# MECHANICAL ENGINEERING: ACCELERATED PROGRAM, M.S.

This is a named option within the Mechanical Engineering M.S. (http://guide.wisc.edu/graduate/mechanical-engineering/mechanical-engineering-ms/#text).

The Department of Mechanical Engineering offers a Master of Science (M.S.) degree in Mechanical Engineering with a named option in Accelerated Program. The Accelerated Program takes approximately three terms (one calendar year) to complete. The Accelerated Program only includes coursework. Each student will be assigned an academic advisor from the Department of Mechanical Engineering.

For a list of mechanical engineering courses 400-level and above, please visit our list of mechanical engineering courses (http://guide.wisc.edu/courses/m_e/).

## 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/).

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Deadline</td>
<td>December 15</td>
</tr>
<tr>
<td>Spring Deadline</td>
<td>October 1</td>
</tr>
<tr>
<td>Summer Deadline</td>
<td>December 15</td>
</tr>
<tr>
<td>GRE (Graduate Record Examinations)</td>
<td>Required*</td>
</tr>
<tr>
<td>English Proficiency Test</td>
<td>Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements (<a href="https://grad.wisc.edu/apply/requirements/#english-proficiency">https://grad.wisc.edu/apply/requirements/#english-proficiency</a>).</td>
</tr>
<tr>
<td>Other Test(s) (e.g., GMAT, MCAT)</td>
<td>n/a</td>
</tr>
<tr>
<td>Letters of Recommendation Required</td>
<td>3**</td>
</tr>
</tbody>
</table>

* 1) Due to COVID-19, GRE scores will not be required for applications to Mechanical Engineering graduate programs for admission to the Spring 2022, Summer 2022, and Fall 2022 terms.
2) Applicants earning a degree from the following UW-Madison B.S. programs are not required to submit GRE scores for the Master of Science in Mechanical Engineering, Accelerated Program application: (1) any program in the College of Engineering, (2) Computer Sciences, (3) Department of Biological Systems Engineering, or (4) the Applied Mathematics, Engineering and Physics program. All other applicants must submit GRE scores.

** Applicants earning a degree from the following UW-Madison B.S. programs are not required to obtain any letters of recommendation for the Master of Science in Mechanical Engineering, Accelerated Program application: (1) any program in the College of Engineering, (2) Computer Sciences, (3) Department of Biological Systems Engineering, or (4) the Applied Mathematics, Engineering and Physics program. To learn how to complete the “Recommendations” tab in the application, please review our webpage here: https://www.engr.wisc.edu/department/mechanical-engineering/academics/master-phd-degrees-mechanical-engineering/. All other applicants must submit a minimum of three letters of recommendation.

Students with a strong background in mechanical engineering or a related field with interest in furthering their education in mechanical engineering are encouraged to apply for admission to the department. Applicants accepted into the program generally have an undergraduate grade point average well above the graduate school minimum of 3.0 on a 4.0 scale. All applicants are required to take the Graduate Record Exam (GRE)*. Applications are evaluated on the basis of previous academic record, GRE scores, letters of recommendation, and a personal statement. For more information on admission requirements see the program's website (https://www.engr.wisc.edu/department/mechanical-engineering/academics/master-phd-degrees-mechanical-engineering/).

## 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

Students in this program are NOT eligible for teaching assistant, research assistant, or project assistant positions as this is an accelerated coursework ONLY degree.

### FEDERAL LOANS

Students who are U.S. citizens or permanent residents may be eligible to receive some level of funding through the federal direct loan program. These loans are available to qualified graduate students who are taking at least 4 credits during the fall and spring semesters, and 2 credits during summer. Private loans are also available. Learn more about financial aid at their website (https://financialaid.wisc.edu/).

### INTERNATIONAL STUDENT SERVICES FUNDING AND SCHOLARSHIPS

For information on International Student Funding and Scholarships visit the ISS website (https://iss.wisc.edu/students/new-students/funding-scholarships/).
REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

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

NAMED OPTIONS REQUIREMENTS

<table>
<thead>
<tr>
<th>Face to Face</th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students are able to complete a program with minimal disruptions to careers and other commitments.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirements Detail

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Credit Requirement</td>
<td>30 credits</td>
</tr>
<tr>
<td>Minimum Residence Credit Requirement</td>
<td>18 credits</td>
</tr>
<tr>
<td>Minimum Graduate Coursework Requirement</td>
<td>9 of these 15 graduate-level credits must be ME courses. Courses with the Graduate Level Coursework attribute are identified and searchable in the university’s Course Guide (<a href="https://registrar.wisc.edu/course-guide/">https://registrar.wisc.edu/course-guide/</a>).</td>
</tr>
<tr>
<td>Overall Graduate GPA Requirement</td>
<td>3.00 GPA required.</td>
</tr>
<tr>
<td>Other Grade Requirements</td>
<td>Students must earn a C or above in all formal coursework. Students may not have any more than two incompletes on their record at any one time.</td>
</tr>
</tbody>
</table>

REQUIRED COURSES

Two semesters of M E 903 Graduate Seminar are required. These should be taken the first two semesters the student is in residence.

