offers a 15 hour Graduate Certificate within each concentration area allowing students to achieve an additional milestone en route to their degree.

Graduate Certificates

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Admission Requirements

Admission Requirements
For Full Standing

The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale

And, applicants must meet **one** of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio. The portfolio is to include:

   ◦ a resume;

   ◦ a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

   ◦ two (2) sealed letters of professional reference.

   ◦ Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognitions. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree.

Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration.

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites
Simple Requisites

Degree Requirements

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

MPS in Public Safety
Type
Completion Requirement

Required Core Courses (12 hours)

Complete ALL of the following Courses:
- PRST6100 - Prof Environmntl Issues/Ethics
- PRST6110 - Leadership and Communication
- PRST6300 - Research Methods
- PRST6998 - Professional Project

Required Concentration Courses (choose 15 hours)

Earn at least 15 credits from the following:
- PRST6200 - Globalization & the Profession
- PRST6700 - Conflict Management and Negotiation
- PRST6710 - Risk Assessment & Prevention
- PRST6720 - Crisis Response Management
- PRST6721 - Managing Emergency Volunteers
- PRST6730 - Leadership in Public Safety
  OR PRST6500 - Foundations of Leadership
- PRST6740 - Diversity in Public Safety
  OR PRST6920 - Diversity in the Workplace
- PRST6750 - Preparedness and Mitigation
- PRST6751 - Global Terrorism-Pndmc/Epidmcs
- PRST6760 - Funding in Public Safety
- PRST6780 - Intelligence Gathering
- PRST6781 - Science of Contact Tracing
- PRST6790 - Special Topics
- PRST6791 - Special Topics
- PRST6792 - Special Topics
- PRST6793 - Special Topics
- PRST6794 - Special Topics
- PRST6795 - Special Topics
- PRST6796 - Special Topics
- PRST6797 - Special Topics
- PRST6798 - Special Topics
- PRST6799 - Special Topics
- PRST6800 - Organizational Skills/Dvlpmnt
- PRST6911 - Constitution & Society

Advisor Guided Elective (3 hours)

Any PRST 6000 level course or course approved by advisor

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the students junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study. The MPS Fast-track program applies to all MPS concentrations.

Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of B in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors who meet the following admissions requirements:

- Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;
- Overall undergraduate GPA of 3.0 or better;
- GPA of 3.25 in undergraduate major;
- Recommendation from the student's undergraduate advisor

Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

MPS-SL - Professional Studies, Strategic Leadership Concentration, M.P.S.

Program Overview

Program Long Title
Professional Studies, Strategic Leadership Concentration, M.P.S.

College/School
Interdisciplinary Studies

Department(s)
Professional Studies

Catalog Full Description
The Master of Professional Studies (MPS) - This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas and offers students the chance to complete a graduate certificate within each of the concentration areas.

Strategic Leadership prepares you to lead in today's rapidly changing professional environment. The interdisciplinary approach focuses on the areas of leadership, communication, strategic planning and assessment, organizational structure and research/data analysis.

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

In addition, the MPS program offers a 15 hour Graduate Certificate within each concentration area allowing students to achieve an additional milestone en route to their degree.

Graduate Certificates

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Admission Requirements

Admission Requirements
For Full Standing

The minimum admission requirements are:

1. A bachelor's degree from an accredited institution
2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale

And, applicants must meet **one** of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study
2. A score of 146 on the verbal portion of the GRE General Test (GRE) and 144 quantitative portion.
3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.
4. Five (5) or more years of professional work experience demonstrated through a portfolio. The portfolio is to include:
   - a resume;
   - a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and
   - two (2) sealed letters of professional reference.
   - Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognitions. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree.

Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration.

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

MPS in Strategic Leadership
Type
Completion Requirement

Required Core Courses (12 hours)

Complete ALL of the following Courses:
- PRST6100 - Prof Environmntl Issues/Ethics
- PRST6110 - Leadership and Communication
- PRST6300 - Research Methods
- PRST6998 - Professional Project

Required Concentration Courses (choose 15 hours)

Earn at least 15 credits from the following:
- ELPA6560 - Small Group Leadership
- JOUR6450 - PR Management
- LDSP6000 - Current Issues in Leadership
- PRST6040 - Human Resources Mgmt
- PRST6105 - Project Planning & Scheduling
- PRST6200 - Globalization & the Profession
- PRST6310 - Leadership in Organization
- PRST6421 - Strategic Org Prog Plan/Eval
- PRST6500 - Foundations of Leadership
- PRST6700 - Conflict Management and Negotiation
- PRST6721 - Managing Emergency Volunteers
- PRST6730 - Leadership in Public Safety
- PRST6770 - Computer-Based Decision Model
- PRST6790 - Special Topics
- PRST6791 - Special Topics
- PRST6792 - Special Topics
- PRST6793 - Special Topics
- PRST6794 - Special Topics

- PRST6795 - Special Topics
- PRST6796 - Special Topics
- PRST6797 - Special Topics
- PRST6798 - Special Topics
- PRST6799 - Special Topics
- PRST6800 - Organizational Skills/Dvlpmnt
- PRST6810 - Masters of Prof Studies Internships

Advisor Guided Elective (3 hours)

Any PRST 6000 level course or course approved by advisor

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the students junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study. The MPS Fast-track program applies to all MPS concentrations.

Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of B in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors who meet the following admissions requirements:

- Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;
- Overall undergraduate GPA of 3.0 or better;
- GPA of 3.25 in undergraduate major;
- Recommendation from the student's undergraduate advisor

Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

MPS-TD - Professional Studies, Training and Development Concentration, M.P.S.

Program Overview

Program Long Title
Professional Studies, Training and Development Concentration, M.P.S.

College/School
Interdisciplinary Studies

Department(s)
Professional Studies

Catalog Full Description
The Master of Professional Studies (MPS) - This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas and offers students the chance to complete a graduate certificate within each of the concentration areas.

Training and Development equips leaders for the growing and evolving field of workplace learning and performance. The program will prepare you to manage, deliver and assess on-site performance-based training, instructional design, and address the needs of human resource managers and other professionals who are increasingly relying on technology to deliver workforce education.

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

In addition, the MPS program offers a 15 hour Graduate Certificate within each concentration area allowing students to achieve an additional milestone en route to their degree.

Graduate Certificates

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Admission Requirements

Admission Requirements
For Full Standing

The minimum admission requirements are:

1. A bachelor's degree from an accredited institution
2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale

And, applicants must meet **one** of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study
2. A score of 146 on the verbal portion of the GRE General Test (GRE) and 144 quantitative portion.
3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio. The portfolio is to include:

   ◦ a resume;

   ◦ a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

   ◦ two (2) sealed letters of professional reference.

   ◦ Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognitions. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree.

Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration.

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

MPS in Training and Development

Type
Completion Requirement

Required Core Courses (12 hours)

Complete ALL of the following Courses:
- PRST6100 - Prof Environmntl Issues/Ethics
- PRST6110 - Leadership and Communication
- PRST6300 - Research Methods
- PRST6998 - Professional Project

Required Concentration Courses (choose 15 hours)

Earn at least 15 credits from the following:
- PRST6040 - Human Resources Mgmt
- PRST6105 - Project Planning & Scheduling
- PRST6200 - Globalization & the Profession
- PRST6400 - Instructional Dsgn/Trning-Devl
- PRST6410 - Evaluation of Learning
- PRST6420 - Organizational Needs Analysis
- PRST6421 - Strategic Org Prog Plan/Eval
- PRST6430 - Adv Instr Design/Training & Dvlpment
- PRST6440 - Teaching On-Line
- PRST6450 - Computer-Based Tech/E-Training
- PRST6470 - Facilitation of Learning
- PRST6700 - Conflict Management and Negotiation
- PRST6710 - Risk Assessment & Prevention
- PRST6790 - Special Topics
- PRST6791 - Special Topics
- PRST6792 - Special Topics
- PRST6793 - Special Topics
- PRST6794 - Special Topics
- PRST6795 - Special Topics
- PRST6796 - Special Topics
- PRST6797 - Special Topics
- PRST6798 - Special Topics
- PRST6799 - Special Topics
- PRST6800 - Organizational Skills/Dvlpmnt
- PRST6810 - Masters of Prof Studies Internships
- PRST6910 - Employment & Human Resources
- PRST6920 - Diversity in the Workplace

Advisor Guided Elective (3 hours)

Any PRST 6000 level course or course approved by advisor

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the students junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study. The MPS Fast-track program applies to all MPS concentrations.

Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of B in the graduate courses in order to apply them to the MPS

program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors who meet the following admissions requirements:

- Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

- Overall undergraduate GPA of 3.0 or better;

- GPA of 3.25 in undergraduate major;

- Recommendation from the student's undergraduate advisor

Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

MPS-TESL - Professional Studies, Teaching English to Speakers of Other Languages (TESOL) Concentration, M.P.S.

Program Overview

Program Long Title
Professional Studies, Teaching English to Speakers of Other Languages (TESOL) Concentration, M.P.S.

College/School	Department(s)
Interdisciplinary Studies	Professional Studies

Catalog Full Description
The Master of Professional Studies (MPS) is designed to affordably and flexibly meet the needs of working adults who are not generally served by traditional methods. This unique program is taught by professors who are best suited to help you develop the skills necessary to excel in your career field and this program is offered completely online and available 24/7.

The Master of Professional Studies (MPS) - This graduate professional studies degree consists of 30 hours of interdisciplinary coursework. This degree is available in several concentration areas and offers students the chance to complete a graduate certificate within each of the concentration areas.

Teaching English to Speakers of Other Languages (TESOL) prepares you to meet an ongoing demand for both initial preparation and continuing education for individuals who plan to teach or a currently teaching English as a second/foreign language in various educational settings.

Degree Requirements

- **Required Core Courses:** 12 hours

- **Required Concentration Courses:** 15 hours

- **Advisor Guided Elective:** 3 hours

- **Total Degree Requirement:** 30 hours

In addition, the MPS program offers a 15-hour Graduate Certificate within each concentration area allowing students to achieve an additional milestone en route to their degree.

Graduate Certificates

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree-seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15-hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements including maintaining their GPA at the 3.0 level.

Admission Requirements

Admission Requirements
For Full Standing

The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale

And, applicants must meet **one** of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio. The portfolio is to include:

   ◦ a resume;

   ◦ a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

   ◦ two (2) sealed letters of professional reference.

