# CHEMICAL ENGINEERING (M.ENG.)

https://ceps.unh.edu/chemical-engineering-bioengineering/program/ meng/chemical-engineering

## Description

Earning a master's degree can be the key to unlocking your career potential or entering the world of entrepreneurship. In fact, earning an advanced degree can translate into better career growth prospects and higher annual salaries of up to \$15,000 compared to those with an undergraduate degree alone. The Chemical Engineering (ChE) graduate program at UNH will provide you with advanced training and experience in one of the many areas, including bioengineering, electrochemical methods, advanced materials, reaction and energy engineering, as well as environmental engineering. The master's degree program concludes with an engineering project which may be completed with an industrial sponsor.

#### **Admission Requirements**

An applicant to the Master of Engineering program will have completed a baccalaureate degree in chemical engineering. Students with good undergraduate records in a science or engineering field may be admitted provided they learn specific math and engineering skills that are aimed at successful completion of the Master of Engineering program requirements. Applicants must submit current scores (within five years) from the general test of the Graduate Record Examination. International students are required to submit TOEFL test scores. IELTS scores are accepted on a case--by-case basis, and students must have a minimum score of 6.5.

### Requirements

# Master of Engineering Degree Requirements

A master of engineering degree is a professional degree for chemical engineers. A minimum of **30 credits**, which must include:

Code	Title	Credits
Required Courses		
CHBE 900	Seminar <sup>1</sup>	0 or 1
CHBE 923	Advanced Chemical Engineering Thermodynamics	3
CHBE 932	Advanced Chemical Engineering Kinetics	3
CHBE 940	Advanced Transport Phenomena	3
In addition to the above 11#credit required courses, the Master of Engineering student is expected to take the following courses:		9
Electives		
Select 19 credits of course v	work <sup>2,3</sup>	19
CHBE 898	Chemical Engineering Project	3-6

The Master of Engineering elective course credits may include CHBE 898, Chemical Engineering Project, of up to 6 credits.

Students should register for CHBE 900 for 1 credit each in their first two semesters and CHBE 900 for 0 credits each additional semester until their degree is granted.

- <sup>2</sup> Can be made up of electives offered by the department or college. In addition, courses taken within the UNH School of Law, College of Life Sciences and Agriculture, and the Paul College of Business and Economics can apply with approval. Electives must be assessed with a letter grade and cannot be pass/fail. Students take electives after consulting with their advisers. Students who do not register for CHBE 898 Chemical Engineering Project must take at least one elective course, which requires the student to take additional work and the completion of a scholarly report, paper, or essay to fulfill the capstone experience requirement for a Master's degree. This scholarly report, paper, or essay must be submitted to the course instructor, Chair of the department, and graduate coordinator for their approval.
- <sup>3</sup> For Accelerated MEng students who have been enrolled in the UNH Chemical Engineering and Bioengineering Department undergraduate programs, no more than three 800- or 900-level courses taken during their senior year can be counted towards their MEng degree requirement.

#### Accelerated Master's

This graduate program is approved to be taken on an accelerated basis in articulation with certain undergraduate degree programs.

<u>General Accelerated Master's policy</u>, note that some programs have additional requirements (e.g. higher grade expectations) compared to the policy.

Please see the <u>Graduate School website</u> and contact the department directly for more information.

#### **Student Learning Outcomes**

# Program Learning Outcomes Upon completion of the master's of engineering degree, the student will be able to:

- use appropriate chemical engineering techniques, tools and methods to solve broadly defined engineering problems.
- · demonstrate oral and written communication skills.