A minimum of 24 formal course credits are required (minimum of 15 credits in Mechanical Engineering taken at UW-Madison). Acceptable courses are numbered 400 and above. Up to two 300 level courses in engineering, math, or the sciences may also be used towards the formal course credit requirement (if M E courses, they must be approved by the faculty advisor and the ME Graduate Committee).

No thesis/research credits are permitted. Up to 3 credits of independent study are permitted but not required.

Advisor Approval of Study Plan

The faculty advisor must always approve the courses a student takes in the MS program. Students should schedule an appointment with their adviser when selecting their courses. During the final semester, the faculty advisor will review the courses taken again and if approved, sign the warrant request form.

POLICIES

GRADUATE SCHOOL POLICIES

The Graduate School’s Academic Policies and Procedures (https://grad.wisc.edu/acadpolicy/) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

NAMED OPTION-SPECIFIC POLICIES

PRIOR COURSEWORK

Graduate Work from Other Institutions

With program approval, students are allowed to count graduate coursework from other institutions (up to 12 credits) toward the minimum graduate degree credit requirement and the minimum graduate coursework (50%) requirement. No credits from other institutions can be counted toward the minimum graduate residence credit requirement. Coursework earned five or more years prior to admission is not allowed to satisfy requirements.

UW–Madison Undergraduate

With advisor approval, up to 7 credits numbered 400 or above may be counted toward the minimum graduate degree credit requirement. These credits may be counted toward the minimum graduate coursework (50%) requirement if they are in courses numbered 700 or above. No credits may be counted toward the minimum graduate residence credit requirement. A course at the 300 level can only be transferred from a UW-Madison undergraduate program if it was taken as a technical elective (i.e., non-required course). Coursework earned five or more years prior to admission to a master's degree is not allowed to satisfy requirements.

UW–Madison University Special

With program approval, and payment of the difference in tuition, students are allowed to count up to 15 credits of coursework numbered 400 or above taken as a UW–Madison Special student toward the minimum graduate residence credit requirement and the minimum graduate degree
credit requirement. These credits may be counted toward the minimum
graduate coursework (50%) requirement if they are in courses numbered
700 or above. Coursework earned five or more years prior to admission is
not allowed to satisfy requirements.

PROBATION
The Graduate School regularly reviews the record of any student who
earned grades of BC, C, D, F, or Incomplete in a graduate course (300
or above), or grade of U in research credits. This review could result in
academic probation with a hold on future enrollment or in being
suspended from the Graduate School.

1. Good standing (progressing according to standards; any funding
guarantee remains in place).
2. Probation (not progressing according to standards but permitted
to enroll; loss of funding guarantee; specific plan with dates and
deadlines in place in regard to removal of probationary status).
3. Unsatisfactory progress (not progressing according to standards; not
permitted to enroll, dismissal, leave of absence or change of advisor
or program).

A semester GPA below 3.0 will result in the student being placed on
academic probation. If a semester GPA of 3.0 is not attained during the
subsequent semester of full time enrollment (or 12 credits of enrollment
if enrolled part-time), this will be deemed unsatisfactory progress and the
student may be dismissed from the program or allowed to continue for
one additional semester based on advisor appeal to the Graduate School.

ADVISOR / COMMITTEE
All students will be assigned a mechanical engineering faculty advisor
who assists them in planning a course sequence that meets degrees
requirements and who will discuss career objectives with the students.

CREDITS PER TERM ALLOWED
15 credits

TIME CONSTRAINTS
Master’s degree students who have been absent for five or more
consecutive years lose all credits that they have earned before their
absence. Individual programs may count the coursework students
completed prior to their absence for meeting program requirements; that
coursework may not count toward Graduate School credit requirements.