   ◦ Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements, and professional awards/ recognitions. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication coursework. The 6 hours are in addition to the 30 hours required for the Master's degree.

Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration.

Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

- **Required Core Courses:** 12 hours
- **Required Concentration Courses:** 15 hours
- **Advisor Guided Elective:** 3 hours
- **Total Degree Requirement:** 30 hours

MPS in Teaching English to Speakers of Other Languages (TESOL)

Type

Completion Requirement

Required Core Courses (12 hours)

Complete ALL of the following Courses:
- PRST6100 - Prof Environmntl Issues/Ethics
- PRST6110 - Leadership and Communication
- PRST6300 - Research Methods
- PRST6998 - Professional Project

Required Concentration Courses (choose 15 hours)

Earn at least 15 credits from the following:
- CUED6010 - Curr Development & Eval
- CUED6440 - Emerging Technologies/Edu
- CUED6920 - Topics
- ESLP5200 - ESL Assmnt: Reading & Writing
- ENGL5511 - Intro/Descriptive Linguistics
- ENGL5531 - Grammar and Language
- PRST6200 - Globalization & the Profession
- PRST6330 - Interntl Iss/EDU Policy-Pract
- PRST6790 - Special Topics
- PRST6791 - Special Topics
- PRST6792 - Special Topics
- PRST6793 - Special Topics
- PRST6794 - Special Topics
- PRST6795 - Special Topics
- PRST6796 - Special Topics
- PRST6797 - Special Topics
- PRST6798 - Special Topics
- PRST6799 - Special Topics
- CUED6100 - Instructional Strategies

Advisor Guided Elective (3 hours)

Any PRST 6000 level course or course approved by advisor

Additional Comments:

Course Substitutions

Course Substitutions are allowed upon approval of the graduate advisory committee, department chair/director, and dean of the college.

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

The MPS Fast Track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the student's junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study. The MPS Fast Track program applies to all MPS concentrations.

Once admitted to the MPS Fast Track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program. Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of B in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast Track program. The MPS Fast Track program is open to all undergraduate majors who meet the following admissions requirements:

- Fast Track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;
- Overall undergraduate GPA of 3.0 or better;
- GPA of 3.25 in the undergraduate major;
- Recommendation from the student's undergraduate advisor

Note: In addition to the requirements for admission to the MPS Fast Track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full-Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five- and seven-week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

PMP-CER - Project Management for the Professional Certificate, M.P.S.

Program Overview

Program Long Title

Project Management for the Professional Certificate, M.P.S.

College/School	Department(s)
Interdisciplinary Studies	Professional Studies

Catalog Full Description

TTU's online Project Management for the Professional Concentration and Certificate prepares students to meet the growing demands for project management with courses grounded in the methodologies, strategies, skills, and tactics critical for success. The program accepts students from a variety of backgrounds providing professionals the opportunity to transition from one career to another. The program does not require a calculus background. The certificate is a 15 credit hour program and consists of 12 credit hours in required courses and 3 credit hours in elective courses.

The courses are 7-weeks long and can be taken completely online. The program can be taken as part of the Master of Professionals Studies degree (30 hours) or as a 15 hour graduate certificate or as a non-degree seeking student.

The program uses the Project Management Body of Knowledge Manual but is not accredited through PMI; consequently, TTU can explore other schools of thought. Students completing the program receive training from PMI certified instructors as well as 20+ year veterans of industry.

The certificate is a 15 credit hour program.

Admission Requirements

Admission Requirements

For Full Standing: The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale.

And, applicants must meet one of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE® General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio.

The portfolio is to include:

- a resume;

- a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

- two (2) sealed letters of professional reference.

Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognition's. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree. Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

The program does not require a calculus background. The certificate is a 15 credit hour program and consists of 12 credit hours in required courses and 3 credit hours in elective courses.

The courses are 7-weeks long and can be taken completely online. The program can be taken as part of the Master of Professionals Studies degree (30 hours) or as a 15 hour graduate certificate or as a non-degree seeking student.

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

Certificate Requirements

Type

Completion Requirement

Project Management Certificate Required Courses (12 Hours)

Complete ALL of the following Courses:

- PRST6820 - Intro: Project Mgmt Expec/Meth
- PRST6830 - Project Mgmt Process/Dev Strat
- PRST6840 - Project Mgmt: Schedule & Fin
- PRST6850 - PM: Risk, Assessment & Quality

Project Management Certificate Elective Courses (3 Hours)

Complete at least 1 of the following courses:

- PRST6860 - Proj Mgt: Conflict Mgt in Proj
- PRST6870 - Project Mgmt for IT Profession
- PRST6880 - Project Mgmt for Hlthcare Admn
- PRST6800 - Organizational Skills/Dvlpmnt
- PRST6810 - Masters of Prof Studies Internships

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program

MPS Fast-track Program Admissions:

The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the student's junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study.

The MPS Fast-track program applies to all MPS concentrations. Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program.

Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of "B" in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors whom meet the following admissions requirements:

• Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

• Overall undergraduate GPA of 3.0 or better;

• GPA of 3.25 in undergraduate major;

• Recommendation from the student's undergraduate advisor Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

PS-CER - Public Safety Certificate, M.P.S.

Program Overview

Program Long Title
Public Safety Certificate, M.P.S.

College/School
Interdisciplinary Studies

Department(s)
Professional Studies

Catalog Full Description
Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

This Certificate is 15 credit hours.

Admission Requirements

Admission Requirements
For Full Standing: The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale.

And, applicants must meet one of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE® General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio.

The portfolio is to include:

• a resume;

• a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

• two (2) sealed letters of professional reference.

Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognition's. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree. Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The certificate program in Public Safety is an interdisciplinary program of study designed to provide the public safety professional with leadership and strategic management tools to lead and serve in one of the nation's growing professions. The focus of the program is to provide these professionals with the opportunity to develop important skills in risk assessment and disaster preparations, crisis response, public safety leadership, research, and administration in the various components of law enforcement security, emergency management, and other publis service systems that include local, state, and federal agencies.

Students will complete 15 credit hours of required courses (see list below) to achieve the Graduate Certificate in Public Safety.

Certificate Requirements
Type
Completion Requirement

Certificate Requirements

Complete at least 5 of the following courses:
• PRST6200 - Globalization & the Profession
• PRST6700 - Conflict Management and Negotiation
• PRST6710 - Risk Assessment & Prevention
• PRST6720 - Crisis Response Management
• PRST6730 - Leadership in Public Safety
  OR PRST6721 - Managing Emergency Volunteers
• PRST6500 - Foundations of Leadership
• PRST6740 - Diversity in Public Safety
• PRST6750 - Preparedness and Mitigation
• PRST6751 - Global Terrorism-Pndmc/Epidmcs
• PRST6780 - Intelligence Gathering
• PRST6781 - Science of Contact Tracing
• PRST6800 - Organizational Skills/Dvlpmnt
• PRST6911 - Constitution & Society
• PRST6920 - Diversity in the Workplace

Optional Special Topics Course

Some students may be advised to select a special topics course as one of the 5 certificate courses.

Earn at least 3 credits from the following:

- PRST/Special Topics

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the student's junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study.

The MPS Fast-track program applies to all MPS concentrations. Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program.

Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of "B" in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors whom meet the following admissions requirements:

• Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

• Overall undergraduate GPA of 3.0 or better;

• GPA of 3.25 in undergraduate major;

• Recommendation from the student's undergraduate advisor Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

SL-CER - Strategic Leadership Certificate, M.P.S.

Program Overview

Program Long Title
Strategic Leadership Certificate, M.P.S.

College/School
Interdisciplinary Studies

Department(s)
Professional Studies

Catalog Full Description
Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour

Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

This is a 15 credit hour program.

Admission Requirements

Admission Requirements
The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale.

And, applicants must meet one of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE® General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio.

The portfolio is to include:

- a resume;

- a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

- two (2) sealed letters of professional reference.

Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognition's. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree. Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

A certificate in Strategic Leadership prepares students to lead in today's rapidly changing professional environment. A certificate in strategic leadership exposes students to guiding principles that can be applied to any career field. This certificate explores the topic from a contemporary perspective facing a dynamic global business environment.

Certificate requirements emphasize competencies for implementing organizational systems, managing and communicating change, and resolving conflict within a framework of ethical leadership. The program gives students an opportunity to expand their understanding of inclusive and collaborative leadership behaviors and develop skills for using them effectively.

Throughout the program students will continually reflect on, assess and frame their own personal leadership style, strengths and weaknesses. The interdisciiplinary approach integrates administration with leadership competencies that develop visionary professionals who can think critically, evaluate process, strategize, innovate practices, communicate, and manage changes that will position their organization for future success.

The student will complete 15 credit hours of coursework (see list below) to receive the Graduate Certificate in Strategic Leadership.

Degree Requirements
Type
Completion Requirement

Certificate Requirements

Complete at least 5 of the following courses:
- PRST6040 - Human Resources Mgmt
- PRST6105 - Project Planning & Scheduling
- PRST6200 - Globalization & the Profession
- PRST6310 - Leadership in Organization
- PRST6500 - Foundations of Leadership
- PRST6421 - Strategic Org Prog Plan/Eval
- PRST6700 - Conflict Management and Negotiation
- PRST6721 - Managing Emergency Volunteers
- PRST6730 - Leadership in Public Safety
- PRST6770 - Computer-Based Decision Model
- PRST6790 - Special Topics
  OR PRST6791 - Special Topics
  OR PRST6792 - Special Topics
  OR PRST6793 - Special Topics
  OR PRST6794 - Special Topics
  OR PRST6795 - Special Topics
  OR PRST6796 - Special Topics
  OR PRST6797 - Special Topics
  OR PRST6798 - Special Topics
  OR PRST6799 - Special Topics
- PRST6800 - Organizational Skills/Dvlpmnt
- PRST6810 - Masters of Prof Studies Internships
- ELPA6560 - Small Group Leadership
- LDSP6000 - Current Issues in Leadership
- JOUR6450 - PR Management

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the student's junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study.

The MPS Fast-track program applies to all MPS concentrations. Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program.

Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of "B" in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors whom meet the following admissions requirements:

• Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

• Overall undergraduate GPA of 3.0 or better;

• GPA of 3.25 in undergraduate major;

• Recommendation from the student's undergraduate advisor Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

TD-CER - Training and Development Certificate, M.P.S.

Program Overview

Program Long Title
Training and Development Certificate, M.P.S.

College/School
Interdisciplinary Studies

Department(s)
Professional Studies

Catalog Full Description
Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

This is a 15 credit hour certificate.

Admission Requirements

Admission Requirements
For Full Standing: The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale.

And, applicants must meet one of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE® General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio.

The portfolio is to include:

- a resume;

- a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

- two (2) sealed letters of professional reference.

Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognition's. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree. Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements
The Training and Development certificate program equips leaders for the growing and evolving field of workplace learning and performance. Students will build both theoretical and practical knowledge and skills in adult learning and cognition, organizational needs analysis, project planning, instructional design, development, and delivery/evaluation in traditional and virtual environments.

The goal of the certificate is to prepare students for employement opportunities where the effective transfer of learning is critical to an organization's success in achieving its overall goals and objectives.

Students will be ready to manage, deliver and assess on-site performance-based training, instructional design, and address the needs of human resource managers and other professioanls who are increasingly relying on technology to deliver workforce education.

The student will complete 15 credit hours of coursework (see options below) to earn the Graduate Certificate in Training and Development.

Degree Requirements

Type
Completion Requirement

Certificate Requirements

Complete at least 5 of the following courses:
- PRST6040 - Human Resources Mgmt
- PRST6105 - Project Planning & Scheduling
- PRST6200 - Globalization & the Profession
- PRST6400 - Instructional Dsgn/Trning-Devl
- PRST6410 - Evaluation of Learning
- PRST6420 - Organizational Needs Analysis
- PRST6421 - Strategic Org Prog Plan/Eval
- PRST6430 - Adv Instr Design/Training & Dvlpment
- PRST6440 - Teaching On-Line
- PRST6450 - Computer-Based Tech/E-Training
- PRST6460 - Training and Development (Inactive)
- PRST6800 - Organizational Skills/Dvlpmnt
- PRST6910 - Employment & Human Resources
- PRST6920 - Diversity in the Workplace
- PRST6790 - Special Topics
  OR PRST6791 - Special Topics
  OR PRST6792 - Special Topics
  OR PRST6793 - Special Topics
  OR PRST6794 - Special Topics
  OR PRST6795 - Special Topics
  OR PRST6796 - Special Topics
  OR PRST6797 - Special Topics
  OR PRST6798 - Special Topics
  OR PRST6799 - Special Topics

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the student's junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study.

The MPS Fast-track program applies to all MPS concentrations. Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program.

Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of "B" in the graduate courses in order to apply them to the MPS program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors whom meet the following admissions requirements:

• Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

• Overall undergraduate GPA of 3.0 or better;

• GPA of 3.25 in undergraduate major;

• Recommendation from the student's undergraduate advisor Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-tme.

TESL-CER - Teaching English to Speakers of Other Languages Certificate, M.P.S.

Program Overview

Program Long Title
Teaching English to Speakers of Other Languages Certificate, M.P.S.

College/School
Interdisciplinary Studies

Department(s)
Professional Studies

Catalog Full Description
The TESOL Certificate and concentration are designed to meet an ongoing demand for both initial preparation and continuing education for individuals who plan to teach or are currently teaching English as a second/foreign language in various educational settings. This includes students with strong English-speaking backgrounds who desire to teach English as a second/foreign language to adults in the United States or abroad or to traditional students in another country. This program would also meet the needs of non-native teachers of English in other countries looking to receive additional English language and pedagogical training from an American university. This program is not for students seeking an ESL endorsement for teaching in U.S public schools.

Students seeking a Graduate Certificate will go through the graduate application process as if they were seeking an MPS degree, meeting all admissions requirements as set forth in the degree program. Once admitted, students are considered MPS degree seeking students and will be working towards completing the pre-defined coursework (15 hours) as listed in this catalog. Upon completion of the 15 hours defined in the program, the student will receive a Graduate Certificate in the appropriate field of study. After completion of the 15 hour Graduate Certificate, the student may continue to fulfill the requirements of the MPS degree. Students are required to meet all graduate student requirements that include maintaining their GPA at the 3.0 level.

This is a 15 credit hour program.

Admission Requirements

Admission Requirements
For Full Standing: The minimum admission requirements are:

1. A bachelor's degree from an accredited institution

2. Satisfactory undergraduate grade point average, a minimum of 2.5 on a 4.0 scale.

And, applicants must meet one of the following conditions:

1. 3.0 grade point average in their undergraduate major course of study

2. A score of 146 on the verbal portion of the GRE® General Test (GRE) and 144 quantitative portion.

3. A combined score of 290 on the verbal and quantitative reasoning sections and a 3.5 on analytical writing.

4. Five (5) or more years of professional work experience demonstrated through a portfolio.

The portfolio is to include:

• a resume;

• a 500- to 600-word essay detailing the reasons for wanting to enter the MPS program and discussing how the program will help the applicant achieve personal and professional goals; and

• two (2) sealed letters of professional reference.

Other items that an applicant may include in the portfolio include a description of professional responsibilities, professional achievements and professional awards/recognition's. The portfolio material must be submitted as a packet, not mailed separately.

International students must meet English language proficiency requirements by providing a TOEFL score. Minimum IBT of 71 or an approved equivalent exam and equivalent scores. International applicants with an IBT below 79 must complete 6 hours of grammar/reading/communication course work. The 6 hours are in addition to the 30 hours required for the Master's degree. Satisfying minimal standards, however, does not guarantee your admission. Admission decisions are based on departmental review, using a combination of factors including an interview to evaluate dispositions for professionals in the chosen concentration. Students may be admitted with provisional status if they do not meet all of the criteria above but do meet the minimum requirements of the graduate school and are approved for provisional status by the departmental admissions committee. Provisional status will limit students to a maximum of 9 hours before the departmental admissions committee makes a recommendation for full admission. To advance from provisional to full admission a student must earn a 3.0 GPA on the 9 hours of graduate study in the concentration and be approved by the departmental admissions committee.

Note: All international students who attend TTU, who are enrolled on the Department of Homeland Securities F-1 or J-1 visa status must complete all midterm and final exams in a proctored setting on the Tennessee Tech University campus in Cookeville, TN.

Degree Requirements and Requisites

Simple Requisites

Degree Requirements

Students will complete 15 credit hours (see course options below) to earn the Graduate Certificate in TESOL.

Certificate Requirements Type
Completion Requirement

Certificate Requirements

Complete at least 5 of the following courses:
• PRST6200 - Globalization & the Profession
• PRST6330 - Interntl Iss/EDU Policy-Pract
• ENGL4531 - Grammar and Language
• ENGL4511 - Intro/Descriptive Linguistics
• ESLP4200 - ESL Assessment: Reading and Writing
• CUED6010 - Curr Development & Eval
• CUED6440 - Emerging Technologies/Edu
• CUED6920 - Topics

Optional Special Topics Course

Some students may be advised to take a special topics course as one of their 5 certificate courses.

Earn at least 3 credits from the following:
• PRST/Special Topics

Additional Comments:

No Requirement Level

Undergraduate Fast Track Program

Undergraduate Fast Track Program
The MPS Fast-track program will allow eligible undergraduates to enroll for up to six (6) hours of graduate courses prior to formal admission to the MPS program. The courses will be taken during the student's junior/senior year and can be used to satisfy both undergraduate and graduate degree requirements. Participation does not change requirements for either the undergraduate or graduate programs of study.

The MPS Fast-track program applies to all MPS concentrations. Once admitted to the MPS Fast-track program, the student will be allowed to enroll in appropriate graduate courses in the junior or senior year with the consent of the student's undergraduate advisor and the Director of the MPS program.

Courses completed at the Graduate Level are only guaranteed to apply to the completion of the MPS graduate degree program. The student must earn a minimum grade of "B" in the graduate courses in order to apply them to the MPS

program of study and to continue in the Fast-track program. The MPS Fast-track program is open to all undergraduate majors whom meet the following admissions requirements:

• Fast-track applicant must be earning a baccalaureate degree at TTU and completed at least 90 hours of credit;

• Overall undergraduate GPA of 3.0 or better;

• GPA of 3.25 in undergraduate major;

• Recommendation from the student's undergraduate advisor Note: in addition to the requirements for admission to the MPS Fast-track program, all requirements for admission to the graduate program must also be met upon graduation. Meeting these minimum requirements does not guarantee admission to the graduate program.

Full Time Status Defined for Accelerated Courses

For a graduate student to be considered full-time they must be enrolled in nine credit hours for the semester (excluding Graduate Assistants who may enroll in 6 hours). The Public Safety program includes an accelerated course schedule with classes available in five and seven week formats, thus the combination of the accelerated courses over the entire semester should equal nine credit hours for a student to be considered full-time.

Courses

COMM6120 - Managing Communication

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Managing Communication	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
COMM	6120

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on communications that flow from manager to team members and employees. We will explore just how communication works (and fails to work) when multiple people are involved. You will be required to read a variety of articles (as mentioned above) and view a number of videos concerning communication. You are likely familiar with Ted Talks. We will use a number of those in the class. I invite you to look for others that are germane to the class. All of these are designed to enhance your understanding of what is a critically important field of study.

Requisites

Simple Requisites

Prerequisites: None

COMM6960 - Communication Behavior Analysis and Insights

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Com Bhvr Analysis & Insights	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
COMM	6960

Credit Hours

Credit Hours Min
3

Course Description
This course is dedicated to exploring communication behavior and audience research. The course explores behaviors, during and after a communication message. It investigates the impact of social media in the digital age.

Requisites

Simple Requisites

Prerequisites: None

COMM6970 - Media Theory and Effects

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Media Theory and Effects	Doctoral, Specialist in Education, Graduate

Course Subject Code COMM	**Course Number** 6970

Credit Hours

Credit Hours Min

3

Course Description

This course is an analysis of historical and current theories of mass communication with an emphasis on media effects and the application of mass communication theory to social, political, economic, legal and ethical aspects of modern society. The course begins by providing a framework for evaluating mass communication theory, then focuses on deconstructing and applying four main theories (diffusion of innovation, uses and gratifications, social learning theory, and agenda setting), as well as a range of related mass communication theories.

Requisites

Simple Requisites

Prerequisites: None

COMM6980 - Strategic Communications

General

College/School

Interdisciplinary Studies

Course Title Strategic Communications	**Academic Level (Course Level)** Doctoral, Specialist in Education, Graduate
Course Subject Code COMM	**Course Number** 6980

Credit Hours

Credit Hours Min

3

Course Description

This course uses communicators and real communication decisions to introduce students to communication strategies. It examines social, economic, technological, legal, ethical, and other environmental factors and their impact on communication practices using real-world applications. It provides students with the knowledge and skills needed to communicate products, services, and ideas in a global marketplace.

Requisites

Simple Requisites

Prerequisites: None

COMM6990 - Design Strategies and Promotions

General

College/School

Interdisciplinary Studies

Course Title Dsgn Strategies & Promotions	**Academic Level (Course Level)** Doctoral, Specialist in Education, Graduate

Course Subject Code COMM	**Course Number** 6990

Credit Hours

Credit Hours Min

3

Course Description

This course will provide graduate students an opportunity to research the subliminal effects of various graphic design structures and tools on consumers' decision-making processes.

Requisites

Simple Requisites

Prerequisites: None

PRST6100 - Prof Environmntl Issues/Ethics

General

College/School

Interdisciplinary Studies

Course Title Prof Environmntl Issues/Ethics	**Academic Level (Course Level)** Doctoral, Specialist in Education, Graduate, Undergraduate
Course Subject Code PRST	**Course Number** 6100

Credit Hours

Credit Hours Min

3

Course Description

Overview of ethics in general, with practical tools for assessing ethical dimensions of professional life, diagnosing or identifying the moral issues at hand, and then developing reasonable options to address particular moral and ethical issues.

Requisites

Simple Requisites

Prerequisites: None

PRST6110 - Leadership and Communication

General

College/School

Interdisciplinary Studies

Course Title Leadership and Communication	**Academic Level (Course Level)** Doctoral, Specialist in Education, Graduate, Undergraduate
Course Subject Code PRST	**Course Number** 6110

Credit Hours

Credit Hours Min

3

Course Description

This course is designed to introduce students to leadership perspectives and the role communication plays in effective leadership and management strategies.

Requisites

Simple Requisites

> **Prerequisites:** Graduate status and admission to the Master of Professional Studies degree program or departmental approval.

PRST6120 - Managing Communication

General

College/School
Interdisciplinary Studies

Course Title
Managing Communication

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6120

Credit Hours

Credit Hours Min
3

Course Description

This course will focus on communications that flow from manager to team members and employees. We will explore just how communication works (and fails to work) when multiple people are involved. You will be required to read a variety of articles (as mentioned above) and view a number of videos concerning communication. You are likely familiar with Ted Talks. We will use a number of those in the class. I invite you to look for others that are germane to the class. All of these are designed to enhance your understanding of what is a critically important field of study.

Requisites

Simple Requisites

> **Prerequisites:** None

PRST6200 - Globalization & the Profession

General

College/School
TN eCampus Degree

Course Title
Globalization & the Profession

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6200

Credit Hours

Credit Hours Min
3

Course Description

The purpose of this course is to assess the impact of globalization on professional life. The course examines globalization as it relates to commerce, information flow, mass media, government, health care and education.

Requisites

Simple Requisites

> **Prerequisites:** None

PRST6300 - Research Methods

General

College/School
Interdisciplinary Studies

Course Title
Research Methods

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6300

Credit Hours

Credit Hours Min
3

Course Description

The student and application of research methods appropriate to professional studies. The course will provide a general introduction to research methods, as well as providing practical exposure to Problem Statements, Literature Reviews, Writing the Research Proposal, and Organization of the Research Report. Quantitative and Qualitative Research methodologies will be covered.

Requisites

Simple Requisites

> **Prerequisites:** None

PRST6310 - Leadership in Organization

General

College/School
Interdisciplinary Studies

Course Title
Leadership in Organization

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6310

Credit Hours

Credit Hours Min
3

Course Description

Designed to inform the individual about the structure and behavior of actors at all levels of the organization. Through various exercises such as written assignments and discussion, the student will be able to understand "why" and "how" organizations operate and function under dynamic leadership.

Requisites

Simple Requisites

Prerequisites: None

PRST6330 - Interntl Iss/EDU Policy-Pract

General

College/School
Interdisciplinary Studies

Course Title
Interntl Iss/EDU Policy-Pract

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6330

Credit Hours

Credit Hours Min
3

Course Description
This course examines the policy and practice of primary and secondary education in select OECD countries as well as the developing world. It will cover issues of pedagogy, professionalism, leadership, finance, accountability, efficiency, and equity. Consideration will be given to the role of international agencies and non-governmental organizations in influencing policy and development. Attention will also be given to such issues as private vs. public provision, corruption, social cohesion, education for immigrants and refugees, and education as a basic human right.

Requisites

Simple Requisites

Prerequisites: None

PRST6340 - Teaching/Learning in Higher ED

General

College/School
Interdisciplinary Studies

Course Title
Teaching/Learning in Higher ED

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6340

Credit Hours

Credit Hours Min
1

Course Description
This course provide the tools, perspectives, and best practices in teaching and learning in higher education for people who teach, or aspire to teach, at the college level.

Requisites

Simple Requisites

Prerequisites: None

PRST6420 - Organizational Needs Analysis

General

College/School
Interdisciplinary Studies

Course Title
Organizational Needs Analysis

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6420

Credit Hours

Credit Hours Min
3

Course Description
The purpose of this course is to provide an overview of the processes and techniques used to conduct an organizational analysis and then identify training needs in private and public organizations. This course is designed to build theoretical as well as practical knowledge and skills for employees who are not necessarily human resource professionals.

PRST6421 - Strategic Org Prog Plan/Eval

General

College/School
Interdisciplinary Studies

Course Title
Strategic Org Prog Plan/Eval

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6421

Credit Hours

Credit Hours Min
3

Course Description
Developing a comprehensive understanding of the fundamentals of strategic organizational program planning and evaluation with a focus on relevance of strategic planning, effective and efficient program delivery plans with formative and summative evaluations for intentional learning and practical application in the workplace.

Requisites

Simple Requisites

Prerequisites: None

PRST6470 - Facilitation of Learning

General

College/School
Interdisciplinary Studies

Course Title
Facilitation of Learning

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6470

Credit Hours

Credit Hours Min
3

Course Description
This course is designed to prepare trainers to design and facilitate training programs that will work effectively and efficiently with adult learners. It will provide the necessary theory and experience to ensure competent facilitation of learning. Students will plan and conduct training sessions and receive feedback on their style of facilitation. Prerequisites: This course is a core course in the Master of Professional Studies degree program. Enrollment is limited to students who have been admitted into the Master of Professional Studies program or departmental approval. PRST 5400/6400/7400 and PRST 5430/6430/7430 are also required.

Requisites

Simple Requisites

> **Prerequisites:** None

PRST6500 - Foundations of Leadership

General

College/School
Interdisciplinary Studies

Course Title
Foundations of Leadership

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6500

Credit Hours

Credit Hours Min
3

Course Description
Students will study leadership from a historical and contemporary perspective. Topics cover historical development, leadership theories, personal assessment, values and ethics, motivation, power, followership, group dynamics, diversity, controversy with civility, change process, and citizenship.

Requisites

Simple Requisites

> **Prerequisites:** None

PRST6530 - Healthcare Systems Economics

General

College/School
Interdisciplinary Studies

Course Title
Healthcare Systems Economics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6530

Credit Hours

Credit Hours Min
3

Course Description
It is expected that this course will facilitate your understanding of the traditional issues in health economics. This course will improve and broaden your knowledge of healthcare systems economics by exploring historical and current economic principles that guide the healthcare system. You will realize how the economy of our healthcare systems has reached the current status. This realization will be as a result of better understanding the impact of an aging population, the malpractice risk, the role of competition and government regulation, and the incentives used by pharmaceuticals and managed care insurers as they drive the healthcare systems. We will explore the health insurance market and managed care, the market for physicians' services, cost of healthcare in hospitals and other healthcare venues, labor issues, cost effectiveness analysis, equity and efficiency, role of government in the health economy, Medicaid and Medicare, international comparisons, and national health insurance.t

Requisites

Simple Requisites

> **Prerequisites:** None

PRST6540 - Health Informatics

General

College/School
Interdisciplinary Studies

Course Title
Health Informatics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6540

Credit Hours

Credit Hours Min
3

Course Description
This course is intended to expose students to the field of health informatics and to give them an understanding in the history, processes, and application of this field in the healthcare delivery system in the United States. Since health informatics is interdisciplinary, students must have already completed introductory courses in statistics, public health (or related subject), computer programming, and economics. Upon completion of this course, students will have a better understanding of healthcare delivery, the specific areas within health informatics, the application of computer technology in healthcare delivery, and the techniques, methodologies, and tools used in health informatics.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6550 - Comp-Based Dec Modlng-Hlth Adm

General

College/School
Interdisciplinary Studies

Course Title
Comp-Based Dec Modlng-Hlth Adm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6550

Credit Hours

Credit Hours Min
3

Course Description
This course will provide an introduction to the principles and practice of decision modeling for financial and operational evaluation in the healthcare industry. Basic business spreadsheet techniques will be used to create models for strong decision support to assist in optimizing business decisions. It will introduce the use of statistical analysis and model development to health administration, healthcare program develop and evaluation, healthcare information management, emphasizing the use of computer technology (specifically MS Excel) across these areas.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6560 - Bio Sciences for Hlthcr Admin

General

College/School
Interdisciplinary Studies

Course Title
Bio Sciences for Hlthcr Admin

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6560

Credit Hours

Credit Hours Min
3

Course Description
The focus of the course is to provide healthcare administrators with a basic understanding of the pathophysiological principles, as well as drug classes used, in the treatment of common medical diagnoses requiring admission to healthcare facilities.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6570 - Public Health

General

College/School
Interdisciplinary Studies

Course Title
Public Health

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6570

Credit Hours

Credit Hours Min
3

Course Description
The focus of this course is to explore the history and impact of public health initiatives in the United States and globally. Students will become familiar with public and private organized measures to prevent disease, promote health, and increase the quality of life among diverse populations. Students will learn to assess and monitor the overall health of populations, and use data to contribute to public health policy.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6580 - Understanding Mental Health

General

College/School
Interdisciplinary Studies

Course Title
Understanding Mental Health

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6580

Credit Hours

Credit Hours Min
3

Course Description
In this course, we will examine the history and impact of mental health on public health. As well as promoting healthy lifestyles, public health works to detect, prevent, and respond to disease. People's mental health has a profound impact on their physical and social well-being, making mental health an essential public health issue.

