CHEMICAL ENGINEERING - MASTER OF SCIENCE (MS)

The Master of Science degree in Chemical Engineering requires 30 hours of approved credit hours and successful completion of a comprehensive final exam or thesis defense.

For more information, visit the department's Prospective Graduate Student (https://www.colorado.edu/chbe/graduate-program/prospective-graduate-students/) webpage.

Note: The department does not accept students interested in a terminal master's degree except under special circumstances. Students generally obtain a master's degree in the course of fulfilling the requirements for the Chemical Engineering - Doctor of Philosophy (PhD) (https://catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/chemical-engineering/chemical-engineering-doctor-philosophy-phd/) or the Biological Engineering - Doctor of Philosophy (PhD) (https://catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/chemical-engineering/biological-engineering-doctor-philosophy-phd/).

Bachelor's–Accelerated Master's Degree Program

Students may earn this degree as part of the bachelor's–accelerated master's (BAM) degree program, which allows currently enrolled CU Boulder undergraduate students the opportunity to earn a bachelor's and master's degree in a shorter period of time.

For more information, see the Accelerated Master's tab for the associated bachelor's degree(s): Chemical Engineering - Bachelor of Science (BS) (https://catalog.colorado.edu/undergraduate/colleges-schools/engineering-applied-science/programs-study/chemical-biological-engineering/chemical-engineering-bachelor-science-bs/#acceleratedmasterstext).

Requirements

Admission Requirements

General criteria for regular admission to the master's program include a bachelor's degree with a 3.25/4.00 or better overall GPA from a college or university of recognized standing, equivalent to the degree given at this university (or college work equivalent to that required for such a degree, at least 96 credit hours of which must be acceptable toward a degree at this university)# promise of ability to pursue advanced study and research, as judged by previous scholastic record or otherwise# and adequate preparation to begin graduate study in the chosen field.

Degree Requirements

The following course requirements are subject to change; for the most current information, visit the department's Prospective Graduate Student (https://www.colorado.edu/chbe/graduate-program/prospective-graduate-students/) webpage.

A candidate for the Master of Science degree in chemical engineering must complete at least 30 credits, including at least 24 credits of coursework and 4–6 credits of MS thesis credit (CHEN 6950).

Only courses 5000-level and above may be applied towards the MS degree. Moreover, only courses at the 5000-level and above in any department count toward the PhD degree. An advisor must approve all courses.

Only those courses for which the student receives a grade of B- or better will count toward the MS degree. The overall grade point average must be 3.00 or better.

A successful oral defense of the MS thesis is required.

Required Courses and Credits

Code	Title	Credit Hours
Required Courses		
CHEN 5210	Transport Phenomena	3
CHEN 5370	Intermediate Chemical Engineering Thermodynamics	3
CHEN 5390	Chemical Reactor Engineering	3
Total Credit Hours		**9**

Additionally, 15 of the total required credits must be chemical and biological engineering courses, and pass/fail courses do not count toward the degree.

A degree plan must be prepared at the beginning of the academic program in consultation with an advisory committee. The student is urged to maintain close contact with this advisory committee during the entire course of study.

Residency and Time Limit

It is expected that a qualified student can complete the MS degree in two years or less. All work, including the thesis defense and filing of the thesis with the Graduate School, must be completed in the two-year requirement.

Learning Outcomes

By the completion of the program, students will be able to: