Mechanical Engineering

Degrees Offered

- M.S. In Mechanical Engineering (MSME)
- Master of Engineering in Mechanical Engineering (M.Eng. ME)
- Ph.D. in Engineering -- Industrial Engineering and Mechanical Engineering Options

Admission

Normally, applicants must present evidence of graduation with a bachelor's degree in engineering with ability to maintain a "B" average. Graduates in other fields may be accepted, but generally these students have to make up background material in certain subject areas. Refer to the Admission Policies and Application Requirements sections for detailed admission and application requirements. Successful applicants are accepted into both the Department and The Graduate School.

For a M.S. in Mechanical Engineering, research is required in Plan A only. Students following Plan B or the Master of Engineering (M.Eng. ME) are not required to write a thesis, and will fill a total of 30 credits with coursework.

Research Requirements

For a M.S. in Mechanical Engineering, research is required in Plan A only.

Plan A - Thesis Option (MSME)

21 formal, graded course credits: 12 required, 9 elective; 1 seminar; 10 thesis = 32 credits minimum

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGEN 505</td>
<td>Advanced Engineering Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EGEN 506</td>
<td>Numerical Sol to Engr Problems</td>
<td>3</td>
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<tr>
<td>EM 525</td>
<td>Continuum Mechanics</td>
<td>3</td>
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<td></td>
<td>3 Graduate course credits outside the student’s emphasis</td>
<td>3</td>
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<tr>
<td>EMEC 594</td>
<td>Seminar</td>
<td>1</td>
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<tr>
<td>EMEC 590</td>
<td>Master’s Thesis (Minimum of 10 total credits required; take 1-10 per term.)</td>
<td>10</td>
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Elective Courses (Maximum of 3 cr. EMEC 592) | 9

Plan B - Non-Thesis Option

The Plan B option substitutes a professional paper (3-4 credits) and additional coursework in lieu of the 10 thesis credits.

Master of Engineering in Mechanical Engineering (M.Eng. ME)

In addition to the required courses for the MSME, the Master of Engineering requires additional coursework in lieu of the 10 thesis credits. A minimum of 3 course credits in each of the following categories is required:

- Materials | 3
- Thermo/Fluids | 3
- Solid Mechanics | 3

For a total of 30 credits, additional coursework must come from the approved list of 400 and 500 level courses.

Link to M.Eng. home page for More Information (http://www.coe.montana.edu/m_eng.html#ME).