

MECHANICAL ENGINEERING MAJOR

Plan of Study

A typical, full-time, four-year plan of study appears below. Some variation may be possible. Students should always discuss their individual plan of study with their advisor prior to registering for courses.

Course	Title	Credits
First Year		
Fall		
ENGR 1031	Fundamentals of Engineering	3
MATH 1141	Calculus I for Chemistry, Engineering, and Physics Majors	4
PHYS 1171	General Physics I	3
PHYS 1171L	General Physics I Lab	1
History Orientation Level ¹		3
Modern/Classical Language Orientation Level ⁵		3
Credits		17
Spring		
ENGL 1001	Introduction to Rhetoric and Composition	3
ENGR 2130	Engineering Graphics I	3
MATH 1142	Calculus II for Chemistry, Engineering, and Physics Majors	4
PHYS 1172	General Physics II	3
PHYS 1172L	General Physics II Lab	1
Religious Studies Orientation Level ¹		3
Credits		17
Second Year		
Fall		
CHEM 1171	General Chemistry I	3
CHEM 1171L	General Chemistry I Lab	1
MATH 2243	Calculus III for Chemistry, Engineering, and Physics Majors	4
MEEG 2201	Engineering Statics	3
MEEG 2206L	Mechanics Lab	1
MEEG 2207	Materials Science	3
Visual and Performing Arts Exploration Tier ⁶		3
Credits		18
Spring		
ENGR 2145	Mathematical Analysis	3
ENGR 2145P	Mathematical Analysis PLG	0
MATH 2251	Ordinary Differential Equations	3
MEEG 2203	Kinematics and Dynamics	3
MEEG 2307L	Dynamics Systems Lab	1
MEEG 3308	Strength of Materials	3
PHIL 1101	Introduction to Philosophy	3
Credits		16
Third Year		
Fall		
ELEG 2213	Introduction to Electric Circuits	3

ELEG 2213L	Electric Circuits Lab	1
MEEG 3241	Principles of Thermodynamics	3
MEEG 3311	Machine Design	3
Behavioral and Social Sciences Exploration Tier ³		3
MATH 3332	Partial Differential Equations	3
Credits		16

Spring		
History or Philosophy or Religious Studies Exploration Tier ²		3
MEEG 3318	Finite Element Analysis	3
MEEG 3342	Applications of Thermodynamics	3
MEEG 3347	Fluid Mechanics	3
MEEG 3348L	Thermal and Fluids Lab	1
Behavioral and Social Sciences Exploration Tier ³		3
Credits		16

Fourth Year		
Fall		
ENGR 4961	Senior Design Project I	3
MEEG 4325	Engineering Systems Dynamics	3
MEEG 4349	Heat Transfer	3
MEEG 4350L	Energy Transfer Lab	1
Major Elective ⁴		3
Major Elective ⁴		3
Credits		16

Spring		
ENGR 4962	Senior Design Project II	3
Major Elective ⁴		3
Major Elective ⁴		3
Major Elective ⁴		3
History or Philosophy or Religious Studies Exploration Tier ²		3
Literature Exploration Tier ⁷		3
Credits		18
Total Credits		134

¹ Choose an appropriate History or Religious Studies course at the 1000 level.

² Choose any appropriate Religious Studies, History, or Philosophy core course.

³ Core Social Science course may be fulfilled by appropriate courses in Communication, Economics, Psychology, Politics, or Sociology and Anthropology.

⁴ Major electives are chosen from the department, but may be chosen with approval of advisor and Department Chair from among other courses offered in the School of Engineering and Computing.

⁵ Choose any language offered by the Department of Modern Languages and Literatures, based on a placement exam.

⁶ Visual and Performing Arts courses may be chosen from Art History, Music, Film, Television, and Media Arts, Studio Art, or Theatre.

⁷ Approved English, Modern Languages and Literatures, or Classics courses.