

CURRICULUM MAP



MERRIMACK COLLEGE

Mechanical Engineering, BS (Pre-Calculus Start)

YEAR ONE

FALL

Pre-Calculus - MTH 1016	4 credits	Major Requirement
First Year Seminar - FYS 1947	4 credits	FC Core Requirement (FYS)
Introduction to Engineering - GEN 1001	4 credits	Major Requirement, FC Core Requirement (STEM)
General Chemistry with Lab - CHM 1110	4 credits	Major Requirement
Total Credits - 16		

SPRING

Calculus I - MTH 1217	4 credits	Major Requirement
Coding in MATLAB - MEN 2050	4 credits	Major Requirement
OR		
Problem Solving with Python - CSC 1611		
FC Core Course	4 credits	FC Core Requirement (RTS)
FC Core Course	4 credits	FC Core Requirement (HUM)
Total Credits - 16		

YEAR TWO

FALL

Statics & Recitation - GEN 2010/GEN 2010R	4 credits	Major Requirement
Calculus II - MTH 1218	4 credits	Major Requirement
Physics I with Lab - PHY 2211	4 credits	Major Requirement
FC Core Course or Probability and Statistics I - MTH 2527	4 credits	FC Core Requirement (DPJ) or Major Requirement
Total Credits - 16		

SPRING

Mechanics of Materials with Lab - GEN 2012	4 credits	Major Requirement
Calculus III - MTH 2219	4 credits	Major Requirement
Fluid Mechanics with Lab - GEN 3040	4 credits	Major Requirement
Physics II with Lab - PHY 2212	4 credits	Major Requirement
Total Credits - 16		

YEAR THREE

FALL

Differential Equations - MTH 2220	4 credits	Major Requirement
Dynamics and Vibrations - MEN 3014	4 credits	Major Requirement
Materials Science - MEN 3020	4 credits	Major Requirement
Thermodynamics I and II - MEN 3030/3032	4 credits	Major Requirement

Total Credits - 16

SPRING

Machine Design - MEN 3010	4 credits	Major Requirement
Heat & Mass Transfer - MEN 3034	4 credits	Major Requirement
FC Core Course or MTH 1505 Applied Statistics and Probability for Engineers	4 credits	FC Core Requirement (DPJ) or Major Requirement
Depth Elective 1	4 credits	Major Requirement

Total Credits - 16

YEAR FOUR

FALL

Design Project I - MEN 4910	2 credits	Major Requirement
Senior Seminar	1 credit	Major Requirement
Depth Elective 2	4 credits	Major Requirement
Open ME Elective	4 credits	Major Requirement
Open Elective	4 credits	Elective Requirement

Total Credits - 15

SPRING

Design Project II - MEN 4920	2 credits	Major Requirement
Depth Elective 3	4 credits	Major Requirement
Depth Elective 4	4 credits	Major Requirement
FC Core Course	4 credits	FC Core Requirement (SOSC)

Total Credits - 14

Notes: This is a sample curriculum map. Students may progress toward graduation using alternative pathways. In addition, 'FC Core Requirement' signifies that the course is required as part of the Foundations and Connections Core - the College's general education program. Please be aware that all students must take six FC Core Requirement courses (FYS, DPJ, HUM, RTS, SOSC, and STEM) and earn an FC Core Minor or Certificate to satisfy the College's general education requirement.

Students must earn a C- or higher in a prerequisite for another course to enroll in the next course. For example, you must earn a C- or higher in Calculus I in order to enroll in Calculus II.

All students must accumulate 100 experiential education points through various activities such as internships, competitions, study abroad, co-op, and so on. Additionally, all seniors must take the FE exam and complete the senior exit survey.