Master of Science in Aerospace Engineering (MSAE)

**Master of Science in Aerospace Engineering**

**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 which is allowed.
- 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.

The student must also write a satisfactory thesis and successfully defend it in an oral examination before a faculty committee consisting of at least three members, at least two of which are from the Department of Mechanical Engineering & Materials Science.

Full-time MS students in any area are required every semester to take MEMS 501 Graduate Seminar, which is a zero-unit, pass-fail course.

Degree candidates will plan their course programs with the help of a departmental adviser.

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<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Applied Mathematics</td>
<td>6</td>
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<tr>
<td>Aerospace</td>
<td>15</td>
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<tr>
<td>Electives</td>
<td>9</td>
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Elective courses may be used to accumulate additional credits in other areas of engineering or in mathematics. A maximum of 3 credits of Independent Study (MEMS 500) may be included as an elective course. A maximum of 6 units of 400-level courses (not required for a MEMS undergraduate degree) with the exception of MEMS 4301 may also be included. Non-engineering courses (such as T-courses or finance and entrepreneurship) cannot be counted as engineering electives. A minimum of 15 units must be in MEMS.

Full-time MS students are required to take MEMS 501 Graduate Seminar, which is a zero-unit, pass-fail course.

Degree candidates will plan their course programs with the help of a departmental adviser.

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**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 must be focused in the area of aerospace engineering. They must conform to the following distribution: