



**SCHOOL OF BIOMEDICAL
ENGINEERING
COLORADO STATE UNIVERSITY**

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

- (1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- (2) an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- (3) an ability to communicate effectively with a range of audiences
- (4) an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- (5) an ability to function effectively on a multidisciplinary team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- (6) an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- (7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies
- (8a) an ability to apply principles of engineering, biology, human physiology, chemistry, calculus-based physics, mathematics (through differential equations), and statistics;
- (8b) an ability to solve bio/biomedical engineering problems, including those associated with the interaction between living and non-living systems;
- (8c) an ability to analyze, model, design, and realize bio/biomedical engineering devices, systems, components, or processes; and
- (8d) an ability to make measurements on and interpret data from living systems

ABET's Criteria for Bioengineering and Biomedical and Similarly Named Engineering Programs are lettered, where our Student Outcomes (items 1 –7 above) are numbered. In order to preserve both the numbering of Student Outcomes and the lettering of ABET program criteria, the latter have been named (8a) through (8d). The result is a list of 11 total Student Outcomes, (1) through (8d).

<https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2019-2020/#GC4>