BIOMEDICAL ENGINEERING

Enrollment and Graduation Data

Fall 2018 Enrollment – 276

2017-18 Graduates – 49 BS degrees conferred

Program Objectives
Graduates of the bachelor of science degree program in biomedical engineering are expected, within a few years of graduation, to have:

- demonstrated an ability to develop system-based engineering solutions that satisfy constraints on the human body and imposed by society (PEO1: “Systems-Based Integrators”).
- demonstrated an ability to enhance their skills through formal education and training, independent inquiry, and professional development (PEO2: “Life-Long Learners”).
- demonstrated an ability to work independently as well as collaboratively with others, and demonstrate leadership, accountability, initiative, and ethical and social responsibility (PEO 3. “Engineering Professionals”).
- demonstrated an ability to successfully pursue graduate degrees at the Master's and/or PhD level (PEO 4. “Graduate Education”).

Student Outcomes
To prepare graduates for attainment of the program educational objectives, the department has identified and documented the student outcomes to be achieved by each of the courses offered within the curriculum and regularly reviews the materials to ensure continued success of the program.

- *Engineering Foundations* An ability to apply knowledge of mathematics, science, and engineering
- *Experimentation* An ability to design and conduct experiments, as well as to analyze and interpret data
- *Design* An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- *Multidisciplinary Teamwork* An ability to function on multidisciplinary teams
- *Problem Solving* An ability to identify, formulate, and solve engineering problems
- *Professional Responsibility* An understanding of professional and ethical responsibility
- *Communication* An ability to communicate effectively
- *Broad Education* The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- *Life-Long Learning* A recognition of the need for, and an ability to engage in life-long learning
- *Contemporary Issues* A knowledge of contemporary issues

Modern Tools An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice