

MECHANICAL ENGINEERING, BACHELOR OF SCIENCE (BS)

Recommended Four-Year Plan

Course	Title	Hours
First Year		
Fall		
ENGR 110	Introduction to Engineering	2
ENGL 102	Critical Writing	3
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
MATH 225	Calculus I	4
SUBJ 139	Foundations of Academic Discovery ¹	3
ESAP 101	FIRST Seminar *	0-1
Hours		16-17
Spring		
ENGR 120	Engineering Design Tools	2
ENGL 104	Critical Reading	3
MATH 230	Calculus II	4
PHYS 216	University Physics 1 with Lab	4
Creative & Aesthetic Inquiry (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Hours		16
Second Year		
Fall		
ENGR 130	Engineering Computing Tools	2
ENGR 210	Statics	3
MATH 231	Calculus III	4
MATH 301	Differential Equations I	3
PHYS 217	University Physics 2 with Lab	4
Hours		16
Spring		
ENGR 220	Engineering Materials	3
ENGR 230	Mechanics of Materials	3
ENGR 231	Mechanics of Materials Lab	1
ENGR 240	Dynamics	3
ENGR 310	Introduction to Electrical Engineering	3
MATH 232	Linear Algebra	3
Hours		16
Third Year		
Fall		
MECH 310	Machines and Mechanisms	4
MECH 320	Manufacturing Processes	3
MECH 330	Introduction to Mechatronics	4
ENGR 301	Fluid Mechanics	3
ENGR 320	Thermodynamics	3
Hours		17
Spring		
MECH 340	Heat Transfer	4
MECH 410	Machine Design	4
MECH 430	Mechatronics	3

MECH 4XX	Mechanical Engineering Elective	3
STAT 350	Applied Statistics	3
Hours		17
Fourth Year		
Fall		
MECH 420	Design and Manufacturing	3
MECH 460	Capstone Design I	3
MECH 4XX	Mechanical Engineering Elective	3
ENGR 340	Engineering Economics	3
Social Science (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Hours		15
Spring		
MECH 461	Capstone Design II	3
MECH 4XX	Mechanical Engineering Elective	3
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
Humanities Inquiry (https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/)		3
Elective		3
Hours		15
Total Hours**		128

¹ Course offered in multiple subjects; cannot take course in first major subject.

* Students are encouraged to take ESAP 101 as a Free Elective.

** This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.

Major: 6184

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