

# ENGINEERING MECHANICS: RESEARCH, MS

## ADMISSIONS

### ADMISSIONS

Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. **Applicants must meet the minimum requirements (<https://grad.wisc.edu/apply/requirements/>) of the Graduate School as well as the program(s).** Once you have researched the graduate program(s) you are interested in, apply online (<https://grad.wisc.edu/apply/>).

| Requirements                       | Detail  |
|------------------------------------|---|
| Fall Deadline                      | December 15   |
| Spring Deadline                    | September 1   |
| Summer Deadline                    | December 15   |
| GRE (Graduate Record Examinations) | Not required.*  |
| English Proficiency Test           | Refer to the Graduate School: Minimum Requirements for Admission policy: <a href="https://policy.wisc.edu/library/UW-1241">https://policy.wisc.edu/library/UW-1241</a> ( <a href="https://policy.wisc.edu/library/UW-1241/">https://policy.wisc.edu/library/UW-1241/</a> ). |
| Other Test(s) (e.g., GMAT, MCAT)   | n/a   |
| Letters of Recommendation Required | 3   |

\* Submitted scores will not be used in admission decisions.

### APPLICATION REQUIREMENTS AND PROCESS

#### Degree

For admission to graduate study in Engineering Mechanics, an applicant must have a bachelor's degree in engineering, mathematics, or physical science, and an undergraduate record that indicates an ability to successfully pursue graduate study. International applicants must have a degree comparable to a regionally accredited US bachelor's degree.

It is highly recommended that students take courses that cover the same material as these UW-Madison courses before entering the program:

| Code                        | Title   | Credits  |
|-----------------------------|---|----------|
| <b>Advanced Mathematics</b> |   | <b>3</b> |
| MATH 319                    | Techniques in Ordinary Differential Equations |          |

|             |  |
|-------------|--|
| or MATH 320 | Linear Algebra and Differential Equations                    |
| or MATH 321 | Applied Mathematical Analysis 1: Vector and Complex Calculus |

#### Linear Algebra and Matrices **3**

|             |   |
|-------------|---|
| MATH 320    | Linear Algebra and Differential Equations |
| or MATH 340 | Elementary Matrix and Linear Algebra      |

#### Mechanics of Materials **3**

|           |                        |
|-----------|------------------------|
| E M A 303 | Mechanics of Materials |
|-----------|------------------------|

#### Dynamics **3**

|                |           |
|----------------|-----------|
| E M A 202      | Dynamics  |
| or PHYSICS 311 | Mechanics |

Descriptions of course content can be accessed through Guide (<https://guide.wisc.edu/courses/>). Applicants may be admitted without having taken these courses. However, in such cases the applicants must inform their advisors, who will help them plan courses of study that will provide adequate background for our department's graduate curriculum.

All applicants must satisfy requirements that are set forth by the Graduate School (<https://grad.wisc.edu/apply/requirements/>).

#### GPA

The Graduate School requires a minimum undergraduate grade point average of 3.0 on a 4.0 scale on the equivalent of the last 60 semester hours from the most recent bachelor's degree or a master's degree with a minimum cumulative GPA of 3.0 on a 4.0 scale.

#### MS Thesis Track Advisor Selection Process

Applicants who intend to complete a thesis are encouraged to identify potential faculty advisors and seek a confirmation. Review the department Research (<https://engineering.wisc.edu/departments/mechanical-engineering/research/>) and People (<https://directory.engr.wisc.edu/me/faculty/>) websites and contact those whose research interests align with yours. Only faculty members listed with the titles of Assistant Professor, Associate Professor, or Professor, can serve as graduate advisors. Do not contact Emeritus faculty, Lecturers, Research Scientists, or Faculty Associates. You are also encouraged to inquire about possible funding opportunities. If a faculty member agrees to be your advisor, ask the person to email an acknowledgment to [emgradadmission@engr.wisc.edu](mailto:emgradadmission@engr.wisc.edu).

#### APPLICATION MATERIALS

Each application must include the following:

- Graduate School Application (<https://grad.wisc.edu/apply/>)
- Academic transcripts
- Statement of purpose
- Resume/CV
- Three letters of recommendation
- English proficiency score (if required)
- Application Fee

#### Academic Transcripts

Within the online application, upload the undergraduate transcript(s) and, if applicable, the previous graduate transcript. Unofficial copies of transcripts are required for review, but official copies are required for admitted applicants. Do not send transcripts or any other application materials to the Graduate School or the Department of Mechanical Engineering unless requested. Review the requirements set by

the Graduate School (<https://grad.wisc.edu/apply/requirements/>) for additional information about degrees/transcripts.

### **Statement of Purpose**

In this document, applicants should explain why they want to pursue further education in Engineering Mechanics and discuss which UW faculty members they would be interested in doing research with during their graduate study (see the Graduate School for more advice on how to structure a personal statement (<https://grad.wisc.edu/apply/prepare/>)).

### **Resume**

Upload your resume in your application.

### **Three Letters of Recommendation**

These letters are required from people who can accurately judge the applicant's academic and/or research performance. It is highly recommended these letters be from faculty familiar with the applicant. Letters of recommendation are submitted electronically to graduate programs through the online application. See the Graduate School for FAQs (<https://grad.wisc.edu/apply/>) regarding letters of recommendation. Letters of recommendation are due by the deadline.

### **English Proficiency Score**

See English Proficiency Test policy above.

### **Application Fee**

Application submission must be accompanied by the one-time application fee. See the Graduate School for FAQs (<https://grad.wisc.edu/apply/>) for information on the application fee.

Fee grants are available, refer to the applying for a fee grant (<https://grad.wisc.edu/apply/fee-grant/>) for information.

## **REENTRY ADMISSIONS**

If previously enrolled as a graduate student in the Engineering Mechanics program, and applicants have not earned their degree, but have had a break in enrollment for a minimum of a fall or spring term, an application to resume studies is required. Review the Graduate School: Readmission (<https://policy.wisc.edu/library/UW-1230/>) for policy information. The previous faculty advisor (or another Engineering Mechanics faculty advisor) must be willing to supply advising support and should e-mail the Engineering Mechanics Graduate Student Services Coordinator regarding next steps in the process.

If previously enrolled in a UW-Madison graduate degree, completed that degree, have had a break in enrollment since earning the degree and would now like to apply for another UW-Madison program, applicants are required to submit a new student application through the UW-Madison Graduate School online application. For Engineering Mechanics graduate programs, you must follow the entire application process as described above.

## **CURRENTLY ENROLLED GRADUATE STUDENT ADMISSIONS**

Students currently enrolled as a graduate student at UW-Madison, whether in Engineering Mechanics or a non-Engineering Mechanics graduate program, wishing to apply to this degree program should contact the Engineering Mechanics Graduate Admissions Team (see contact information box) to inquire about the process and deadlines several months in advance of the anticipated enrollment term. Current students may apply to change or add programs for any term (fall, spring, or summer).

## **QUESTIONS**

If you have questions, contact [emgradadmission@engr.wisc.edu](mailto:emgradadmission@engr.wisc.edu).