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, 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
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
General Education or Honors Distribution 4 3

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

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) 5 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
<table>
<thead>
<tr>
<th>Course Type</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Mechanical Engineering Elective</td>
<td>3</td>
</tr>
<tr>
<td>General Education Course (Non Honors Track)</td>
<td>3</td>
</tr>
<tr>
<td>General Education Course (Non Honors Track)</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td>4</td>
</tr>
<tr>
<td>Total Hours</td>
<td>136</td>
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</table>

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.