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# **Biomedical Engineering**

Biomedical engineering is highly relevant to the 21<sup>st</sup> century research and education needs of the citizens of North Dakota and providing opportunity to students in one of the highest demand fields today. The current high quality education received by engineering students at NDSU will be augmented with the biomedical engineering minor allowing graduates to more readily be able to contribute to the global demand for medical technologies and innovations. Employers are supportive and encouraging the addition of biomedical minor at NDSU.

## **Minor Requirements**

### **Biomedical Engineering Minor**

**Required Credits: 21** 

#### **Minor Requirements**

Code	Title	Credits
BIOL 150	General Biology I	4
& 150L	and General Biology I Laboratory	
CHEM 121	General Chemistry I	3
ZOO 370	Cell Biology	3
or ZOO 460	Animal Physiology	
Electives		11
CE 486	Nanotechnology and Nanomaterials	
ECE 483	Instrumentation for Engineers	
ECE 485	Biomedical Engineering	
ECE 487	Cardiovascular Engineering	
ECE 488	Cardiovascular Engineering II	
IME 411	Human Factors Engineering	
IME 453	Hospital Management Engineering	
ME 331	Materials Science and Engineering	
ME 468	Introduction to Biomechanics	
ME 480	Biofluid Mechanics	
ME 486	Nanotechnology and Nanomaterials	
MICR 445	Animal Cell Culture Techniques	
ZOO 460	Animal Physiology	
Undergraduate Research: ENGR 193, 293, 393, or 494		

**Total Credits** 

#### **Minor Requirements and Notes**

• A minimum of 8 credits must be taken at NDSU.

Course pre-requisites apply.

• At least 12 credits that apply to this minor must be unique from courses that apply to the student's major.