Master of Science in Mechanical Engineering (MSME)

**Thesis Option**

The quantitative requirement for the degree is 30 credit hours. A minimum of 24 of these units must be course work, and a minimum of 6 units must be Master's Research (MEMS 599). The overall grade-point average must be 2.70 or better.

Courses may be chosen from 400- and 500-level offerings. All must be engineering, math or science courses with the following restrictions:

- A maximum of 3 units of Independent Study (MEMS 500) are allowed.
- A maximum of 6 units of 400-level courses are allowed, and these must be from courses not required for the BSME degree (if counted for the MSAE) or not required for the BSAE degree (if counted for the MSME degree) with the exception of MEMS 4301 Modeling, Simulation and Control, which can count toward the MS.
- Each course must be approved by the candidate’s thesis adviser.
- A maximum of 6 units of transfer credit is allowed for courses taken at other graduate institutions, and these must have been taken with grade B or better.
- A minimum of 15 units of the total 30 units must be in MEMS courses.

Elective courses may be chosen in any area of engineering or mathematics at the 400 level or higher. Of the 30 units, a minimum of 24 must be in 500-level courses. No more than 6 units may be in 400-level courses; but core requirements for the ME undergraduate degree are not allowed with the exception of MEMS 4301 which is allowed. A maximum of 3 credits of Independent Study, MEMS 400 or MEMS 500, may be used as an elective. A minimum of 15 units must be in MEMS.

Degree candidates will plan their course programs with the help of a departmental adviser. Use the links below to find courses in the areas of specialization.

**Course Option**

The quantitative requirement for the degree is 30 credit hours (normally 10 courses) completed with a grade-point average of 2.70 or better.

Course programs may be composed from one area of specialization below (MSME) or in aerospace engineering (MSAE). They must conform to the following distribution:

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Mathematics</td>
<td>6</td>
</tr>
<tr>
<td>Area of Specialization</td>
<td>15</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

Elective courses may be chosen in any area of engineering or mathematics at the 400 level or higher. Of the 30 units, a minimum of 24 must be in 500-level courses. No more than 6 units may be in 400-level courses; but core requirements for the ME undergraduate degree are not allowed with the exception of MEMS 4301 which is allowed. A maximum of 3 credits of Independent Study, MEMS 400 or MEMS 500, may be used as an elective. A minimum of 15 units must be in MEMS.

Degree candidates will plan their course programs with the help of a departmental adviser. Use the links below to find courses in the areas of specialization.