



BIOMEDICAL ENGINEERING MINOR

SUPPLEMENT YOUR STUDIES WITH A BIOMEDICAL ENGINEERING MINOR

Undergraduate students can take biomedical engineering courses and earn a minor. This minor is intended for undergraduate engineering students seeking to supplement their education by applying skills learned in their respective disciplines to the field of biomedical engineering.

The minor in biomedical engineering requires: a) a minimum of 18 hours of coursework; b) a GPA of 2.5 in these courses; and c) no grade lower than a C in any BME course. At the discretion of the BME department chair (or designee), a limited number of equivalent course substitutions (6 credit hours) may count toward the requirements for this minor. At least 12 credits must have the BME prefix.

REQUIRED COURSE:

BME 301 - Fundamentals of Biomedical Engineering (3 credits)

ELECTIVE COURSES (SELECT FIVE OF THE FOLLOWING#):

- BME 395** - Independent Research in Biomedical Engineering (1-3 credits)
- BME 440** - Introduction to Biomedical Signal Processing (3 credits)
- BME 455** - Introduction to Biomedical Optical Spectroscopy (3 credits)
- BME 464** - Nanobioengineering and Nanomedicine (3 credits)
- BME 465** - Tissue Engineering (3 credits)
- BME 470** - Biosolid Mechanics (3 credits)
- BME 472** - Human Biomechanics (3 credits)
- BME 473** - Fundamentals of Biofluid Mechanics (3 credits)
- BME 476** - Introduction to Assistive Technology (3 credits)
- BME 477** - Design and Development of Assistive Technology Devices (3 credits)
- BME 488** - Introduction to Biomaterials (3 credits)
- BME 491** - Topics in Biomedical Engineering; Subtitle Required (3 credits)
- BME 532** - Modeling of Physiological Systems (3 credits)
- BME 540** - Biomedical Instrumentation (3 credits)
- BME 550** - Introduction to Biomedical Imaging (3 credits)
- BME 571** - Mechanical Modeling of Human Motion (3 credits)
- BME 573** - Cell Mechanics and Mechanobiology (3 credits)
- BME 579** - Neural Engineering: Merging Engineering with Neuroscience (3 credits)
- BME 599** - Topics in Biomedical Engineering; Subtitle required (3 credits)

#up to 6 credit hours of independent research (BME 395) or special topics courses (BME 481G or BME 599) may count as electives.

Biomedical engineering is a growing industry and our ability to augment a student's engineering education with specialized courses leading to a minor demonstrates our commitment to developing students who can make a difference.

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