BS in Bioengineering ABET Accreditation

The Bachelor of Science program in Bioengineering at Syracuse University is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Enrollment and Graduation Data

Spring 2015 Enrollment 179 students
2014-15 Graduates 45 students

Program Objectives:

I. Graduates will have mastered engineering and biological fundamentals and be able to apply critical thinking to solve problems at the interface of science or medicine and engineering.
II. Graduates will have a broad education that develops their ability to make informed and ethical decisions and understand the engineer’s role in society.
III. Graduates will be able to effectively communicate their work and ideas.
IV. Graduates will be prepared to be successful in biomedical industry and postgraduate education in engineering, science, or professional studies.

Student Outcomes:

(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.
(l) An understanding of biology and physiology, and the capability to apply advanced mathematics (including differential equations and statistics), science, and engineering to solve the problems at the interface of engineering and biology
(m) The ability to make measurements on and interpret data from living systems, addressing the problems associated with the interaction between living and non-living materials and systems