Biomedical Engineering Minor
15 credits, 2014/2015 Catalog

This biomedical engineering minor is a 15 credit hour program that is open to all engineering majors and other students that meet the prerequisites listed below. For engineering majors, at least 9 hours beyond the B.S. in any Engineering discipline must be completed for the biomedical engineering minor. Student must register with the Department of Chemical & Biomedical Engineering undergraduate advisor prior to starting this minor program. Departments within the College of Engineering are currently developing additional courses that will be added to the list of courses that can be applied to this minor, so consultation with the advisor will insure that students are informed of all offered courses.

Prerequisite courses:
1. Biology I: BSC 2010
2. Calculus II: MAC 2282, MAC 2242, MAC 2233 or MAC 2312
3. Physics II: PHY 2049 or PHY 2054
4. General Chemistry II: CHM 2046

Required Courses (6 hours)
BME 4100 Biomedical Engineering
BME 4406 Engineering of Biological Systems

The remaining 9 credit hours can be taken from the following list:
• ECH 4931 Special Topics in Chemical Engineering*
• PHZ 4702 Applications of Physics to Biology & Medicine I
• PHZ 4703 Applications of Physics to Biology & Medicine II
• BCH 3023 Introductory Biochemistry
• EIN 4313C Human Factors
• BME 5320 Theory and Design of Bioprocesses
• BME 5040 Pharmaceutical Engineering
• BME 4332 Cell and Tissue Engineering
• BME 4440 Introduction to Bioastronautics
• ECH 5748 Selected Topics in Biomedical Engineering**
• BME 5748 Selected Topics in Biomedical Engineering**

*The list of approved special topics courses is below. Please see academic advisor for other special topics courses.
• ECH 4931 Bioseparations
• ECH 4931 Chemical/Bio Sensors & Micofabrication
• ECH 4931 Nanomedicine
• ECH 4931 Modern Biomedical Technologies
• ECH 4931 Engineering Physiology
• ECH 4931 Research Design Methods & Interpretations
• ECH 4931 Biomedical Image Processing
• ECH 4931 or EEL 4936 Bioelectricity

**Please see academic advisor for selected topics courses.