Engineering

Degree Type
Bachelor of Science - Major

The Engineering major requires completion of the following courses totaling 75-76 credit hours. The program is designed such that it meets ABET engineering accreditation guidelines and has at least 45 credits in engineering and computer science courses and 30 credits in mathematics and sciences courses.

Required Courses

Course Code	Title	Credits
MATH-133	Calculus I	4
MATH-134	Calculus II	4
MATH-233	Calculus III	4
MATH-331	Differential Equations	3
MATH-210	Introduction to Linear Algebra	3
CHEM-161	General Chemistry I	4
PHYS-221	General Physics I	4
PHYS-222	General Physics II	4
ENGR-101	Foundations of Engineering I	2
ENGR-102	Foundations of Engineering II	3
ENGR-303	Circuit Analysis	3
ENGR-304	Statics	3
ENGR-306	Signals and Systems	3
ENGR-488	Senior Project in Engineering I	1
ENGR-489	Senior Project in Engineering II	2

Choose One Course

Course Code	Title	Credits
CSCI-101	Programming I	4
CSCI-130	Programming with Python	3

Elective Courses

Choose at least 25 credits from the following courses:

Course Code	Title	Credits
CSCI-210	Discrete Mathematics	3
ENGR-305	Dynamics	3
ENGR-331	Thermodynamics	3
ENGR-332	Fluid Mechanics	3
ENGR-334	Mechanics of Materials	4
ENGR-336	Mechanical Design and Manufacturing With CAD	3
ENGR-339	Mechanical Vibrations	3
ENGR-401	Computational Applied Physics With Machine Learning	3
ENGR-461	Electronics	3
ENGR-464	Digital Electronics	3
ENGR-477	Introduction to Mechatronics Applications	3
ENGR-478	Control Systems	3
	Total Credits	**75-76**