

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 Total Credit Hours: 16			Semester: Spring Total Credit Hours: 16		
ENGR 1020 Connections to Eng & Tech ¹		1	ENGR 1120 Programming for Engine	ers ¹	2
ENGR 1110 Engineering Graphics	,	2	MATH 1920 Calculus II		4
MATH 1910 Calculus I	4	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 Total Credit H		urs: 16	Semester: Spring	Total Credit	Hours: 16
CEE 2110 Statics		3	ME 2330 Dynamics		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		4
English Literature		3	COMM 2025 Fund of Communication 3		3
Course		Cr. Hrs.	Course		Cr. Hrs.
JUNIOR YEAR					
Semester: Fall Total Credit F		urs· 18	Semester: Spring	Total Crodit	Hours: 16
ECE 2050 Circuits & Electronics I		ars. 10	Jennester. Spring	Total Credit	
LCL 2000 Circuits & Liectroffics I		4	ECE 2140 Intro to Digital Systems	Total Credit	4
ENGR 3120 Solid Modeling	:	3		Total Credit	3
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I		3 3	ECE 2140 Intro to Digital Systems		3 3
ENGR 3120 Solid Modeling	:	4 3 3 3	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing		3
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials Social/Behavioral Science Elective		4 3 3 3 3	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy		3 3
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials		4 3 3 3	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy ME 3720 Fluid Mechanics		4 3 3 3
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials Social/Behavioral Science Elective	Statistics	4 3 3 3 3	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy ME 3720 Fluid Mechanics		4 3 3 3
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials Social/Behavioral Science Elective ENGR 3720 Principles of Engineering	g Statistics	3 3 3 3 3 3 Cr. Hrs.	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy ME 3720 Fluid Mechanics Social/Behavioral Science Elective	rstems	4 3 3 3 3 Cr. Hrs.
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials Social/Behavioral Science Elective ENGR 3720 Principles of Engineering Course	Statistics	3 3 3 3 3 3 Cr. Hrs.	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy ME 3720 Fluid Mechanics Social/Behavioral Science Elective Course Semester: Spring		4 3 3 3 3 Cr. Hrs.
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials Social/Behavioral Science Elective ENGR 3720 Principles of Engineering Course SENIOR YEAR Semester: Fall ENGR 4510 Engineering Managemen	Total Credit Hount	4 3 3 3 3 3 3 Cr. Hrs.	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy ME 3720 Fluid Mechanics Social/Behavioral Science Elective Course	rstems	4 3 3 3 3 Cr. Hrs.
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials Social/Behavioral Science Elective ENGR 3720 Principles of Engineering Course SENIOR YEAR Semester: Fall	Total Credit Hount	4 3 3 3 3 3 3 Cr. Hrs.	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy ME 3720 Fluid Mechanics Social/Behavioral Science Elective Course Semester: Spring ENGR 3020 Numerical Methods ENGR 4960 Senior Design II	rstems	4 3 3 3 3 3 Cr. Hrs.
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials Social/Behavioral Science Elective ENGR 3720 Principles of Engineering Course SENIOR YEAR Semester: Fall ENGR 4510 Engineering Managemer ENGR 4900 Egr Design, Prof & Ethics ENGR 4950 Senior Design I	Total Credit Hount	4 3 3 3 3 3 3 Cr. Hrs.	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy ME 3720 Fluid Mechanics Social/Behavioral Science Elective Course Semester: Spring ENGR 3020 Numerical Methods ENGR 4960 Senior Design II Technical Elective ²	rstems	4 3 3 3 3 3 Cr. Hrs.
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials Social/Behavioral Science Elective ENGR 3720 Principles of Engineering Course SENIOR YEAR Semester: Fall ENGR 4510 Engineering Management ENGR 4900 Egr Design, Prof & Ethics ENGR 4950 Senior Design I ENGR 4750 Mechanical Engineering	Total Credit Hount	4 3 3 3 3 3 3 Cr. Hrs.	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy ME 3720 Fluid Mechanics Social/Behavioral Science Elective Course Semester: Spring ENGR 3020 Numerical Methods ENGR 4960 Senior Design II	rstems	4 3 3 3 3 3 Cr. Hrs.
ENGR 3120 Solid Modeling ME 3210 Thermodynamics I CEE 3110 Mechanics of Materials Social/Behavioral Science Elective ENGR 3720 Principles of Engineering Course SENIOR YEAR Semester: Fall ENGR 4510 Engineering Managemer ENGR 4900 Egr Design, Prof & Ethics ENGR 4950 Senior Design I	Total Credit Hount :	4 3 3 3 3 3 3 Cr. Hrs. urs: 16 3 3	ECE 2140 Intro to Digital Systems ME 3010 Mats in Manufacturing ME 3023 Measurements in Mech Sy ME 3720 Fluid Mechanics Social/Behavioral Science Elective Course Semester: Spring ENGR 3020 Numerical Methods ENGR 4960 Senior Design II Technical Elective ²	rstems	4 3 3 3 3 3 Cr. Hrs.

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 notes in blue color are taken at East Tennesee State University (ETSU)
- 4. ETSU Technical Electives: ENTC 4037, ENTC 4237, ENTC 4257, MGMT 4610, SURV 2530