



# CHEMICAL AND BIOMOLECULAR ENGINEERING (MS/PHD)

Dual Degree programs allow students to be admitted to two degree programs simultaneously with approval of each Graduate Program Committee and the Dean(s) for Graduate Studies.

More Dual Degree information (<https://catalog.unl.edu/graduate-professional/policies/academic-program-requirements/#concurrent-degrees>)

The Department of Chemical and Biomolecular Engineering offers research and instruction leading to a master's degree in chemical engineering and a doctorate in engineering with a specialization in chemical and biomolecular engineering.

## Description

The chemical and biomolecular engineering faculty are actively involved in research related to biomolecular engineering, biomedical engineering, nanotechnology, polymers, composite materials, catalysis, and solid-phase reactions. Graduate coursework is offered in the advanced fundamentals of applied mathematics, chemical reaction kinetics, numerical methods, thermodynamics, transport phenomena, biomolecular engineering, and polymers.

The scope of chemical and biomolecular engineering work is far-reaching. Engineers are involved in a range of industries including manufacturing, healthcare, environmental health, and biotechnology. Graduates are among the highest-paid within engineering disciplines.

## Program-Related Information

### Graduate Chair

Rajib Saha  
402-472-7531  
rsaha2@unl.edu

### Support Staff

Ethan Kreifels  
402-472-2750  
s-ekreife3@unl.edu

## Program Website

<https://engineering.unl.edu/chme/graduate-programs/>

## Applying for Admission

### Standard requirements for all graduate programs

- Application for Admission with \$50 non-refundable application fee (<https://graduate.unl.edu/admissions/requirements/#appfee>).
- Transcripts (<https://graduate.unl.edu/admissions/requirements/#transcripts>) (unofficial): Uploaded as part of application form.

If International: Uploads must include all college- or university-level transcripts or mark sheets (records of courses and marks earned), with certificates, diplomas, and degrees plus certified English translations.

After admission: Official documents are required from all students who are admitted and enroll. Photocopies of certified records are not acceptable. International students

enrolled in other U.S. institutions may have certified copies of all foreign records sent directly to the Office of Graduate Studies by their current school's registrar office.

- If applicant's native language is not English, verification of English proficiency (<https://graduate.unl.edu/admissions/english-proficiency/>) is required.

When sending TOEFL scores, our institution code is 6877 and a department code is not needed.

- If applicant is not a US citizen and expects an F or J visa: financial information (<https://graduate.unl.edu/prospective/international/financial/>).
- Applicants must also fulfill any additional requirements the department specifies at the time of application.

### Additional requirements specific to this program

- Minimum English proficiency: Paper TOEFL (<http://www.toefl.org/>) 550, Internet TOEFL (<http://www.toefl.org/>) 80, IELTS (<https://www.ielts.org/>) 6.5
- Resume/CV
- Personal Statement: One-page statement of purpose or letter of intent. Discuss your teaching, research, and/or volunteer experience. Your resume will be the primary document we refer to for your work history; it is not necessary to repeat your resume here. Use this item to describe and/or highlight your experience in further detail, for example, undergraduate or masters level student research projects, laboratory research, teaching experience, or volunteer experience.
- Faculty and Research Interest: Review current faculty areas of research and indicate your research interests.
- Three recommendation letters.

### Admission Application Deadlines

For full financial consideration, students must apply by January 15 for Fall.