



Degree Map

CATALOG YEAR: 2021-2022

Degree: BSME

MAJOR: Mechanical Engineering
Concentration: Vehicle 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	
ENGL 1010 Writing	3	ENGL 1020 Writing II	3
Humanities/Fine Arts Elective	3	MATH 1920 Calculus II	4
MATH 1910 Calculus I	4	PHYS 2110 Physics I	4
CHEM 1110 Gen Chemistry	4	ENGR 1120 Programming	2
ENGR 1110 Graphics	2	Humanities/Fine Arts Elective	3
Course	Cr. Hrs.	Course	Cr. Hrs.
SOPHOMORE YEAR			
Semester: Fall Total Credit Hours: 17		Semester: Spring Total Credit Hours: 16	
ENGL 2130, 2230, or 2330 Lit.	3	COMM 2025 or PC 2500 Communication	3
MATH 2120 Diff. Equations	3	MATH 2110 Calculus III	4
MATH 2010 Matrix Algebra	3	ECE 2850 Principles of Electric Circuits	3
PHYS 2120 Physics II	4	ME 3010 Materials	3
CEE 2110 Statics	3	ME 2330 Dynamics	3
ME 2910 Prof. & Ethics	1		
Course	Cr. Hrs.	Course	Cr. Hrs.
JUNIOR YEAR			
Semester: Fall Total Credit Hours: 15		Semester: Spring Total Credit Hours: 18	
ME 3001 ME Analysis	3	ME 3610 ME Dynamics of Mach	3
VE 3400 Intro to Auto Systems	3	VE 3500 Sensors, Transducers, and Instr	3
ME 3210 Thermo I	3	ME 3220 Thermodynamics II	3
ME 3720 Fluid Mechanics	3	ME 3710 Heat Transfer	3
CEE 3110 Mech of Materials	3	ME 4010 Machine Design	3
		MATH 3470 Intro Probability & Statistics	3
Course	Cr. Hrs.	Course	Cr. Hrs.
SENIOR YEAR			
Semester: Fall Total Credit Hours: 15		Semester: Spring Total Credit Hours: 15	
Social Behavior Sc. Elective	3	Social Behavior Sc. Elective	3
ME 3050 Dynamic Modeling & Controls	3	VE 4420 Senior Design II	3
ME 3060 Dynamic Modeling & Controls Lab	1	VE 4550 Reliability & Quality Control Engineering	3
VE 4410 Senior Design I	3	AoE from BSME Approved List	3
ME 4020 Applied Mac Design or ME 4720 Thermal Design	3	AoE from BSME Approved List	3
ME 4751 Energy Systems Lab	2		

Notes:

- Area of Emphasis (AoE) Courses:
 - Category 1: Mechanical Engineering Elective Courses (a minimum of 9 credit hours must be taken from this category for AoEs)
 - ME 4020 (5020), ME 4060 (5060), ME 4120 (5120), ME 4140 (5140), E 4160 (5160), ME 4180 (5180), ME 4190 (5190), ME 4210 (5210), ME 4220 (5220), ME 4260 (5260), ME 4310 (5310), ME 4370 (5370), ME 4380 (5380), ME 4450 (5450), ME 4460 (5460), ME 4480 (5480), ME 4490 (5490), ME 4510 (5510), ME 4610 (5610), ME 4620 (5620), ME 4630 (5630), ME 4640 (5640), ME 4720 (5720), ME 4730 (5730), ME 4810 (5810), ME 4900, ME 4930 (5930), ME 4990.
 - Category 2: Mathematics directly applicable to Mechanical Engineering
 - MATH 3810, MATH 4210 (5210), MATH 4220 (5220), MATH 4250 (5250), MATH 4510 (5510), MATH 4530 (5530), MATH 4710 (5710)
 - Category 3: Select General Engineering and Business (maximum of 3 credit hours shall be counted as AoEs)
 - BMGT 350, ENGR 4510, ENTR 4500
 - Category 4: Miscellaneous Engineering, Technology and Science Courses
 - MET 4400 (5400), MET 4450 (5450), MET 4650 (5650)