Requisites

Simple Requisites

> **Prerequisite**: Acceptance into Graduate School.

PRST6590 - Fraud, Waste, and Abuse for Healthcare Administrators

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Frd, Wst, Abuse Hlthcre Admin	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
PRST	6590

Credit Hours

Credit Hours Min
3

Course Description
Fraud, Waste, and Abuse (FWA) in the United States is unfortunately highly pervasive and extremely detrimental to all facets of health care delivery. This special topic, Fraud, Waste, and Abuse for Healthcare Administrators, focuses on real-world situations and examples which illustrate how destructive these activities are to providers, payers, and, most importantly, patients. This course will focus on a different topic each week to assist the student in understanding (1) where the nearly 25% of all erroneous medical payments occur, (2) why so much money is lost to fraud, waste and abuse each year, and (3) how different analytic and investigative techniques are best applied to help regulate these issues. In addition to the reading and examples provided in class, students will participate in weekly threaded discussions and chat. Students also learn how to conduct a health care fraud investigation through applying techniques learned in this course to a fictional case. This course covers FWA from two perspectives: (1) statistical and analytical processes to identify potential FWA and (2) investigation techniques to impede future FWA.

Requisites

Simple Requisites

> **Prerequisite:** None

PRST6600 - Statistical Analysis

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Statistical Analysis	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
PRST	6600

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: PRST 6300. Analytical decision making including statistics, quantitative methods, and other optimization and simulation models.

PRST6700 - Conflict Management and Negotiation

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Conflict Mgmt & Negotiation	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
PRST	6700

Credit Hours

Credit Hours Min
3

Course Description
Negotiation and Conflict Management presents negotiation theory—strategies and styles—within an employment context. A different topic will be presented each week. Students practice negotiating and learn how to negotiate in difficult situations.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6710 - Risk Assessment & Prevention

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Risk Assessment & Prevention	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
PRST	6710

Credit Hours

Credit Hours Min
3

Course Description
This course provides discussion for risk assessment and vulnerability analysis application to manmade and natural disasters. The course will also review methods for preparing public safety personnel, and the communities they serve, for potential disaster and emergency response.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6720 - Crisis Response Management

General

College/School
Interdisciplinary Studies

Course Title
Crisis Response Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6720

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on response issues surrounding a natural or manmade crisis/disaster. Afocus will be given to Commanding, Controlling, Communicating, Coordinating, andCooperating during a crisis according to NIMS/ICS standards.

Requisites

Simple Requisites

Prerequisite: None.

PRST6721 - Managing Emergency Volunteers

General

College/School
Interdisciplinary Studies

Course Title
Managing Emergency Volunteers

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6721

Credit Hours

Credit Hours Min
3

Course Description
This course will focus on the management and benefits of using Internal Volunteer Organization, External Volunteer Organizations, and Spontaneous Volunteers to support an agency's prepardness and increase capacities during crises response incidents, emergencies, or disasters. The course includes an overview of Managing Community donations.

Requisites

Simple Requisites

Prerequisite: None.

PRST6730 - Leadership in Public Safety

General

College/School
Interdisciplinary Studies

Course Title
Leadership in Public Safety

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6730

Credit Hours

Credit Hours Min
3

Course Description
This course examines the history and development of leadership within public safety organizations. Principles, styles, and theories of leadership, management, and administration are discussed.

Requisites

Simple Requisites

Prerequisite: None.

PRST6740 - Diversity in Public Safety

General

College/School
Interdisciplinary Studies

Course Title
Diversity in Public Safety

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6740

Credit Hours

Credit Hours Min
3

Course Description
This course examines the impact of diversity, culture, and ethnic origin on public safety response and assessment, and is designed to better prepare individuals to meet the challenge of cultural diversity in organizations. Attention is given to how language, tradition, gender, age, race, education, economic structure, and organizational philosophy interact to create a set of rules for acceptable behaviors in complex organizations and society.

Requisites

Simple Requisites

Prerequisite: None.

PRST6750 - Preparedness and Mitigation

General

College/School
Interdisciplinary Studies

Course Title
Preparedness and Mitigation

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6750

Credit Hours

Credit Hours Min
3

Course Description
This course is intended to provide a more focused discussion of preparedness and mitigation as itrelates to homeland security and emergency management. This course will address strategicplanning and mitigation measures that create effective preparedness and mitigation plans. Thecourse will also cover federal government policies, procedures, and funding opportunities forpublic safety organizations.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6751 - Global Terrorism-Pndmc/Epidmcs

General

College/School
Interdisciplinary Studies

Course Title
Global Terrorism-Pndmc/Epidmcs

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6751

Credit Hours

Credit Hours Min
3

Course Description
This course provides the various tools needed for public health and public safety agencies to overcome pandemics and epidemics. The students will learn how to identify the differences between pandemics, epidemics, and outbreaks and to overcome these incidents. Throughout this class, they will research various mitigation measures and preparedness efforts related to pandemics/epidemics. Students will learn mitigation strategies to ensure that critical infrastructure and essential work can be functional during a pandemic or epidemic, even if key personnel are unavailable. The course will look at the potential risks of a bioterrorist attack and the ways that bioterrorism might be perpetrated. Students will research acts of bioterrorism and utilize critical thinking skills needed to prevent bioterrorist attacks. Learners will learn the importance of communication and collaboration during an incident, including communicating with the public and those with special needs. An overview of the importance of mapping in pandemics/epidemics and free resources are taught.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6755 - Surviving an Active Shooter

General

College/School
Interdisciplinary Studies

Course Title
Surviving an Active Shooter

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6755

Credit Hours

Credit Hours Min
3

Course Description
Course Description: Mass violence and active shootings are not new phenomena. In this course, students will take a historical look at acts of mass violence. They will learn to appreciate that the "It won't happen to me" perspective can be the largest barrier to protection from mass violence. Part of protection involves being informed about the importance of and how to improve situational awareness. Students will also learn strategies to increase survivability in an active shooter situation. They will discover how to potentially save lives. Equally important is knowing what public safety entities will do during and immediately after a mass shooting. The final piece of this course is discovering how to assist victims and their families for the months and years after an incident.

Requisites

Simple Requisites

> Prerequisites: None

PRST6760 - Funding in Public Safety

General

College/School
Interdisciplinary Studies

Course Title
Funding in Public Safety

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6760

Credit Hours

Credit Hours Min
3

Course Description
This course will provide an overview of fiscal requirements for public safety organizations. Thiswill include budget concerns, payroll, and liability issues, as well as grant acquisition.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6770 - Computer-Based Decision Model

General

College/School
Interdisciplinary Studies

Course Title
Computer-Based Decision Model

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6770

Credit Hours

Credit Hours Min
3

Course Description
Topics covered within the course include basic business spreadsheet modeling, decision support using spreadsheet models, and optimization of business decisions using spreadsheet models. Models will be multidisciplinary in nature, stemming from areas such as operations, finance, and management. The contextual interpretation of results and their use in decisions will be emphasized.

PRST6780 - Intelligence Gathering

General

College/School
Interdisciplinary Studies

Course Title
Intelligence Gathering

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6780

Credit Hours

Credit Hours Min
3

Course Description
This course examines the theoretical and analytical concepts for gathering intelligence. A brief history of gathering and current concerns/trends will also be examined. The course will cover approaches used in public safety agencies including law enforcement, homeland security, and others.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6781 - Science of Contact Tracing

General

College/School
Interdisciplinary Studies

Course Title
Science of Contact Tracing

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6781

Credit Hours

Credit Hours Min
3

Course Description
During the COVID-19/SARS-CoV-2, many members of the public learned about contact tracing for the first time. During the pandemic response, we saw the media speak about the many hours of work that were undertaken by these contact tracers. Relatively few individuals know much about the science of contact tracing. In this course, students will learn the principles of contact tracing, the management of identified cases, and best practices for managing teams of contact tracers. Students will learn the necessary investigative skills needed for contact tracing and various strategies that can be used to jog the memory of an infected patient. Principles are also taught dealing with secretive patients, and even more importantly, the principles of case management for infected patients. Students will also learn the principles of leading a contact tracing team.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6790 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6790

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Consent of the instructor. Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

PRST6791 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6791

Credit Hours

Credit Hours Min
3

Course Description
Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

Requisites
Simple Requisites

> **Prerequisite**: Consent of the instructor.

PRST6792 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6792

Credit Hours
Credit Hours Min
3

Course Description
Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

Requisites
Simple Requisites

> **Prerequisite**: Consent of the instructor.

PRST6793 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6793

Credit Hours
Credit Hours Min
3

Course Description
Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

Requisites
Simple Requisites

> **Prerequisite**: Consent of the instructor.

PRST6794 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6794

Credit Hours
Credit Hours Min
3

Course Description
Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

Requisites
Simple Requisites

> **Prerequisite**: Consent of the instructor.

PRST6795 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6795

Credit Hours
Credit Hours Min
3

Course Description
Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

Requisites
Simple Requisites

> **Prerequisite**: Consent of the instructor.

PRST6796 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
PRST	6796

Credit Hours

Credit Hours Min
3

Course Description
Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

Requisites

Simple Requisites

Prerequisite: Consent of the instructor.

PRST6797 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code	Course Number
PRST	6797

Credit Hours

Credit Hours Min
3

Course Description
Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

Requisites

Simple Requisites

Prerequisite: Consent of the instructor.

PRST6798 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
PRST	6798

Credit Hours

Credit Hours Min
3

Course Description
Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

Requisites

Simple Requisites

Prerequisite: Consent of the instructor.

PRST6799 - Special Topics

General

College/School
Interdisciplinary Studies

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
PRST	6799

Credit Hours

Credit Hours Min
3

Course Description
Concentration on a special topic in professional studies. Students may take a total of up to 6 hours of Special Topic hours but no more than 3 hours on a single topic.

Requisites

Simple Requisites

Prerequisite: Consent of the instructor.

