

## The Academic Minor

Many departments have designed academic minors for the convenience of undergraduate students.

A minor is a structured group of courses that leads to considerable knowledge and understanding of a subject, although with less depth than a major. Some employers consider minors desirable, and the corresponding major requirements at the University may stipulate a minor. Some students choose to complement their major program with a minor in a related field or even in an entirely different field of interest. Students interested in pursuing an academic minor should contact their college dean's office and the department responsible for the minor program for guidance and advising.

**Please note that undergraduate students can only complete a minor *in addition to* and as a *complement to* a major. The University does not award stand-alone minors.**

## Minor in Biomedical Engineering

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 (BME). The emphasis on upper level BME courses builds upon the foundation taught in core undergraduate engineering courses. Beyond the one required course, students pursuing this minor will choose at least five elective courses in consultation with a Biomedical Engineering faculty advisor. Students and their Biomedical Engineering faculty advisor may select courses providing concentration in a particular subfield, or they may select courses providing breadth across the field of biomedical engineering.

The minor in Biomedical Engineering requires: a) at least 18 credit hours of course work; b) a GPA of 2.5 or greater in these courses; and c) no grade lower than **C** in any BME course. At the discretion of the BME department chair (or designee), a limited number (maximum 6 credit hours) of equivalent course substitutions may be used. At least 12 credit hours must have the BME prefix.

### Required Course

BME 301 Fundamentals of Biomedical Engineering ..... 3

### Elective Courses

\*Select five from among the following:

BME 395 Independent Research in Biomedical Engineering ..... 1-6  
 BME 405 Introduction to Biomedical Signal Processing ..... 3  
 BME 472 Human Biomechanics ..... 3  
 BME 485 Fundamentals of Biofluid Mechanics ..... 3  
 BME 488 Introduction to Biomaterials ..... 3  
 BME 508 Cell Mechanics and Mechanobiology ..... 3  
 BME 515 Modeling of Physiological Systems ..... 3  
 BME 530 Biomedical Instrumentation ..... 3  
 BME 540 Mechanical Modeling of Human Motion ..... 3  
 BME 579 Neural Engineering:  
     Merging Engineering with Neuroscience ..... 3  
 BME 580 Introduction to Biomedical Imaging ..... 3  
 BME 481G Topics in Biomedical Engineering ..... 3  
 BME 599 Topics in Biomedical Engineering (Subtitle required) ..... 3

*\*Up to 6 credit hours of independent research (e.g., BME 395) or special topics courses (e.g., BME 481G or BME 599) may count as electives.*