Biomedical Engineering

Department Information

- **Department Web Site:**
  www.ndsu.edu/coe/future_students/biomedical_engineering/ (http://www.ndsu.edu/coe/future_students/biomedical_engineering/)
- **Credential Offered:**
  Minor
- **Program Overview:**
  catalog.ndsu.edu/programs-study/undergraduate/biomedical-engineering/ (http://catalog.ndsu.edu/programs-study/undergraduate/biomedical-engineering/)

Minor Requirements

Minor: Biomedical Engineering

Required Credits: 21

Code	Title	Credits
Core Requirements		
BIOL 150 & 150L	General Biology I and General Biology I Laboratory	4
BIOL 151	General Biology II	3
BME 220	Introduction to Biomedical Engineering	2
BIOL 370	Cell Biology	3
or BIOL 460	Animal Physiology	
Elective Requirements (at least 6 of the 9 credits must be courses with an engineering prefix of CE, ECE, IME, ME)		9
BIOC 461	Foundations of Biochemistry and Molecular Biology II	
BIOL 220	Human Anatomy and Physiology I	
BIOL 220L	Human Anatomy and Physiology I Laboratory	
BIOL 221	Human Anatomy and Physiology II	
BIOL 221L	Human Anatomy and Physiology II Laboratory	
BIOL 370	Cell Biology (if not used in the core)	
BIOL 460	Animal Physiology (if not used in the core)	
CE 486	Nanotechnology and Nanomaterials	
ECE 483	Instrumentation for Engineers	
ECE 485	Biomedical Engineering	
ECE 486	Biosensing Technology	
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	
Undergraduate Research or Individual Study (maximum 3 credits): ENGR/ME/ECE/CE/IME/ABEN 193, 293, 393, 493, 194, 294, 394 or 494		
Total Credits		**21**

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.