

CHEMICAL ENGINEERING, MS

Degree: Master of Science (MS)
Field of Study: Chemical Engineering

Program Overview

The Master of Science in Chemical Engineering program will allow students to push the frontiers of science and help develop the technologies that will solve engineering challenges related to energy, materials, the environment, and human health. It is offered in a variety of formats to suit different career goals. There are three curricular tracks:

- Thesis-focused, where students can work on cutting-edge research;
- Project-focused, where students can work on a real-world effort; or
- Accelerated course-focused, where students can graduate in 11 months.

Graduate Policies

For graduate policies and procedures, please review the School of Graduate Studies section of the General Bulletin.

Program Requirements

Each MS candidate must complete a minimum of 30 credit hours of graduate-level credits. These credits can be distributed in one of three ways: Thesis-Focused, Project-Focused, or Course-Focused.

Thesis-Focused

Code	Title	Credit Hours
ECHE 401	Chemical Engineering Communications	1
ECHE 402	Chemical Engineering Communications II	2
Six graduate-level courses ^a		18
MS thesis research		9
Total Credit Hours		30

Project-Focused

Code	Title	Credit Hours
ECHE 401	Chemical Engineering Communications	1
ECHE 402	Chemical Engineering Communications II	2
Eight graduate-level courses ^a		24
Project and/or Special Problems ^b		3
Total Credit Hours		30

^a Some of the graduate-level courses must be taken from a list of recommended courses that satisfy the Chemical Engineering core 'units' requirement. The list is maintained by the department. For the MS program, students should demonstrate that they have acquired a minimum of three core 'units' in each of the categories of Chemical Engineering Transport, Thermodynamics and Reactions. Elective courses should be technical graduate-level courses selected after consultation with the advisor.

^b In special cases, a student may be permitted to complete a 6 credit

project. In this case, only seven graduate courses will be required.

Course-Focused

The Course-Focused M.S. degree program requirements consist of the completion of 30 credit hours of approved coursework at the 400-level or higher, satisfactory completion of the culminating course-focused experience, i.e. passing the course ENGR 600 with requirements defined by the student's curricular program, and additional requirements as specified by the program. Students should consult with their academic advisor and/or department to determine the detailed requirements within this framework.

Full-time MS students are expected to serve as a teaching assistant as part of their education. Also, at various points during their thesis research, students will be required to present seminars and reports on their progress.