# MECHANICAL ENGINEERING  
**(CAPITAL)**

## Degree Requirements

**Master of Science (M.S.)**

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Policies. ([http://gradschool.psu.edu/graduate-education-policies/](http://gradschool.psu.edu/graduate-education-policies/))

A minimum of 31 credits at the 400, 500, 600, or 800 level is required, including 24 course credits with at least 15 credits at the 500 level, 1 credit of ME 590, and 6 credits of thesis research (ME 600 or ME 610).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMCH 524A</td>
<td>Mathematical Methods in Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ME 590</td>
<td>Colloquium</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Students take 9 credits in one of the following concentrations.</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>A list of courses that will count towards these concentrations is maintained by the program office.</td>
<td></td>
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<tr>
<td></td>
<td>Thermo-Fluids Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mechanical Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Materials Science</td>
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</tbody>
</table>

### Electives

Students take 12 credits of electives from a list of approved electives maintained by the program office. To incorporate breadth into the program, students are required to take at least one elective course in a Concentration Area other than the one they complete.

<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ME 600</td>
<td>Thesis Research</td>
<td>6</td>
</tr>
<tr>
<td>or ME 610</td>
<td>Thesis Research Off Campus</td>
<td></td>
</tr>
</tbody>
</table>

### Culminating Experience

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>ME 600</td>
<td>Thesis Research</td>
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</tr>
<tr>
<td>or ME 610</td>
<td>Thesis Research Off Campus</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits:** 31

A maximum of 3 400-level courses (9 credits) can be counted towards the degree requirements for the M.S. A minimum of 12 credits must be earned in 400- and 500-level courses in Mechanical Engineering.

Students who have deficiencies in the use of spoken or written English may be required to take courses in these areas in addition to the specified degree requirements. Credits earned to remediate deficiencies cannot be applied towards requirements for the M.S. degree.

Degree requirements must be completed within six years of admission to degree status.