ME in Engineering

The College of Engineering offers the Master of Engineering degree for graduate students interested in a terminal master's degree, who have a demonstrated need for a professional, non-research degree in engineering, and have an academic interest in a specific focus area within engineering.

The Master of Engineering degree is offered so that students can select courses in areas of their choice or with one of several focus areas listed in the Degree Requirements.

Note: A focus area is not listed on the MU transcript. Hence the transcript and the diploma for any student completing an ME degree will only indicate Master of Engineering, with no designation of any specific department.

Degree Requirements

An ME student must complete a minimum of 30 credit hours of graduate course work if no focus area is chosen. The Master of Engineering degree is also offered with several focus areas: Biological Engineering, Electrical Engineering, Chemical Engineering, Computer Engineering, Industrial and Manufacturing Systems Engineering, or Mechanical and Aerospace Engineering. If a focus area is chosen, an ME student must complete 36 credit hours of graduate course work.

ME in Engineering without a Focus Area

A total of 30 hours of coursework is required.

A minimum of 15 hours of courses must be taken at the 8000 level. At least 21 course credit hours must be taken from courses in the College of Engineering.

The remaining courses should be taken at the 7000 level or higher.

ME in Engineering with a Focus Area

Specific information about focus areas are listed below. A total of 36 hours of coursework is required. At least 15 hours must be in 8000+ level courses and a minimum of 21 hours must be from the College of Engineering. The student must maintain at least a 3.0 cumulative GPA and complete the program in eight years. A project may be required by the advisor. For additional degree requirements based on the focus area, students should consult with the specific College of Engineering Department.

ME with a focus in Biological Engineering

Consult with the department of Biological, Biomedical, and Chemical Engineering for details.

ME with a focus in Chemical Engineering

For the ME degree with focus in chemical engineering, a minimum of 36 credit hours of coursework is required as follows:

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH_ENG 8336</td>
<td>Advanced Heat and Momentum Transfer</td>
</tr>
<tr>
<td>CH_ENG 8337</td>
<td>Advanced Mass Transfer</td>
</tr>
<tr>
<td>CH_ENG 8451</td>
<td>Advanced Chemical Engineering</td>
</tr>
<tr>
<td>CH_ENG 8463</td>
<td>Chemical Reaction Engineering Science</td>
</tr>
<tr>
<td>Math Course Requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses

At least one 8000-level course in any natural science or engineering discipline.

Three CH_ENG 7000- or 8000-level courses.

Three additional 7000-level or higher courses in any science or engineering discipline.

ME with a focus in either Electrical or Computer Engineering

The entrance requirements for the ME degree/Electrical and Computer Engineering Focus are the same as for the MS in Electrical Engineering and MS in Computer Engineering. Note: When registering for the GRE and TOEFL exams, be sure to designate the University of Missouri-Columbia and your program of interest as locations to receive the scores. MU's Institutional Code for the GRE and TOEFL is: 6875. Consult with the department of Electrical Engineering and Computer Science.

ME with a focus in Industrial and Manufacturing Systems Engineering

Of the 36 required credit hours, 21 must be at the 8000 level and the rest at 7000 or above level. Consult with the department of Industrial and Manufacturing Systems Engineering for additional details.

ME with a focus in Mechanical and Aerospace Engineering

Of the 36 hours required for the ME degree with focus in mechanical and aerospace engineering:

- A minimum of 18 hours must be 8000 level coursework
- A minimum of 18 hours of coursework must be in the MAE department
- A minimum of 18 hours must be taken at the University of Missouri-Columbia
- A maximum of 18 hours may be transferred from another school with the same discipline
- A maximum of 6 hours may be transferred from a school external to the UM system
- A maximum of 6 hours of problems in MAE (MAE 8085) may be counted

ME Entrance requirements

- GPA of 3.0 on 4.0 scale in the last 60 hours of the BS program
- Minimum GRE scores may vary according to area.

<table>
<thead>
<tr>
<th>When did you take the GRE?</th>
<th>Verbal</th>
<th>Quantitative</th>
<th>Analytical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to August 1, 2011</td>
<td>will be considered</td>
<td>80th percentile</td>
<td>will be considered</td>
</tr>
<tr>
<td>On or After August 1, 2011</td>
<td>will be considered</td>
<td>80th percentile</td>
<td>will be considered</td>
</tr>
</tbody>
</table>

- Minimum TOEFL scores (international applicants only):

  - Internet-based test (iBT) | Paper-based test (PBT) |
  | 80 | 550 |

- Minimum Academic IELTS scores 6.5 with no section below 6.0
<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
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</tr>
<tr>
<td>Reading</td>
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</tr>
<tr>
<td>Writing</td>
<td>6.0</td>
</tr>
<tr>
<td>Speaking</td>
<td>6.0</td>
</tr>
</tbody>
</table>

- 3 letters of recommendation
- statement of purpose
- transcripts

When registering for the GRE and TOEFL exams, be sure to designate the University of Missouri - Columbia and your program of interest as locations to receive the scores. MU's institutional code for the GRE and TOEFL is 6875.

**How to Apply**

Applicants must concurrently apply to the MU Graduate School and the engineering department offering the focus area interest.