ENGINEERING: ENGINE SYSTEMS, M.ENG.

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.

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>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</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**
  - Minimum Credit Requirement: 30 credits
  - Minimum Residence Credit Requirement: 16 credits
  - Minimum Graduate Coursework Requirement: All courses in this fixed curriculum program are graduate-level courses, identified with the Graduate Level Coursework attribute in the university’s Course Guide (https://registrar.wisc.edu/course-guide/), and are offered exclusively to Graduate students in the M.Eng. degree program.
  - Overall Graduate GPA Requirement: 3.00 GPA required.

Other Grade Requirements: Must retake any courses for which a grade below C is recorded.

Assessments and Examinations

- **Language Requirements**: No language requirements.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>E P D 622</td>
<td>Engine Design I</td>
<td>2</td>
</tr>
<tr>
<td>E P D 623</td>
<td>Engine Design II</td>
<td>4</td>
</tr>
<tr>
<td>E P D 624</td>
<td>Engine Performance and Combustion</td>
<td>4</td>
</tr>
<tr>
<td>E P D 625</td>
<td>Engine Gas Dynamics</td>
<td>2</td>
</tr>
<tr>
<td>E P D 627</td>
<td>Perspectives on Engine Modeling</td>
<td>2</td>
</tr>
<tr>
<td>E P D 628</td>
<td>Analysis of Trends in Engines</td>
<td>2</td>
</tr>
<tr>
<td>E P D 629</td>
<td>Powertrain Systems and Controls</td>
<td>3</td>
</tr>
<tr>
<td>E P D 633</td>
<td>Engine Boosting</td>
<td>2</td>
</tr>
<tr>
<td>E P D 642</td>
<td>Thermodynamics of Engine Systems</td>
<td>3</td>
</tr>
<tr>
<td>E P D 720</td>
<td>Engine Noise and Vibration</td>
<td>2</td>
</tr>
</tbody>
</table>

Electives: 4

- E P D 612 | Technical Project Management |
- E P D 630 | Engine Design III |
- E P D 690 | Special Topics in Engineering Professional Development |
- E P D 701 | Writing for Professionals |
- E P D 702 | Professional Presentations |
- E P D 704 | Organizational Communication and Problem Solving |
- E P D 706 | Change Management |
- E P D 708 | Creating Breakthrough Innovations |
- E P D 712 | Ethics for Professionals |
- E P D 713 | Key Legal Concepts for Professionals |
- E P D/ACCT I S/GEN BUS 781 | Financial and Business Acumen |
- E P D/GEN BUS/MARKETING 782 | Marketing for Non-Marketing Professionals |
- E P D/GEN BUS/MHR 783 | Leading Teams |
- E P D/GEN BUS/OTM 784 | Project Management Essentials |
- E P D/GEN BUS/MHR 785 | Effective Negotiation Strategies |

Other courses with program director approval.

Total Credits: 30

Summer Residency:

A brief (2-3 day) summer residency at University of Wisconsin–Madison is required annually.