PRST6800 - Organizational Skills/Dvlpmnt

General

College/School
Interdisciplinary Studies

Course Title
Organizational Skills/Dvlpmnt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
PRST	6800

Credit Hours

Credit Hours Min
3

Course Description
Analysis of theory, practice and skills involved in leading organizational change, including: aligning change with the organizational strategy, understanding changes as part of a system, understanding the dynamics of and managing resistance to change, creating a vision to inspire others to become a part of the change process, the use of goal setting, feedback and incentives to promote change, and aligning individual's roles to support change. The course will blend learning from the texts and skill building.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6810 - Masters of Prof Studies Internships

General

College/School
Interdisciplinary Studies

Course Title
Masters of Prof St Internships

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6810

Credit Hours

Credit Hours Min
3

Course Description

Internships offer the student an opportunity to observe and work in a professional setting while gaining valuable "on-the-job training." Internships for the Master of Professional Studies program should fit within the framework of the intern's concentration area (Strategic Leadership, Human Resource Leadership, Training and Development, Healthcare Administration, or Project Management). The intern must complete 150 hours of work to receive three hours of credit.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6820 - Intro: Project Mgmt Expec/Meth

General

College/School
Interdisciplinary Studies

Course Title
Intro: Project Mgmt Expec/Meth

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6820

Credit Hours

Credit Hours Min
3

Course Description

This course is designed to equip the student with the needed background to apply for introductory-level roles in project management. Project managers play a key role in leading, planning and implementing critical projects to help their organizations succeed. In this course, students will discover foundational project management terminology and gain a deeper understanding of the role and responsibilities of a project manager.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6830 - Project Mgmt Process/Dev Strat

General

College/School
Interdisciplinary Studies

Course Title
Project Mgmt Process/Dev Strat

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6830

Credit Hours

Credit Hours Min
3

Course Description

The world of project management is changing. Industry no longer relies on a single project management process to complete all project work, isntead they use multiple processes all tailored to their needs. This course is designed to take a deep dive view in the world of project management processes leveraged in industries today. At the complete of the class, students will have a better understanding of the processes to include predictive (Waterfall), adaptive (SCRUM), and hybrid processes.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6840 - Project Mgmt: Schedule & Fin

General

College/School
Interdisciplinary Studies

Course Title
Project Mgmt: Schedule & Fin

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6840

Credit Hours

Credit Hours Min
3

Course Description

This course is designed to take a deep approach into both the schedule and financial activities used by project managers today. In this class, students will learn how to both plan and estimate activities to include how to create a schedule baseline, develop a network diagram, estimate activity durations, and develop a schedule and build financial estimates. In addition, students will learn critical terms such as critical path, late start, late finish, early start, and early finish.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6850 - PM: Risk, Assessment & Quality

General

College/School
Interdisciplinary Studies

Course Title
PM: Risk, Assessment & Quality

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6850

Credit Hours

Credit Hours Min
3

Course Description
This course provides an overview of risk mitigation with a focus on project management models, risk assessment include FMEA analysis, and includes a comprehensive introduction to standards organization and their purpose. Course topics will include: (a) continuous risk assessment models, (b) continuous process improvement, (c) LEAN Management principles, and (d) Make or Break Quality assessment. Case studies will be analyzed in each area, and each student will be required to assess and develop mitigation strategies relating to risk and quality management.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6860 - Proj Mgt: Conflict Mgt in Proj

General

College/School
Interdisciplinary Studies

Course Title
Proj Mgt: Conflict Mgt in Proj

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6860

Credit Hours

Credit Hours Min
3

Course Description
Project managers routinely deal with conflict, both from internal and external sources. This course will explore effective conflict resolution strategies within a project management environment. Students will develop conflict resolution skills while addressing scarce resources, lines of authority, team building, conflicting goals and expectations, time lines, and other conflict creating variables.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6870 - Project Mgmt for IT Profession

General

College/School
Interdisciplinary Studies

Course Title
Project Mgmt for IT Profession

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6870

Credit Hours

Credit Hours Min
3

Course Description
This course provides an overview of strategic project planning and execution in IT delivery and administration with a focus on project management models, tools, planning, analysis, and assessment. This course explores strategies to provide successful oversight of information technology projects that an organization undertakes. Topics include planning, budgeting, executing, leading, troubleshooting, and maintaining IT projects.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6910 - Employment & Human Resources

General

College/School
Interdisciplinary Studies

Course Title
Employment & Human Resources

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6910

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6911 - Constitution & Society

General

College/School
Interdisciplinary Studies

Course Title
Constitution & Society

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6911

Credit Hours

Credit Hours Min
3

Course Description
This course uses critical thinking skills to study how the Constitution impacts society from an historical, legal and political perspective. A review of the entire Constitution, including the Amendments, is covered with emphasis on the first three Articles of the Constitution and the First, Second, Fourth, Fifth, Eighth, and fourteenth Amendments. Also pertinent Supreme Course decisions and other primary and secondary sources are covered in this course. Prior study of the Constitution is not a prerequisite.

Requisites

Simple Requisites

> **Prerequisite**: None

PRST6915 - Earning and Managing External Funds for Community and Research Development

General

College/School
Interdisciplinary Studies

Course Title
Earn & Mng Fnds for Com & Rsch

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6915

Credit Hours

Credit Hours Min
3

Course Description
This Earning and Managing External Funds for Community and Research Development course will guide the students through the process of earning funding for their research programs through the submission of well-developed grants.

Requisites

Simple Requisites

> Prerequisites: None

PRST6920 - Diversity in the Workplace

General

College/School
Interdisciplinary Studies

Course Title
Diversity in the Workplace

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6920

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: None.

PRST6925 - Navigating the Future of Work: Remote Work Strategies and Beyond

General

College/School
Interdisciplinary Studies

Course Title
Nav The Future of Work Rmt Stg

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6925

Credit Hours

Credit Hours Min
3

Course Description
This course, "Navigating the Future of Work: Remote Work Strategies and Beyond," delves into the multifaceted world of remote work, equipping students with the knowledge and skills necessary to thrive in this evolving employment paradigm.

Requisites

Simple Requisites

> Prerequisites: None

PRST6930 - Compensation and Benefits

General

College/School
Interdisciplinary Studies

Course Title
Compensation and Benefits

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6930

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: None

PRST6940 - Recruitmnt/Selectn/Retentn

General

College/School
Interdisciplinary Studies

Course Title
Recruitmnt/Selectn/Retentn

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
PRST

Course Number
6940

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: None

PRST6960 - Communication Behavior Analysis and Insights

General

College/School
Interdisciplinary Studies

Course Title
Com Bhvr Analysis & Insights

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6960

Credit Hours

Credit Hours Min
3

Course Description
This course is dedicated to exploring communication behavior and audience research. The course explores behaviors, during and after a communication message. It investigates the impact of social media in the digital age.

Requisites

Simple Requisites

> Prerequisites: None

PRST6970 - Media Theory and Effects

General

College/School
Interdisciplinary Studies

Course Title
Media Theory and Effects

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6970

Credit Hours

Credit Hours Min
3

Course Description
This course is an analysis of historical and current theories of mass communication with an emphasis on media effects and the application of mass communication theory to social, political, economic, legal and ethical aspects of modern society. The course begins by providing a framework for evaluating mass communication theory, then focuses on deconstructing and applying four main theories (diffusion of innovation, uses and gratifications, social learning theory, and agenda setting), as well as a range of related mass communication theories.

Requisites

Simple Requisites

> Prerequisites: None

PRST6980 - Strategic Communications

General

College/School
Interdisciplinary Studies

Course Title
Strategic Communications

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
PRST

Course Number
6980

Credit Hours

Credit Hours Min
3

Course Description
This course uses communicators and real communication decisions to introduce students to communication strategies. It examines social, economic, technological, legal, ethical, and other environmental factors and their impact on communication

practices using real-world applications. It provides students with the knowledge and skills needed to communicate products, services, and ideas in a global marketplace.

Requisites

Simple Requisites

Prerequisites: None

PRST6990 - Design Strategies and Promotions

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Dsgn Strategies & Promotions	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
PRST	6990

Credit Hours

Credit Hours Min
3

Course Description

This course will provide graduate students an opportunity to research the subliminal effects of various graphic design structures and tools on consumers' decision-making processes.

Requisites

Simple Requisites

Prerequisites: None

PRST6998 - Professional Project

General

College/School
Interdisciplinary Studies

Course Title	**Academic Level (Course Level)**
Professional Project	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
PRST	6998

Credit Hours

Credit Hours Min
3

Course Description

Cross-listing: COMM 6998. The Professional Project is the last requirement for the MPS Degree, serving as the integrative culmination of theprogram of study. It should be a substantial piece of independent research or a significant professional project that is logically consistent with the theme and content of the program of study. Student's work should demonstrate familiarity with and understanding of a body of professional literature related to a specific topic. The Project should grow out of the program of study and should demonstrate the student's ability to use the knowledge gained from this program of study.

School of Art, Craft & Design Department

Although a graduate degree is not available in the School of Art, Craft & Design, certain senior-level courses have been so designed as to generate graduate credit and these courses are dually listed as 4000 (5000). A student must register for the 5000-level course in order to get graduate credit and additional assignments will be required. Students are warned that graduate credit will not be given for a 4000-level registration.

Courses

ART5100 - Art Tour

General

College/School
Fine Arts

Course Title	**Academic Level (Course Level)**
Art Tour	Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	**Course Number**
ART	5100

Credit Hours

Credit Hours Min
3

Course Description

A 1-2 week trip to view internationally recognized art. A term paper is required. May be repeated for credit if trip is different. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: ART1030 Art Appreciation, ART2110 Art History I, ART2120 Art History II, ART3130 Art Since 1900, ART3150 History of Crafts, or ART3160 History of Crafts II, or consent of instructor.

ART5140 - Art Theory

General

College/School
Fine Arts

Course Title	**Academic Level (Course Level)**
Art Theory	Doctoral, Specialist in Education, Graduate

Course Subject Code	**Course Number**
ART	5140

Credit Hours

Credit Hours Min
3

Course Description
Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites
> **Prerequisite:** ART2110 Art History I, ART2120 Art History II, and ART3130 Art Since 1900, or consent of instructor.

