

CHEMICAL ENGINEERING, MS

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (<https://guide.wisc.edu/graduate/#requirements>) and policies (<https://guide.wisc.edu/graduate/#policies>), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

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	30 credits
Minimum Residence Credit Requirement	16 credits
Minimum Graduate Coursework Requirement	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 (https://policy.wisc.edu/library/UW-1244/).
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).

Other Grade Requirements Grades of B or better are required for all courses in the professional and elective groups.

Assessments and Examinations An MS candidate not planning to petition to return to the PhD program must successfully complete an oral examination before a departmental examining committee of the advisor(s) plus two other CBE faculty members, for a total of 3–4 committee members. The candidate may defend an MS thesis or an independent study project report that 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.

An MS candidate who is planning to petition to return to the PhD program must successfully complete an oral examination before a departmental examining committee of the advisor(s) plus three other CBE faculty members, for a total of 4–5 committee members. The candidate must defend an MS thesis in order to petition to return to the PhD.

Language Requirements No language requirements.

REQUIRED COURSES

To qualify for the MS degree, students must complete a minimum of 30 graduate-level credits (numbered 300 and above).

- An MS student must complete 24 credits, divided into two groups:
 - Professional group: minimum of 12 credits of chemical engineering courses. At least 6 credits must be numbered 600–899 (excluding research).
 - Elective group: minimum of 12 credits of graduate courses. At least 6 of these credits shall be in departments other than chemical and biological engineering and shall be chosen in consultation with the advisor(s) for their relevance to chemical and biological engineering.
 - In groups I and II combined, up to 6 credits will be allowed for chemical and biological engineering courses numbered between 300 and 499, provided equivalent courses were not previously taken by the student.
- An MS candidate must successfully complete an oral examination before a departmental examining committee. Therefore, students must also choose one of the options below:
 - When a candidate presents an independent study project report, no fewer than 3 and no more than 12 credits of supervised CBE 790 Master's Research or Thesis may be counted toward the 30-credit-total requirement. It may involve a lab project, theoretical work, or a critical review of an advanced engineering topic.
 - When a candidate presents a thesis, no fewer than 5 and no more than 14 credits of supervised CBE 790 Master's Research or Thesis may be counted toward the 30-credit-total requirement.

Any additional credits needed to meet the 30-credit minimum can come from other coursework.

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