ENGINEERING MECHANICS, MS

The master of science and doctor of philosophy degrees in engineering mechanics are offered within a graduate program covering contemporary areas in both theoretical and applied mechanics. With the guidance of a major professor, a program can be designed to meet an individual student’s needs and interests.

The Department of Mechanical Engineering offers two distinct master of science (MS) degree programs in Engineering Mechanics:

- Engineering Mechanics MS, Research (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-research-ms/) – traditional master’s program culminating in a thesis for students with an undergraduate background in mechanics
- Engineering Mechanics MS, Aerospace Engineering Option (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-aerospace-engineering-ms/) - an accelerated coursework-only program, where students will learn advanced mechanics topics pertaining to the aerospace field

ADMISSIONS

Students apply to the Master of Science in Engineering Mechanics through one of the named options:

- Research (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-research-ms/)
- Aerospace Engineering (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-aerospace-engineering-ms/)

FUNDING

GRADUATE SCHOOL RESOURCES

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (https://grad.wisc.edu/funding/) is available from the Graduate School. Be sure to check with your program for individual policies and restrictions related to funding.

PROGRAM RESOURCES

Program specific funding information may be reviewed through one of the named options:

- Research (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-research-ms/)
- Aerospace Engineering (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-aerospace-engineering-ms/)

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

CURRICULAR REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement Detail</th>
<th>Minimum Credit Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Graduate Coursework Requirement</td>
<td>30 credits</td>
</tr>
<tr>
<td>Graduate GPA Requirement</td>
<td>16 credits</td>
</tr>
<tr>
<td>Other Grade Requirements</td>
<td>See Named Options for policy information.</td>
</tr>
<tr>
<td>Assessments and Examinations</td>
<td>Students must earn a C or above in all formal coursework.</td>
</tr>
<tr>
<td>Language Requirements</td>
<td>Students may not have more than two incompletes on their record at any one time.</td>
</tr>
</tbody>
</table>

REQUIRED COURSES

Select a Named Option (p. 1) for courses required.

NAMED OPTIONS

A named option is a formally documented sub-major within an academic major program. Named options appear on the transcript with degree conferral. Students pursuing the Master of Science in Engineering Mechanics must select one of the following named options:

View as list View as grid
• Engineering Mechanics: Aerospace Engineering, MS (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-aerospace-engineering-ms/)

• Engineering Mechanics: Research, MS (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-research-ms/)

Policies

Students should refer to one of the named options for policy information:

• Research (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-research-ms/)

• Aerospace Engineering (http://guide.wisc.edu/graduate/mechanical-engineering/engineering-mechanics-ms/engineering-mechanics-aerospace-engineering-ms/)

Professional Development

Graduate School Resources

Take advantage of the Graduate School’s professional development resources (https://grad.wisc.edu/pd/) to build skills, thrive academically, and launch your career.

Learning Outcomes

1. Demonstrate a strong understanding of mathematical, scientific, and engineering principles in the field.

2. Demonstrate an ability to formulate, analyze, and independently solve advanced engineering problems.

3. Apply the relevant scientific and technological advancements, techniques, and engineering tools to address these problems.

4. Recognize and apply principles of ethical and professional conduct.

People

Professors

Darryl Thelen (Chair)
Peter Adamczyk
Mark Anderson
Riccardo Bonazza

Associate Professors

Lianyi Chen
Melih Giriten
Katherine Fu
Tom N. Krupenkin
Ying Li
Franklin Miller
Sangkee Min
Wenxiao Pan
James Pikul
Pavana Prabhakar
Alejandro Roldan-Alzate
Michael Zinn

Assistant Professors

Yunus Alapan
Joseph Andrews
Jennifer Franck
Corinne Henak
Eric Kazyak
Allison Mahvi
Luca Mastropasqua
Jacob Nolte
Josh Roth
Shiva Rudraraju
Eric Tervo
Ramathasan Thevamaran
Dakotah Thompson
Michael Wagner
Wei Wang
Michael Wehner
Jinlong Wu
Xiaobin Xiong
Lei Zhou

See also Mechanical Engineering Faculty Directory (https://directory.engr.wisc.edu/me/faculty/).