

# Program Learning Outcomes

## Biochemical Engineering

### ***Program Educational Objectives***

- to prepare graduates for employment in a professional field related to biochemical engineering, or another area of their choosing that utilizes their skills as identified in the Biochemical Engineering student outcomes, and/or admission into graduate or professional programs of study.
- to graduate biochemical engineers who contribute to their profession and society through engineering practice, research and development, teaching and/or education, or in governmental, regulatory or legal aspects.

### ***Student Outcomes***

1. an ability to apply knowledge of mathematics, science, and engineering
2. an ability to design and conduct experiments, as well as to analyze and interpret data
3. 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
4. an ability to function on multidisciplinary teams
5. an ability to identify, formulate, and solve engineering problems
6. an understanding of professional and ethical responsibility
7. an ability to communicate effectively
8. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
9. a recognition of the need for, and an ability to engage in life-long learning
10. a knowledge of contemporary issues
11. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.