

# B.A. In Mechanical Engineering

Specializations: Not Applicable

## Sample Degree Plan

THIS IS ONE EXAMPLE OF MANY POSSIBLE SCHEDULES.

CONSULT A DIVISIONAL OR DEPARTMENTAL ADVISOR TO CUSTOMIZE YOUR DEGREE PLAN.

<b>FALL</b>			<b>SPRING</b>		
<b>FRESHMAN</b> 16 credits			<b>FRESHMAN</b> 17 credits		
MATH 101	Single Variable Calculus I	3	MATH 102	Single Variable Calculus II	3
CHEM 121	General Chemistry I w/Lab	4*	CHEM 122	General Chemistry II w/Lab	4*
PHYS 101	Mechanics w/Lab	3*	PHYS 102	Electricity & Magnetism w/Lab	4*
DIST	Distribution elective	3	CAAM 210	Intro to Eng Computation	3
OPEN	Open elective	3	DIST	Distribution elective	3
LPAP	Lifetime Phys Activity elective	0	LPAP	Lifetime Phys Activity elective	0
<b>SOPHOMORE</b> 15 credits			<b>SOPHOMORE</b> 15 credits		
MATH 211	Ordinary Differential Equations	3	MATH 212	Multivariable Calculus	3
MECH 211	Engineering Mechanics	3	MECH 200	Classical Thermodynamics	3
MSCI 301	Materials Science	3	MECH 311	Mechanics of Solids	3
DIST	Distribution elective	3	DIST	Distribution elective	3
OPEN	Open elective	3	OPEN	Open elective	3
<b>JUNIOR</b> 16–17 credits			<b>JUNIOR</b> 15–16 credits		
CAAM 335	Matrix Analysis	3–4	CAAM 336	Diff Eqs in Science & Eng	3–4
MECH 343	Modeling of Dynamic Systems	4	MECH 401	Machine Design Applications	3
MECH 371	Fluid Mechanics I	3	MECH 420	Fundamentals of Control Systems	3
DIST	Distribution elective	3	MECH 481	Heat Transfer	3
OPEN	Open elective	3	DIST	Distribution elective	3
<b>SENIOR</b> 18 credits			<b>SENIOR</b> 15 credits		
DIST	Distribution elective	3	MECH 412	Vibrations	3
OPEN	Open elective	3	DIST	Distribution elective	3
OPEN	Open elective	3	OPEN	Open elective	3
OPEN	Open elective	3	OPEN	Open elective	3
OPEN	Open elective	3	OPEN	Open elective	3
OPEN	Open elective	3			

\* In addition to class hours, these courses have a regularly scheduled lab that must fit into your schedule.

BASIC REQUIREMENTS	General Math & Science Courses	39
	Core Courses in Major	28
ELECTIVE REQUIREMENTS	Open Electives	36
	Distribution Courses in Humanities and Social Science	24
Minimum credit required for the B.A.		127

Of the 127 total degree credits, MECH requires 67 credits in general math and science courses and core courses.

## Major Requirements

NUMBER	CREDIT	TITLE
CAAM 210	3	Introduction to Engineering Computation
CAAM 335	3-4	Matrix Analysis
CAAM 336	3-4	Differential Equations in Science & Engineering
CHEM 121	4*	General Chemistry I w/Lab
CHEM 122	4*	General Chemistry II w/Lab
MATH 101	3	Single Variable Calculus I
MATH 102	3	Single Variable Calculus II
MATH 211	3	Ordinary Differential Equations & Linear Algebra
MATH 212	3	Multivariable Calculus
MSCI 301	3	Materials Science
PHYS 101	3*	Mechanics w/Lab
PHYS 102	4*	Electricity and Magnetism w/Lab
MECH 200	3	Classical Thermodynamics
MECH 211	3	Engineering Mechanics
MECH 311	3	Mechanics of Solids & Structures
MECH 343	4	Modeling of Dynamic Systems
MECH 371	3	Fluid Mechanics I
MECH 401	3	Mechanical Design Applications
MECH 412	3	Vibrations
MECH 420	3	Fundamentals of Control Systems
MECH 481	3	Heat Transfer

\* In addition to class hours, these courses have a regularly scheduled lab that must fit into your schedule.