

# CHEMICAL ENGINEERING (PH.D.)

<https://ceps.unh.edu/chemical-engineering/chemical-engineering-phd>

student is advanced to candidacy and upon recommendation of the graduate coordinator, a doctoral dissertation committee is appointed by the dean of the graduate school. The doctoral dissertation committee supervises and approves the dissertation and administers the final dissertation defense.

There is no language requirement.

## Description

### Ph.D. Admission Requirements

Students admitted to the Ph.D. program normally have a master's degree in chemical engineering. Exceptional students with a baccalaureate degree in chemical engineering are eligible for admission to the program. To be admitted, students must present evidence that they have a strong foundation in chemical engineering. 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

### Ph.D. Degree Requirements

PhD students will complete the following core chemical engineering courses:

Code	Title	Credits
CHE 900	Seminar <sup>1</sup>	1
CHE 913	Advanced Fluid Mechanics	3
CHE 915	Heat Transfer	3
CHE 916	Diffusive Mass Transfer	3
CHE 923	Advanced Chemical Engineering Thermodynamics	3
CHE 932	Advanced Chemical Engineering Kinetics	3

<sup>1</sup> Students should register for CHE 900 for 1 credit in their first semester and CHE 900 for 0 credits each additional semester until their degree is granted.

Those students admitted with a master's degree in chemical engineering are required to take an additional 3 courses at the 800- or 900- level to complete the course work requirements. Those students admitted with a baccalaureate degree in chemical engineering are required to complete an additional 6 courses at the 800- or 900- level to complete the course work requirement for the PhD. These elective courses will be chosen in consultation with the student's advisor.

Students in the PhD program are expected to complete the five required core courses within the first year of graduate study. After completion of the core courses, the graduate coordinator will administer a written qualifying exam on each of the core subjects. The graduate coordinator also conducts an annual review of each student's progress in the program. All course work, including electives, should be completed by the end of the second year of study and must be completed before the student can be advanced to candidacy.

To advance to candidacy, the student must prepare a research proposal, which is different from his/her PhD dissertation research, and defend the proposal in an oral examination before a doctoral guidance committee. After successful completion of the oral qualifying examination, the