ART5170 - Ancient Mesoamerican Art

General
College/School
Fine Arts

Course Title
Ancient Mesoamerican Art

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
ART

Course Number
5170

Credit Hours
Credit Hours Min
3

Course Description
Art and architecture of Pre- Columbian Mesoamerican cultures, including Olmec, Maya, Teotihuacan, Monte Alban, Veracruz, Mixtecs, and Aztecs. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites
> **Prerequisite:** None.

ART5540 - Special Problems in Clay

General
College/School
Fine Arts

Course Title
Special Problems in Clay

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
5540

Credit Hours
Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites
> **Prerequisite:** Permission of the instructor.

ART5640 - Special Problems in Fibers

General
College/School
Fine Arts

Course Title
Special Problems in Fibers

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
5640

Credit Hours
Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites
> **Prerequisite:** Permission of the instructor.

ART5740 - Special Problems in Glass

General
College/School
Fine Arts

Course Title
Special Problems in Glass

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
5740

Credit Hours
Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Permission of the instructor.

ART5840 - Special Problems in Metal

General

College/School
Fine Arts

Course Title
Special Problems in Metal

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
5840

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Permission of the instructor.

ART5940 - Special Problems in Wood

General

College/School
Fine Arts

Course Title
Special Problems in Wood

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
5940

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** Permission of the instructor.

ART6030 - Graduate Seminar-Crafts

General

College/School
Fine Arts

Course Title
Graduate Seminar-Crafts

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6030

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ART6070 - Ind Study-Art/Craft History

General

College/School
Fine Arts

Course Title
Ind Study-Art/Craft History

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6070

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available

Requisites

Simple Requisites

> **Prerequisites:** None

ART6120 - Practicum in Ceramics

General

College/School
Fine Arts

Course Title
Practicum in Ceramics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6120

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

ART6121 - Practicum in Ceramics

General

College/School
Fine Arts

Course Title
Practicum in Ceramics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6121

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

ART6180 - Ind Studies Crafts/Clay

General

College/School
Fine Arts

Course Title
Ind Studies Crafts/Clay

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6180

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

ART6220 - Practicum in Fibers

General

College/School
Fine Arts

Course Title
Practicum in Fibers

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6220

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

ART6221 - Practicum in Fibers

General

College/School
Fine Arts

Course Title
Practicum in Fibers

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6221

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

ART6280 - Ind Studies Crafts/Fibers

General

College/School
Fine Arts

Course Title
Ind Studies Crafts/Fibers

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6280

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

ART6320 - Practicum in Glass

General

College/School
Fine Arts

Course Title
Practicum in Glass

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6320

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

ART6321 - Practicum in Glass

General

College/School
Fine Arts

Course Title
Practicum in Glass

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6321

Credit Hours

Credit Hours Min
1

Credit Hours Max
6

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisites: None

ART6380 - Ind Studies Crafts/Glass

General

College/School
Fine Arts

Course Title
Ind Studies Crafts/Glass

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6380

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite:** None

ART6420 - Practicum in Metals

General

College/School
Fine Arts

Course Title
Practicum in Metals

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6420

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ART6421 - Practicum in Metals

General

College/School
Fine Arts

Course Title
Practicum in Metals

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6421

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ART6480 - Ind Studies Crafts/Metals

General

College/School
Fine Arts

Course Title
Ind Studies Crafts/Metals

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6480

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ART6520 - Practicum in Wood

General

College/School
Fine Arts

Course Title
Practicum in Wood

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ART

Course Number
6520

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite:** None

ART6521 - Practicum in Wood

General

College/School
Fine Arts

Course Title
Practicum in Wood

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
ART

Course Number
6521

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** None

ART6580 - Ind Studies Crafts/Wood

General

College/School
Fine Arts

Course Title
Ind Studies Crafts/Wood

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
ART

Course Number
6580

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite:** None

Sociology and Pol Science Department

No degree is offered in Sociology or Criminal Justice but courses may be used (with advisory committee approval) as electives in other fields of study.

Courses

ANTH5040 - Law and Culture

General

College/School
Arts and Sciences

Course Title
Law and Culture

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
ANTH

Course Number
5040

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite:** SOC1010 or SOC1100 or consent of instructor.

ANTH5910 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate

Course Subject Code
ANTH

Course Number
5910

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** Consent of instructor.

ANTH5960 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
ANTH

Course Number
5960

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** Consent of instructor.

CJ5010 - Organized Crime

General

College/School
Arts and Sciences

Course Title
Organized Crime

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5010

Credit Hours

Credit Hours Min
3

Course Description
Organized crime in America as a product of legal, historical, cultural and economic forces. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites**: Sophomore standing and SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or CJ2660 Criminology or SOC2660 Criminology or consent of instructor.

CJ5040 - Law & Culture (Anthropology)

General

College/School
Arts and Sciences

Course Title
Law & Culture (Anthropology)

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5040

Credit Hours

Credit Hours Min
3

Course Description
A comparative cross-cultural analysis of primitive, traditional, and modern attitudes toward law, social control, punishment, and individual responsibility. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite:** SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology consent of instructor.

CJ5100 - Probation and Parole

General

College/School
Arts and Sciences

Course Title
Probation and Parole

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5100

Credit Hours

Credit Hours Min
3

Course Description
Probation and parole services with special attention to current practices and issues. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites**: Sophomore Standing and SOC1010 Intro to Sociology or CJ2660 Criminology or SOC2660 Criminology or SW1800 Intro to Social Work

CJ5120 - Case Management

General

College/School
Arts and Sciences

Course Title
Case Management

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CJ

Course Number
5120

Credit Hours

Credit Hours Min
3

Course Description

Individual and group methods used in counseling and treating offenders in both the institutional and community setting. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: Sophomore Standing and SOC1010 Intro to Sociology or CJ2660 Criminology or SOC2660 Criminology or SW1800 Intro to Social Work.

CJ5250 - Drugs/Behavioral Pharmacology

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Drugs/Behavioral Pharmacology	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
CJ	5250

Credit Hours

Credit Hours Min
3

Course Description

Relationships between drugs or drug groupings and human behavior, including toxicity, behavioral symptoms and historical aspects of drug abuse. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: Sophomore Standing and SOC1010 Intro to Sociology or CJ2660 Criminology or SOC2660 Criminology

CJ5660 - Corrections

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Corrections	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
CJ	5660

Credit Hours

Credit Hours Min
3

Course Description

Correctional services, practices and issues with particular attention to the maximum security adult institution. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisites: Sophomore Standing and CJ2660 Criminology or SOC2660 Criminology or SW1800 Intro to Social Work or SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or consent of instructor.

CJ5700 - Independent Study

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Independent Study	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
CJ	5700

Credit Hours

Credit Hours Min	**Credit Hours Max**
1	3
	Credit Hours Operator
	TO

Course Description

Prerequisite: Consent of instructor. Allows the student to undertake study in an area of criminology or criminal justice where there is no appropriate course. May be taken twice, provided that the topic is different. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

CJ5900 - Internship

General

College/School
Arts and Sciences

Course Title	**Academic Level (Course Level)**
Internship	Doctoral, Specialist in Education, Graduate
Course Subject Code	**Course Number**
CJ	5900

Credit Hours

Credit Hours Min
3

Course Description

Prerequisite: Nine hours of sociology. See instructor prior to enrolling. Students are placed with and work in a public or private agency which is compatible with their interests. (Students may take a maximum of two internships for up to a total of 6 hours of Internship. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements with any additional hours counting as upper division general elective hours).

CJ5915 - Internship

General

College/School
Arts and Sciences

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5915

Credit Hours

Credit Hours Min
6

Course Description
Six hour internships are only available for internships that offer special opportunities that are not available in a 3 hour internship. See instructor prior to enrolling to determine if an available internship opportunity qualifies for 6 hours of credit.

Requisites

Simple Requisites

> **Prerequisite**: Nine hours of sociology

CJ5925 - Internship

General

College/School
Arts and Sciences

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5925

Credit Hours

Credit Hours Min
9

Course Description
Nine hour internships are only available for internships that offer special opportunities that are not available in a 3 or 6 hour internship. The great majority of these will be summer internships that require the intern to work a 40 hour week. See instructor prior to enrolling to determine if an available internship opportunity qualifies for 9 hours of credit.

Requisites

Simple Requisites

> **Prerequisite**: Nine hours of sociology.

CJ5940 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5940

Credit Hours

Credit Hours Min
1

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

CJ5941 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5941

Credit Hours

Credit Hours Min
1

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

CJ5948 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5948

Credit Hours

Credit Hours Min
2

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites
Simple Requisites

> **Prerequisite**: Consent of instructor.

CJ5949 - Independent Study

General
College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5949

Credit Hours
Credit Hours Min
2

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites
Simple Requisites

> **Prerequisite**: Consent of instructor.

CJ5950 - Independent Study

General
College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5950

Credit Hours
Credit Hours Min
3

CJ5951 - Independent Study

General
College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5951

Credit Hours
Credit Hours Min
3

CJ5970 - Special Topics

General
College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5970

Credit Hours
Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Seminar or lecture course on a selected topic, issue, or interest area in criminology or criminal justice Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites
Simple Requisites

> **Prerequisite**: Consent of instructor.

CJ5980 - Special Topics

General
College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate

Course Subject Code
CJ

Course Number
5980

Credit Hours
Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Prerequisite: Consent of instructor. Seminar or lecture course on a selected topic, issue, or interest area in criminology or criminal justice Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

CJ5990 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
CJ

Course Number
5990

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description
Prerequisite: Consent of instructor. Seminar or lecture course on a selected topic, issue, or interest area in criminology or criminal justice Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

SOC5010 - Organized Crime

General

College/School
Arts and Sciences

Course Title
Organized Crime

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5010

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: Sophomore Standing and SOC1010 or CJ2660 or SOC2660.

SOC5040 - Law and Culture

General

College/School
Arts and Sciences

Course Title
Law and Culture

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5040

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 or SOC1100 or consent of instructor.

SOC5080 - Sociology of Appalachia

General

College/School
Arts and Sciences

Course Title
Sociology of Appalachia

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5080

Credit Hours

Credit Hours Min
3

Course Description
An exploration of the people, culture, and political economy of Appalachia. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or consent of instructor.

SOC5090 - Cross Cult Comm/Cult Diversity

General

College/School
Arts and Sciences

Course Title
Cross Cult Comm/Cult Diversity

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code	Course Number
SOC	5090

Credit Hours

Credit Hours Min
3

Course Description
An examination of the socio-cultural context of communication with emphasis upon enhancing communication skills across cultures. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: None

SOC5120 - Death & Dying

General

College/School
Arts and Sciences

Course Title
Death & Dying

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5120

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisite: SOC1010 or SOC1100 or consent of instructor.

