

# Mechanical Engineering Major

## B.S. in Mechanical Engineering - Curriculum Map 2016-2017 Catalog

Freshman		
Fall	Cr. Spring	Cr.
CH 103 General Chemistry I (General Education Lab Science)	4 CH 104 General Chemistry II (General Education Lab Science)	4
EG 109 Introduction to Engineering I	3 EN 102 Composition and Literature II	3
EN 101 Composition and Literature I	3 EG 110 Introduction to Engineering II	3
MA 121 Calculus I (General Education Math)	4 General Education Elective: History/Literature/Arts & Humanities/Social Science	3
	MA 122 Calculus II (General Education Math)	4
<b>Semester Total Credits</b>	<b>14 Semester Total Credits</b>	<b>17</b>
Sophomore		
Fall	Cr. Spring	Cr.
EE 204 Electrical Circuits I	3 EE 240 Electrical Concepts and Applications	3
EG 201 Engineering Mechanics (Statics, Dynamics)	3 EG 202 Engineering Mechanics (Statics,Dynamics)	3
MA 223 Calculus III	4 EG 206 Thermodynamics I	3
ME 211 Mechanical Engineering Tools I	2 MA 224 Differential Equations	4
PS 211 University Physics I	4 PS 212 University Physics II	4
<b>Semester Total Credits</b>	<b>16 Semester Total Credits</b>	<b>17</b>
Junior		
Fall	Cr. Spring	Cr.
EG 203 Materials Science	3 EG 303 Fluid Mechanics	3
EG 301 Mechanics of Materials	3 ME 356 Manufacturing Processes	4
ME 307 Thermodynamics II	3 ME 368 Design of Machine Elements	3
ME 311 Mechanical Engineering Tools II	2 ME 370 Mechanical Systems Design	3
ME 363 Kinematic and Kinetic Sythesis	3 ME 382 Mechanical Engineering Laboratory II	1
ME 381 Mechanical Engineering Laboratory I	2 General Education Elective: History/Literature/Arts & Humanities/Social Science	3
<b>Semester Total Credits</b>	<b>16 Semester Total Credits</b>	<b>17</b>
Senior		
Fall	Cr. Spring	Cr.
EE 321 Embedded Systems	4 ME 468 Mechanical Engineering Design II	3
EG 044 Conference	0 EG 043 Conference	0
General Education Elective: History/Literature/Arts & Humanities/Social Science	3 General Education Elective: History/Literature/Arts & Humanities/Social Science	3
ME 435 Mechanical Control Systems	3 Mechanical Engineering (ME) Elective <sup>3</sup>	3
ME 465 Heat Transfer	3 General Education Elective <sup>2</sup>	3
ME 467 Mechanical Engineering Design I	3 Math or Science or Engineering Elective <sup>1</sup>	3
ME 487 Mechanical Engineering Laboratory III	2	
<b>Semester Total Credits</b>	<b>18 Semester Total Credits</b>	<b>15</b>
<b>Total Credits For This Major: 130</b>		

An undergraduate student, who has completed all degree requirements except for attaining a 2.00 average, must take at least 50 percent of all subsequent course work in technical material (subject to approval by the Director of the David Crawford School of Engineering).

- 1 Courses approved for Math/Science/Engineering Electives: CE 348, CH 205, CH 225, CH 327, EE 303, EE 325, EE 357, MA 241, MA 306, MA 309 MA 310, MA 370 MA 407, PS 232, PS 331 PS 363, PS 423, PS 441, and any ME 400 level course not specifically listed as a degree requirement.  
Two different ME 490 courses covering different topics can be used to satisfy the ME elective and the Math/Science/Engineering elective.  
Other 200 level (or higher) 3+ credit courses offered by College of Science and Mathematics or the David Crawford School of Engineering may be approved subject to completion of the course prerequisites and a positive recommendation from the student's academic advisor and the Mechanical Engineering department chair.
- 2 A fifth General Education Elective is required, choose from History, Literature, Arts & Humanities or Social Science General Education courses.
- 3 Two different ME 490 courses covering different topics can be used to satisfy the ME elective and the Math/Science/Engineering elective.