## CHEMICAL ENGINEERING, M.S.

### 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.

#### MAJOR 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>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**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Detail</th>
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</thead>
<tbody>
<tr>
<td>Minimum Credit Requirement</td>
<td>30 credits</td>
</tr>
<tr>
<td>Minimum Residence Credit Requirement</td>
<td>16 credits</td>
</tr>
<tr>
<td>Minimum Graduate Coursework Requirement</td>
<td>Half of degree coursework (15 credits out of 30 total credits) must be completed graduate-level coursework; 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/">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>
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**Other Grade Requirements**

- Professional group of courses: Grades of B or better are required.
- Elective group of courses: Grades of B or better are required.

**Assessments and Examinations**

- An M.S. candidate not planning to seek re-admission to the Ph.D. program must successfully complete an oral examination before a departmental examining committee of the advisor(s) plus two other CBE faculty members. An M.S. candidate who is seeking re-admission to the Ph.D. program must successfully complete an oral examination before a departmental examining committee of the advisor(s) plus three other CBE faculty members. The candidate may defend an M.S. thesis or an independent study project report in a closed defense. The independent study project will comprise a minimum of three credits of supervised CBE 790 and may involve a lab project, theoretical work, or a critical review of an advanced engineering topic. The defense of an independent study project is conducted in a closed session.

**Language Requirements**

- No language requirements.

### REQUIRED COURSES

To qualify for the M.S. degree, student must complete a minimum of 30 graduate-level credits (300 and above), divided into two groups:

1. **Professional group:** minimum of 12 credits of chemical engineering courses. At least 6 credits must be numbered 600–899 (excluding research).

2. **Elective group:** minimum of 12 credits of graduate courses. At least 6 of these credits shall be in departments other than CBE and shall be chosen in consultation with the advisor(s) for their relevance to chemical and biological engineering.

Up to 6 credits will be allowed for chemical and biological engineering courses numbered between 300 and 499 in groups I and II combined, provided equivalent courses were not previously taken by the student.

The independent study project will comprise no fewer than 3 credits of supervised CBE 790 Master’s Research or Thesis and may involve a lab project, theoretical work, or a critical review of an advanced engineering topic.

An M.S. candidate must successfully complete an oral examination before a departmental examining committee.

When a candidate presents a thesis, no fewer than 5 nor more than 14 credits of research (CBE 790) may be counted toward the 30-credit-total requirement. When a thesis is not presented, a maximum of 6 credits of research may be counted toward the total.

Students who enter the program without a Bachelor of Science in Chemical Engineering may be required to take remedial coursework.