



**SCHOOL OF BIOMEDICAL
ENGINEERING
COLORADO STATE UNIVERSITY**

**Graduates of the Colorado State University
Biomedical Engineering bachelor's degree program will have**

- (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 on multidisciplinary 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, environmental, 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 the techniques, skills, and modern engineering tools necessary for engineering practice.

In addition, from the ABET “Criteria for Bioengineering and Biomedical and Similarly Named Engineering Programs,” the curriculum prepares our graduates with experience in the following areas (CSU has noted these criteria (l) – (o)):

- (l) “Applying principles of engineering, biology, human physiology, chemistry, calculus-based physics, mathematics (through differential equations), and statistics;
- (m) Solving bio/biomedical engineering problems, including those associated with the interaction between living and non-living systems;
- (n) Analyzing, modeling, designing and realizing bio/biomedical engineering devices, systems, components, or processes; and
- (o) Making measurements on and interpreting data from living systems

<http://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2016-2017/#objectives>