



# BIOMEDICAL ENGINEERING (PHD)

## Description

Biomedical Engineering at Nebraska is highly interdisciplinary, with collaboration among faculty and students from many UNL College of Engineering departments and from the University of Nebraska Medical Center and the University of Nebraska at Omaha. In addition, Nebraska biomedical engineering faculty and students work closely with area hospitals including Bryan LGH, Madonna Rehabilitation Hospital, St. Elizabeth Hospital, and the Nebraska Heart Institute. Major emphasis is on employing engineering techniques to improve human health, by understanding both the engineering needs and the medical needs for the specific problem.

The Biomedical Engineering Ph.D. program is designed to facilitate interdisciplinary research. Students must have an undergraduate degrees in engineering or show strong academic competency in the quantitative and physical sciences. The core curriculum of 42 graduate-level credit hours includes:

- 3 credit hours: statistics and experimental design
- 9 credit hours: human biology
- 30 credit hours: engineering/science electives
- Dissertation

Admission to the Ph.D. program does not require a master's degree. However, a previous M.S. degree generally reduces the coursework and amount of time needed to complete a Ph.D. It also provides valuable experience in defining and managing a Ph.D. research project.

## Program-Related Information

### Graduate Chair

Greg Bashford  
402-472-1413  
gbashford2@unl.edu

### Support Staff

Cameron Adams  
402-472-5600  
cadams@unl.edu

## Program Website

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

## 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

- GRE General (optional)
- GRE Subject (optional)
- Resume/CV
- Personal Statement: Indicate within your personal statement the specific field of biomedical engineering in which you are interested. It is helpful (but not required) for your statement to describe how your interests relate to the areas of research of any faculty members you name as potential advisors in this form's Faculty item.
- Coursework: Biomedical Engineering Prerequisite Coursework Form ([https://graduate.unl.edu/sites/unl.edu/executive-vice-chancellor/graduate-studies/files/media/file/Courses\\_BIOE.pdf](https://graduate.unl.edu/sites/unl.edu/executive-vice-chancellor/graduate-studies/files/media/file/Courses_BIOE.pdf))
- Faculty: Identify one or more faculty members in this department with whom you would like to work.

### Admission Application Deadlines

For full funding consideration, students must choose Fall term and submit applications by January 15.