SOC5130 - Death and Dying

General

College/School
Arts and Sciences

Course Title
Death and Dying

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5130

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisite: None

SOC5210 - Race/Ethnicity/Multicultural

General

College/School
Arts and Sciences

Course Title
Race/Ethnicity/Multicultural

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5210

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisite: SOC1010 or SOC1100 or consent of instructor.

SOC5220 - Sociology of Mass Comm

General

College/School
Arts and Sciences

Course Title
Sociology of Mass Comm

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5220

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

Prerequisite: SOC1010 or SOC1100 or consent of instructor.

SOC5320 - Sociology of Religion

General

College/School
Arts and Sciences

Course Title
Sociology of Religion

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5320

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 or SOC1100 or consent of instructor.

SOC5330 - Population & Social Proc

General

College/School
Arts and Sciences

Course Title
Population & Social Proc

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5330

Credit Hours

Credit Hours Min
3

Course Description
Sociological analysis of the interrelationship between particular population characteristics and patterns of social organization. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or consent of instructor.

SOC5430 - People in Organizations

General

College/School
Arts and Sciences

Course Title
People in Organizations

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5430

Credit Hours

Credit Hours Min
3

Course Description
Analysis of the structures and processes of large bureaucratic organizations, with emphasis on individuals' relationships to them. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or consent of instructor.

SOC5500 - Soc-Alcohol Abuse/Alcoholism

General

College/School
Arts and Sciences

Course Title
Soc-Alcohol Abuse/Alcoholism

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5500

Credit Hours

Credit Hours Min
3

Course Description
Sociological analysis of alcohol abuse and alcoholism; issues in prevention and rehabilitation; implications for education. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or consent of instructor.

SOC5510 - Social Deviance

General

College/School
Arts and Sciences

Course Title
Social Deviance

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5510

Credit Hours

Credit Hours Min
3

Course Description
Examination of various groups who are identified as deviant due to their unacceptable behavior and relative powerlessness. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or consent of instructor.

SOC5610 - Contemporary Am Family

General

College/School
Arts and Sciences

Course Title
Contemporary Am Family

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5610

Credit Hours

Credit Hours Min
3

Course Description
Models of family organization; variations in the institutional pattern; kinship; basic social trends affecting the family. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or consent of instructor.

SOC5660 - Corrections

General

College/School
Arts and Sciences

Course Title
Corrections

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5660

Credit Hours

Credit Hours Min
3

Course Description
Correctional services, practices and issues with particular attention to the maximum security adult institution. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisites**: Sophomore Standing and SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or CJ2660 Criminology or SOC2660 Criminology or SW1800 Intro to Social Work or consent of instructor

SOC5810 - Concepts of Gerontology

General

College/School
Arts and Sciences

Course Title
Concepts of Gerontology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5810

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite**: None

SOC5830 - Medical Anthropology

General

College/School
Arts and Sciences

Course Title
Medical Anthropology

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5830

Credit Hours

Credit Hours Min
3

Course Description
Examination of the significance of the complex relationship between attitudes, beliefs relating to the underlying causes of disease, the level of health characteristics, appropriate treatment practices and the role of the healer in various groups and societies. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or consent of instructor.

SOC5860 - Social Movement/Social Change

General

College/School
Arts and Sciences

Course Title
Social Movement/Social Change

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5860

Credit Hours

Credit Hours Min
3

Course Description
Analysis of social movements and other kinds of planned and unplanned change in society. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC1010 Intro to Sociology or SOC1100 Intro to Anthropology or consent of instructor.

SOC5900 - Internship

General

College/School
Arts and Sciences

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5900

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Nine hours of sociology. See instructor prior to enrolling. Students are placed with and work in a public or private agency which is compatible with their interests. (Students may take a maximum of two internships for up to a total of 6 hours of Internship. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements with any additional hours counting as upper division general elective hours).

SOC5915 - Internship

General

College/School
Arts and Sciences

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5915

Credit Hours

Credit Hours Min
6

Course Description
Six hour internships are only available for internships that offer special opportunities that are not available in a 3 hour internship. See instructor prior to enrolling to determine if an available internship opportunity qualifies for 6 hours of credit.

Requisites

Simple Requisites

> **Prerequisite**: Nine hours of sociology.

SOC5920 - Data Analysis & Mgmt

General

College/School
Arts and Sciences

Course Title
Data Analysis & Mgmt

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5920

Credit Hours

Credit Hours Min
3

Course Description
The techniques of management and analysis of quantitative social science data from primary and secondary sources. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC3910 Soc Science Stat Analysis

SOC5925 - Internship

General

College/School
Arts and Sciences

Tennessee Technological University

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5925

Credit Hours

Credit Hours Min
9

Course Description
Nine hour internships are only available for internships that offer special opportunities that are not available in a 3 or 6 hour internship. The great majority of these will be summer internships that require the intern to work a 40 hour week. See instructor prior to enrolling to determine if an available internship opportunity qualifies for 9 hours of credit.

Requisites

Simple Requisites

> **Prerequisite**: Nine hours of sociology.

SOC5930 - Field Research Methods

General

College/School
Arts and Sciences

Course Title
Field Research Methods

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5930

Credit Hours

Credit Hours Min
3

Course Description
An in-depth examination and direct involvement with various qualitative research tools and techniques used by sociologists. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

> **Prerequisite**: SOC2900 Intro-Sociological Research or consent of instructor or SOC3900 Intro-Sociological Research

SOC5940 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5940

Credit Hours

Credit Hours Min
1

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

SOC5941 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5941

Credit Hours

Credit Hours Min
1

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

SOC5948 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5948

Credit Hours

Credit Hours Min
2

Course Description

Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

SOC5949 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5949

Credit Hours

Credit Hours Min
2

Course Description

Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

SOC5950 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5950

Credit Hours

Credit Hours Min
3

Course Description

Allows the student to undertake study in an area of sociology where there is no appropriate course. May be taken twice, provided that the topic is different. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

SOC5951 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5951

Credit Hours

Credit Hours Min
3

Course Description

Course description not available.

Requisites

Simple Requisites

Prerequisite: None

SOC5970 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5970

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

Credit Hours Operator
TO

Course Description

Seminar or lecture course on a selected topic, issue, or interest area in sociology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

Requisites

Simple Requisites

Prerequisite: Consent of instructor.

SOC5980 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5980

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
Prerequisite: Consent of instructor. Seminar or lecture course on a selected topic, issue, or interest area in sociology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

SOC5990 - Special Topics

General

College/School
Arts and Sciences

Course Title
Special Topics

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
SOC

Course Number
5990

Credit Hours

Credit Hours Min
1

Credit Hours Max
3

**Credit Hours
Operator**
TO

Course Description
Prerequisite: Consent of instructor. Seminar or lecture course on a selected topic, issue, or interest area in sociology. Students enrolled in the 5000-level course will be required to complete additional work as stated in the syllabus.

SOC6100 - Interdisc Cultural Training

General

College/School
Arts and Sciences

Course Title
Interdisc Cultural Training

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
SOC

Course Number
6100

Credit Hours

Credit Hours Min
3

Course Description
This will be an active learning course focused on sociology, history, cultures, economics, and language of the Cherokee Nation and Appalachia. It will explore effective strategies to collaboratively solve complex food-energy-water challenges from a culturally responsive perspective.

Requisites

Simple Requisites

> **Prerequisite**: None

SW5100 - Probation and Parole

General

College/School
Arts and Sciences

Course Title
Probation and Parole

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
SW

Course Number
5100

Credit Hours

Credit Hours Min
3

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisites:** Sophomore Standing and SOC1010 or CJ2660 or SOC2660 or SW1800.

SW5120 - Case Management

General

College/School
Arts and Sciences

Course Title
Case Management

Academic Level (Course Level)
Undergraduate

Course Subject Code
SW

Course Number
5120

Credit Hours

Credit Hours Min
3

SW5900 - Internship

General

College/School
Arts and Sciences

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
SW

Course Number
5900

Credit Hours

Credit Hours Min
3

Course Description
Prerequisite: Nine hours of sociology. See instructor prior to enrolling. Students are placed with and work in a public or private agency which is compatible with their interests. (Students may take a maximum of two internships for up to a total of 6 hours of Internship. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements with any additional hours counting as upper division general elective hours).

SW5915 - Internship

General

College/School
Arts and Sciences

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
SW

Course Number
5915

Credit Hours

Credit Hours Min
6

Course Description
Six hour internships are only available for internships that offer special opportunities that are not available in a 3 hour internship. See instructor prior to enrolling to determine if an available internship opportunity qualifies for 6 hours of credit.

Requisites

Simple Requisites

> **Prerequisite:** Nine hours of sociology.

SW5925 - Internship

General

College/School
Arts and Sciences

Course Title
Internship

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
SW

Course Number
5925

Credit Hours

Credit Hours Min
9

Course Description
Course description not available.

Requisites

Simple Requisites

> **Prerequisite:** None

SW5940 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
SW

Course Number
5940

Credit Hours

Credit Hours Min
1

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

SW5941 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education,
Graduate, Undergraduate

Course Subject Code
SW

Course Number
5941

Credit Hours

Credit Hours Min
1

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

SW5948 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SW

Course Number
5948

Credit Hours

Credit Hours Min
2

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

> **Prerequisite:** Consent of instructor.

SW5949 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SW

Course Number
5949

Credit Hours

Credit Hours Min
2

Course Description
Allows the student to undertake study in an area of sociology where there is no appropriate course. Students may take a total of up to 6 hours of Independent Study hours with no more than 3 hours on a single topic. Up to 6 hours may be taken for upper division credit to fulfill major or minor requirements.

Requisites

Simple Requisites

> **Prerequisite**: Consent of instructor.

SW5950 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SW

Course Number
5950

Credit Hours

Credit Hours Min
3

SW5951 - Independent Study

General

College/School
Arts and Sciences

Course Title
Independent Study

Academic Level (Course Level)
Doctoral, Specialist in Education, Graduate, Undergraduate

Course Subject Code
SW

Course Number
5951

Credit Hours

Credit Hours Min
3