



Degree Map

CATALOG YEAR: 2023-2024

Degree: BSE

MAJOR: General Engineering

The major map illustrates one path to completing your major, based on faculty members' advice on course sequence and course schedule. This document provides general direction.

Course	Cr. Hrs.	Course	Cr. Hrs.
FIRST YEAR			
Semester: Fall		Semester: Spring	
Total Credit Hours: 16		Total Credit Hours: 16	
ENGR 1020 Connections to Eng & Tech ¹	1	ENGR 1120 Programming for Engineers ¹	2
ENGR 1110 Engineering Graphics	2	MATH 1920 Calculus II	4
MATH 1910 Calculus I	4	CHEM 1120 General Chemistry II	4
CHEM 1110 General Chemistry I	4	ENGL 1020 English Composition II	3
ENGL 1010 English Composition I	3	Humanities/Fine Arts Elective	3
Humanities/Fine Arts Elective	3		
Course	Cr. Hrs.	Course	Cr. Hrs.
SOPHOMORE YEAR			
Semester: Fall		Semester: Spring	
Total Credit Hours: 16		Total Credit Hours: 16	
CEE 2110 Statics ³	3	ME 2330 Dynamics ³	3
ENGR 3710 Principles of Eng Economy	2	MATH 2010 Intro to Linear Algebra	3
MATH 2110 Calculus III	4	MATH 2120 Differential Equations	3
PHYS 2110 Calculus based Physics I	4	PHYS 2120 Calculus based Physics II	4
English Literature	3	COMM 2025 Fund of Communication	3
Course	Cr. Hrs.	Course	Cr. Hrs.
JUNIOR YEAR			
Semester: Fall		Semester: Spring	
Total Credit Hours: 18		Total Credit Hours: 16	
ECE 2050 Circuits & Electronics I ³	4	ECE 2140 Intro to Digital Systems ³	4
ENGR 3120 Solid Modeling ³	3	ME 3010 Mats in Manufacturing	3
ME 3210 Thermodynamics I	3	ME 3023 Measurements in Mech Systems ³	3
CEE 3110 Mechanics of Materials	3	ME 3720 Fluid Mechanics	3
Social/Behavioral Science Elective	3	Social/Behavioral Science Elective	3
ENGR 3720 Principles of Engineering Statistics ³	2		
Course	Cr. Hrs.	Course	Cr. Hrs.
SENIOR YEAR			
Semester: Fall		Semester: Spring	
Total Credit Hours: 16		Total Credit Hours: 14	
ENGR 4510 Engineering Management	3	ENGR 3020 Numerical Methods	3
ENGR 4900 Egr Design, Prof & Ethics	3	ENGR 4960 Senior Design II ³	3
ENGR 4950 Senior Design I ³	3	Technical Elective (ETSU) ⁴	3
ENGR 4750 Mechanical Engineering Laboratory ³	1	Technical Elective ²	3
Technical Elective ²	3	Free Elective	2
Technical Elective ²	3		

Foot notes:

1. Not part of the 128-hour BSE degree program
2. Technical Electives: CEE 3320, CEE 3413, CEE 3610, ECE 3210, ECE 3330, ECE 3610, ME 3610, ME 3710, ME 4010
3. Courses noted in blue color are taken online from East Tennessee State University (ETSU)
4. ETSU Technical Electives: ENTC 4037, ENTC 4237, ENTC 4257, MGMT 4610, SURV 2530