MECHANICAL ENGINEERING: AUTOMOTIVE ENGINEERING, MS

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

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

NAMED OPTION REQUIREMENTS

MODE OF INSTRUCTION

<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 typically take enough credits aimed at completing the program in a year or two.

**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

Requirement Detail

Minimum Credit Requirement

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Minimum Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence</td>
<td>18 credits</td>
</tr>
</tbody>
</table>
| Graduate Coursework | 15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244/.

Overall Graduate GPA Requirement

3.00 GPA required.

Graduate GPA Requirement

Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203/.

Other Grade Requirements

Students must earn a C or above in all formal coursework.

Assessments and Examinations

None.

Language Requirements

No language requirements.

REQUIRED COURSES

A minimum of 24 formal course credits* are required (minimum of 15 credits in Mechanical Engineering taken at UW–Madison).

*Formal credits are any course offering that is not a seminar course, thesis research course, or independent study course.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>M E 903</td>
<td>Graduate Seminar (Two semesters are required and must be taken the first two semesters.)</td>
<td>0</td>
</tr>
</tbody>
</table>

A minimum of 12 credits (4 courses) must be taken from the courses listed:

- M E 461 Thermal Systems Modeling
- M E 466 Air Pollution Effects, Measurements and Control
- M E 469 Intermediate Combustion Engines
- M E 561 Intermediate Thermodynamics
- M E 563 Intermediate Fluid Dynamics
- M E 564 Heat Transfer
- M E 569 Applied Combustion
- M E 572 Intermediate Gas Dynamics
- M E 573 Computational Fluid Dynamics
- M E 761 Topics in Thermodynamics
- M E 764 Advanced Heat Transfer I-Conduction
- M E 769 Combustion Processes
- M E 770 Advanced Experimental Instrumentation
- M E/CIV ENGR/E M A 775 Turbulent Heat and Momentum Transfer

During the summer term, students are required to enroll in the following 6 credits:

- M E 669 Engine Experiments 3
- M E 673 Internal Combustion Engine Simulations 3

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.

**Other Policy**
Students in this program may not take courses outside the prescribed curriculum without faculty advisor and program director approval. Students in this program cannot enroll concurrently in other undergraduate or graduate degree programs.