

Suggested Plan of Study Mechanical Engineering (Fall 2026 Catalog) 122 Credit Hours

SEMESTER 1 - FALL		
Course No.	Course Name	Hours
ENC 1101	Composition I	3
MAC 2311C	Calculus I	4
CHS 1440 or CHM 2045C	Prin. of Chemistry <u>or</u> Chemistry Fund I <i>CHM 2045C PR: Math Placement beyond MAC 1105C and Passing Score on Chemistry Placement Test</i>	4
EGS 1006C	Intro. to Engineering Profession	1
Total		12

SEMESTER 2 - SPRING		
Course No.	Course Name	Hours
ENC 1102	Composition II	3
MAC 2312	Calculus II	4
PHY 2048/L	Physics I with Calculus/Lab <i>PR: MAC 2311C</i>	4
EGN 1007C	Engineering Concepts & Methods	1
Total		12

SEMESTER 3 - SUMMER		
Course No.	Course Name	Hours
MAC 2313	Calculus III <i>PR: MAC 2312</i>	4
EGN 3310	Engineering Statics <i>PR: MAC 2311C, PHY 2048C CR: MAC 2312</i>	3
SPC 1603C or SPC 1608	Speech	3
Total		10

SEMESTER 4 - FALL		
Course No.	Course Name	Hours
MAP 2302	Differential Equations <i>PR: MAC 2313</i>	3
PHY 2049/L	Physics II with Calculus/Lab <i>PR: MAC 2312, PHY2048</i>	4
EGN 3321	Engineering Dynamics <i>PR: MAC 2311C, MAC 2312, MAC 2313, EGN 3310, PHY2048/L, CHS 1440 or CHM 2045C</i>	3
EGN 3365	Struct. & Prop of Materials <i>PR: MAC 2312, CHS1440 or CHM 2045C</i>	3
Total		13

SEMESTER 5 - SPRING		
Course No.	Course Name	Hours
EGM 3601	Solid Mechanics <i>PR: MAC 2311C, MAC 2312, MAC 2313, EGN 3310, PHY2048/L, CHS 1440 or CHM 2045C</i>	3
EGN 3373	Principles of Electrical Engineering <i>PR: MAC 2311C, MAC 2312, MAC 2313, EGN 3310, PHY 2048/L, PHY 2049/L, CHS 1440 or CHM 2045C</i>	3
EGN 3343	Thermodynamics <i>PR: MAC 2311C, MAC 2312, MAC 2313, EGN 3310, PHY2048/L, CHS 1440 or CHM 2045C</i>	3
COP 3223C	Intro. to Programming with C <i>PR: COP 2500C or CS Placement Test</i>	3
Total		12

SEMESTER 6 - SUMMER		
Course No.	Course Name	Hours
EML 3701	Fluid Mechanics <i>PR: MAC 2311C, MAC 2312, MAC 2313, EGN 3310, PHY2048/L, EGN 3321, EGN 3343</i>	3
Humanities Foundation	Consider Gordon Rule Writing Course	3
Social Science Foundation		3
Total		9

SEMESTER 7 - FALL		
Course No.	Course Name	Hours
EML 3933	Career/Academic Faculty Advising I PR: MAP 2302	0
EML 3034C	Modeling Methods in MAE PR: MAC 2311C, MAC 2312, MAC 2313, EGN 3310, PHY2048/L, COP 3223C CR: EGN 3321, EML 3933	3
EML 3500	Machine Components PR: EGM 3601	3
EML 3303C	Mechanical Measurements PR: EGN 3343	3
Approved Technical Elective	See Approved Technical Elective List	3
Social Science Foundation		3
Total		15

SEMESTER 8 - SPRING		
Course No.	Course Name	Hours
EML 4142	Heat Transfer I PR: EML 3701, EML 3034C	3
EML 4312	System Dynamics and Control PR: EGN 3321, EGM 3601, EML 3034C, EGN 3373	3
STA 3032	Prob. & Statistics for Engineers PR: MAC 2312	3
Approved Technical Elective	See Approved Technical Elective List	3
Humanities Foundation	Consider Gordon Rule Writing Course	3
Total		15

SEMESTER 9 - SUMMER		
Course No.	Course Name	Hours
	Consider an internship	
Total		0

SEMESTER 10 - FALL		
Course No.	Course Name	Hours
EML 4501C	Mechanical Design I (Senior Design I) PR: EGN 3373, EML 3303C, EML 3701, EML 4142, EML 4312 CR: EML 4931	3
EML 4931	Career/Academic Faculty Advising II PR: EML 3933	0
Approved Technical Elective	See Approved Technical Elective List	3
Approved Technical Elective	See Approved Technical Elective List	3
Advanced Course	Choose 1 of 6	3
Total		12

SEMESTER 11 - SPRING		
Course No.	Course Name	Hours
EML 4502C	Mechanical Design II (Senior Design II) PR: EML 4501C, EML 4931	3
Approved Technical Elective	See Approved Technical Elective List	3
Advanced Course	Choose 1 of 6	3
Systems Lab Course	Choose 1 of 2	3
Total		12

SEMESTER 12 - SUMMER		
Course No.	Course Name	Hours
Total		0

Advanced Course Requirement - Select 2 of 6
Note: Advanced Courses do not also count as Technical Electives

EML 4143 Heat Transfer II
EML 4703 Fluid Mechanics II
EML 3101 Thermodynamics of Mechanical Systems
EML 4505 Design & Analysis of Machine Components II
EML 3262 Kinematics of Mechanisms
EML 4220 Vibrations

Systems Lab Requirement - Select 1 of 2

EML 4301C Mechanical Systems Lab
EML 4306C Energy Systems Lab

PR = Pre-requisite - must be taken before another course

CR = Co-requisite - must be taken at the same time or before another course or

IMPORTANT NOTES:

Grade of "C" (2.0) or better is required in all major courses. All prerequisites require a "C" (2.0) or better.

Must complete Lecture and Lab components of Physics courses with a "C" (2.0) or better.

PHY 2048C or (PHY 2048 & PHY 2048L)
PHY 2049C or (PHY 2049 & PHY 2049L)

Courses should be taken in the noted term or in a previous term, if your schedule permits, and if all prerequisites have been met. Please meet with your Academic Success Coach regularly to schedule plan. Do not drop any course before discussing this action with your Academic Success Coach.