

# Biomedical Engineering

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## Department Information

- **Program Coordinator:**  
Annie Tangpong, Ph.D.
- **Email:**  
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- **Department Location:**  
Dolve 101E
- **Department Phone:**  
(701) 231-8839
- **Department Web Site:**  
[www.ndsu.edu/coe/future\\_students/biomedical\\_engineering/bme\\_ms\\_and\\_phd/](http://www.ndsu.edu/coe/future_students/biomedical_engineering/bme_ms_and_phd/)
- **Application Deadline:**  
February 15 for fall semester; September 15 for spring semester. Applications received after the deadline will still be considered, but preference is given to those submitted by the deadline.
- **Credential Offered:**  
Ph.D., M.S.

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## Program Description

The graduate-level (M.S. and Ph.D.) programs in Biomedical Engineering (BME) are offered jointly by NDSU's College of Engineering, UND's School of Medicine and Health Sciences, and UND's College of Engineering and Mines.

The BME programs provide opportunities for technically qualified persons to attain specialized knowledge in an area of industry need, and to enhance career opportunities. The objective of the jointly-sponsored, interdisciplinary graduate programs is to:

- Meet the needs of regional students interested in biomedical engineering.
- Attract women and under-represented minorities into a developing field.
- Educate and train students through courses and research focused on biomedical research and device development.
- Advance the biomedical knowledge base through collaborative research directed by faculty from UND's School of Medical and Health Sciences, College of Engineering and Mines, and NDSU's College of Engineering and other qualified researchers from the two universities.
- Through biomedical research and device development, develop intellectual property to generate company spin-offs, attract new companies, and subsequent economic development.

For more information: [engineering.und.edu/bme/](http://engineering.und.edu/bme/) (<http://engineering.und.edu/bme/>)

### *Ph.D.:*

- a) Bachelor of Science degree from an ABET accredited engineering program
- b) Students holding a B.S. degree in other disciplines may be admitted to Qualified Status with an obligation to acquire the necessary background undergraduate engineering knowledge. The exact requirements will be determined on a case-by-case basis
- c) Graduate Record Examination General Test for applicants from non-ABET accredited programs
- d) Minimum GPA is 3.0 (4.0 scale) is required. Conditional admittance may be obtained for GPA less than 3.0.

### *M.S.:*

- a) Bachelor of Science degree from an ABET accredited engineering program.
- b) Students holding a B.S. degree in other disciplines may be admitted to Qualified Status with an obligation to acquire the necessary background undergraduate engineering knowledge. The exact requirements will be determined on a case-by-case basis.
- c) Graduate Record Examination General Test for applicants from non-ABET accredited programs.
- d) Minimum GPA is 3.0 (4.0 scale) is required. Conditional admittance may be obtained for GPA less than 3.0.

## Financial Assistance

Research and/or teaching assistantships may be available to qualified students. Applicants are considered on the basis of scholarship, potential to undertake advanced study and research, and financial need. The availability of research and teaching assistantships is contingent upon current funding levels. Applicants should communicate with potential faculty advisors for funding opportunities.

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Code	Title	Credits
<b>M.S. (30 credits)</b>		
Anatomy & Physiology		3-6
BIOL 660	Animal Physiology	3
BRG Related Courses		6-9
Graduate Preparation (e.g. Grant Writing)		0-3
Internship (industrial, clinical, or research lab):		0-3
Electives (approved by adviser)		9
		(max)
		for
		thesis
		option
		and 15
		(max)
		for
		non-
		thesis
		option
Master's thesis (9) or Master's project (non-thesis option) (3)		
BME 790	Graduate Seminar (One credit per semester.)	3
BME 798	Master's Thesis	9

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Code	Title	Credits
<b>Ph.D. (90 credits)</b>		
Anatomy & Physiology		3-6
BIOL 660	Animal Physiology	3
BME 790	Graduate Seminar (One credit per semester)	3-6
or UND-ENGR 562 Seminar (1 credit), or UND-EE 570 Seminar (1 credit)		
BRG Related Courses		12-15
BME 899	Doctoral Dissertation	6-30
Graduate Preparation (e.g. Grant Writing; College Teaching Certificate)		3-6
Internship (industrial, clinical, or research lab):		3-6
Electives (approved by adviser)		36
		(max)

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