

MECHANICAL ENGINEERING, CO-OP OPTION, BS

Bachelor of Science in Mechanical Engineering with Co-op (460005BS)

This option of the undergraduate program in Mechanical Engineering includes a cooperative education component.

The following information has official approval of the **Department of Mechanical Engineering** and **The College of Engineering and Polymer Science**, but is intended only as a supplemental guide. Official degree requirements are established at the time of transfer and admission to the degree-granting college. Students should refer to the Degree Progress Report (DPR) which is definitive for graduation requirements. *Completion of this degree within the identified time frame below is contingent upon many factors, including but not limited to: class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, prerequisites, among others.* The transfer process is completed through an appointment with your academic advisor.

1st Year

Fall Semester		Hours
3150:151	Principles of Chemistry I ¹	3
3150:152	Principles of Chemistry I Laboratory	1
3300:111	English Composition I ^{1,2,3}	3
3450:221	Analytic Geometry-Calculus I ¹	4
4600:165	Tools for Mechanical Engineering	3
Hours		14

Spring Semester

3150:153	Principles of Chemistry II ¹	3
3450:222	Analytic Geometry-Calculus II ¹	4
	Second Writing Course ^{1,3}	3
	General Education or Honors Distribution ⁴	3
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Hours		16

2nd Year

Fall Semester

3250:244	Introduction to Economic Analysis	3
3450:223	Analytic Geometry-Calculus III ¹	4
3650:291	Elementary Classical Physics I ¹	4
4300:201	Statics ¹	3
	General Education or Honors Distribution ⁴	3
Hours		17

Spring Semester

3450:335	Introduction to Ordinary Differential Equations	3
3650:292	Elementary Classical Physics II ¹	4
4300:202	Introduction to Mechanics of Solids	3
4600:203	Dynamics ¹	3
4600:260	Engineering Analysis I	2
Hours		15

Summer Semester

4100:300	Cooperative Education Work Period (Possible)	0
Hours		0

3rd Year

Fall Semester

3470:401	Probability and Statistics for Engineers	2
4600:300	Thermodynamics I	3
4600:310	Fluid Mechanics I	2
4600:321	Kinematics of Machines	2
4600:336	Analysis of Mechanical Components	3
4600:360	Engineering Analysis II	2
Hours		14

Spring Semester

4100:301	Cooperative Education Work Period	0
Hours		0

Summer Semester

4600:311	Fluid Mechanics II	3
4600:380	Introduction to Materials Science and Engineering	2
4600:340	Systems Dynamics & Response	3
Hours		8

4th Year

Fall Semester

4100:302	Cooperative Education Work Period	0
Hours		0

Spring Semester

4400:307	Basic Electrical Engineering	4
4600:301	Thermodynamics II	2
4600:315	Heat Transfer	3
4600:337	Design of Mechanical Components	3
4600:431	Fundamentals of Mechanical Vibrations	3
4600:483	Measurements Laboratory	2
Hours		17

Summer Semester

4100:403	Cooperative Education Work Period	0
Hours		0

5th Year

Fall Semester

4600:400	Thermal System Components	3
4600:402	Senior Seminar	1
4600:441	Control Systems Design	3
4600:460	Concepts of Design	3
4600:484	Mechanical Engineering Laboratory	2
4600:461	ME Senior Design Project I (Non Honors Track) ⁶	2
	Mechanical Engineering Elective ⁵	3
Hours		17

Spring Semester

4600:471	ME Senior Design Project II (Non Honors Track) ⁷	2
	Mechanical Engineering Elective ⁵	3

2 Mechanical Engineering, Co-op Option, BS

Mechanical Engineering Elective ⁵	3
General Education Course (Non Honors Track) ^{4,8}	3
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General Electives	4
Hours	18
Total Hours	136

- ¹ Honors sections may be available; check the schedule of classes.
- ² The Mechanical Engineering Department recommends that English Composition I be used to satisfy writing course requirement but other choices are available. See the General Education Program for details.
- ³ Check General Education Program or Honors Distribution to find courses that satisfy the second writing course requirement.
- ⁴ Credit hours shown for General Education or Honors Distribution are general guidelines only. These courses should be chosen in accordance with the appropriate General Education curriculum guide (for non-honors students) or Honors Distribution (for honors students). Honors students must also ensure that their course selections meet additional requirements not shown on this curriculum guide.
- ⁵ Mechanical Engineering Electives must include three credits Mechanical Engineering design elective, three credits Technical elective, and three credits Mechanical Engineering technical elective.
- ⁶ Students following the Honors Track will complete part of the Honors Distribution instead of 4600:461 ME Senior Design Project I.
- ⁷ Students following the Honors Track will complete the 4-credit Honors Project instead of 4600:471 ME Senior Design Project II.
- ⁸ Students following the Honors Track will complete part of the Honors Distribution instead of General Education. Course credits hours vary between General Education and Honors Distribution.