

Bachelor of Science in Biomedical Engineering†

Department of Biomedical Engineering

Student Outcomes

Upon graduation, graduates of the Biomedical Engineering Department at the University of Arizona will have attained:

- a) an ability to apply knowledge of mathematics, science and engineering
- b) an ability to design and conduct experiments, as well as to analyze and interpret data
- c) 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
- d) an ability to function multi-disciplinary teams
- e) an ability to identify, formulate and solve engineering problems
- f) an understanding of professional and ethical responsibility
- g) an ability to communicate effectively
- h) the broad education necessary to understand the impact of engineering solutions in a global, economic environment, and societal context
- i) a recognition of the need for and an ability to engage in life-long learning
- j) a knowledge of contemporary issues
- k) an ability to use technique, skills, and modern engineering tools necessary for engineering practice

In addition our graduates have been trained in

1. applying principles of engineering, biology, human physiology, chemistry, calculus based physics, mathematics (through Differential Equations) and statistics
2. solving bio/biomedical engineering problems, including those associated with the interaction between living and non-living systems
3. analyzing, modeling, designing and realizing bio/biomedical engineering devices, systems, components or processes
4. making measurement on and interpreting data from living systems