

# **Biomedical Engineering Minor**

## **Program Description**

A minor in Biomedical Engineering is suitable for students wishing to apply their knowledge of engineering principles to medical and biological problems. This minor is a collaboration between the Southern Polytechnic College of Engineering and Engineering Technology and the Wellstar College of Health and Human Services. Students need to complete 15 credit hours in this minor program. The student must earn a 'C' or better in all courses for the minor.

Non-engineering students who desire to enroll in upper-level engineering courses to complete a minor or a dual major must have the applicable course prerequisites and a 2.70 GPA in the following courses:

ENGL 1101 English Composition I

ENGL 1102 English Composition II

PHYS 221I Principles of Physics I & PHYS 221IL Principles of Physics Laboratory I

CHEM 121I Principles of Chemistry I & CHEM 121IL Principles of Chemistry Laboratory I

OR

PHYS 2212 Principles of Physics II & PHYS 2212L Principles of Physics Laboratory II

MATH 1190 Calculus I

MATH 2202 Calculus II

12 additional credits from courses in the Southern Polytechnic College of Engineering and Engineering Technology or with prefixes CHEM, CS, CSE, IT, MATH, PHYS, or STAT.



This program is a part of the Southern Polytechnic College of Engineering and Engineering Technology.

## **Admission, Enrollment, and Graduation Policies**

### Admission Requirements

This program does not have specific admission requirements and only admission to Kennesaw State University is required. For more information, please see the Admissions section of the catalog.

### Enrollment Requirements

Upper division engineering courses require Engineering Standing.

### Graduation Requirements

Each student is expected to meet the requirements outlined in the Academic Policies: 5.0 PROGRAM REQUIREMENTS & GRADUATION.

## **Program Course Requirements**

### **Required Courses (12 Credit Hours)**

- ENGR 3410: Fundamentals of Biomedical Engineering
- ENGR 3411: Biomechanics for Engineers
- ENGR 3412: Biomedical Circuit Applications
- HPAL 2250: Anatomy and Physiology for Health and Physical Activity Leadership

### **Electives (3 Credit Hours)**

Students must complete three credit hours in one or a combination of the following:

- ES 2100: Physical Activity in Health and Disease
- ES 2300: Medical Terminology
- EE 4400: Directed Study in Electrical Engineering \*
- ES 4400: Directed Study \*
- ISYE 4400: Directed Study \*
- ME 4400: Directed Study \*
- MTRE 4400: Directed Research – Mechatronics \*

\* Research projects must have biomedical emphasis and requires the approval of the Robotics and Mechatronics Engineering Department Chair

### **Program Total (15 Credit Hours)**