GRIEVANCES AND APPEALS
These resources may be helpful in addressing your concerns:

• Employee Disability Resource Office (https://
  employee(disabilities.wisc.edu/) (for qualified employees or
  applicants with disabilities to have equal employment opportunities)
• Graduate School (https://grad.wisc.edu/) (for informal advice at any
  level of review and for official appeals of program/departmental or
  school/college grievance decisions)
• Office of Compliance (https://compliance.wisc.edu/) (for class
  harassment and discrimination, including sexual harassment and
  sexual violence)
• Ombuds Office for Faculty and Staff (http://www.ombuds.wisc.edu/)
  (for employed graduate students and post-docs, as well as faculty
  and staff)
• Title IX (https://compliance.wisc.edu/titleix/) (for concerns about
discrimination)

Mechanical Engineering Grievance Procedures
If a student feels unfairly treated or aggrieved by faculty, staff, or another
student, the University offers several avenues to resolve the grievance.
Students’ concerns about unfair treatment are best handled directly
with the person responsible for the objectionable action. If the student
is uncomfortable making direct contact with the individual(s) involved,
they should contact the advisor or person in charge of the unit where
the action occurred (program or department chair, section chair, lab
manager, etc.). Many departments and schools/colleges have established
specific procedures for handling such situations; check their web pages
and published handbooks for information. If such procedures exist at
the local level, these should be investigated first. For more information
see the Graduate School Academic Policies & Procedures: https://
grad.wisc.edu/acadpolicy/?policy=grievancesandappeals. The Assistant
Dean for Graduate Affairs (engr-dean-graduateaffairs@engr.wisc.edu)
provides overall leadership for graduate education in the College of
Engineering (CoE), and is a point of contact for graduate students who
have concerns about education, mentoring, research, or other difficulties.

1. The student is encouraged to speak first with the person toward
  whom the grievance is directed to see if a situation can be resolved at
  this level.

2. Should a satisfactory resolution not be achieved, the student should
  contact the ME Graduate Committee Chair (https://docs.google.com/
document/d/18F268f2Cq_CKw0aTcHJKju9RQA6t9xho/edit/
#heading=h1fob9te) or Department Chair (https://docs.google.com/
document/d/18F268f2Cq_CKw0aTcHJKju9RQA6t9xho/edit/
#heading=h1fob9te) to discuss the grievance. The Graduate
Committee Chair or Department Chair will facilitate problem
resolution through informal channels and facilitate any complaints
or issues of students. The first attempt is to help students informally
address the grievance prior to any formal complaint. Students
are also encouraged to talk with their faculty advisors regarding
concerns or difficulties if necessary. University resources for sexual
harassment, discrimination, disability accommodations, and other
related concerns can be found on the UW Office of Compliance
website (https://compliance.wisc.edu/). Other campus resources can
be found above.

3. If the issue is not resolved to the student’s satisfaction the student
can submit the grievance to the Graduate Committee Chair in writing,
within 60 calendar days of the alleged unfair treatment.
4. On receipt of a written complaint, a faculty committee will be convened by the Graduate Committee Chair to manage the grievance. The faculty committee will obtain a written response from the person toward whom the complaint is directed. This response will be shared with the person filing the grievance.

5. The faculty committee will determine a decision regarding the grievance. The Graduate Committee Chair will report on the action taken by the committee in writing to both the student and the party toward whom the complaint was directed within 15 working days from the date the complaint was received.

6. At this point, if either party (the student or the person toward whom the grievance is directed) is unsatisfied with the decision of the faculty committee, the party may file a written appeal. Either party has 10 working days to file a written appeal to the School/College.

7. Documentation of the grievance will be stored for at least 7 years. Significant grievances that set a precedent will be stored indefinitely.

The Graduate School has procedures for students wishing to appeal a grievance decision made at the school/college level. These policies are described in the Graduate School’s Academic Policies & Procedures: https://grad.wisc.edu/acadpolicy/?policy=grievancesandappeals.

OTHER

Students enrolled in this program are not permitted to accept teaching assistantships, project assistantships, research assistantships or other appointments that would result in a tuition waiver. Students in this program cannot enroll in other graduate programs nor take courses outside the prescribed curriculum.

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.

PEOPLE

PROFESSORS
Darryl Thelen (Chair)
Jaal Ghandhi
Dan Negrut
Gregory F. Nellis
Tim Osswald
Frank Pfefferkorn
John Pfothenhauer
Xiaoping Qian
Douglas Reindl
David Rothamer
Scott T. Sanders
Vadim Shapiro
Krishnan Suresh
Lih-sheng Turng

ASSOCIATE PROFESSORS
Melih Eriten
Christian Franck

ASSISTANT PROFESSORS
Peter Adamczyk
Mark Anderson
Joseph Andrews
Lianyi Chen
Corinne Henak
Sangkee Min
Wenxiao Pan
Alejandro Roldan-Alzate
Josh Roth
Shiva Rudraraju
Stephan Rudykh
Dakota Thompson
Mike Wagner
Xiangru Xu

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