LEARNING OUTCOMES

Undergraduate Degree Programs of Study

The Bachelor of Science in Engineering degree programs accredited by the Engineering Accreditation Commission (EAC) of ABET must demonstrate that their graduates attain the following outcomes:

a. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
b. 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
c. An ability to communicate effectively with a range of audiences
d. 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
e. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
f. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
g. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

The Bachelor of Science in Engineering Technology degree programs accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET must demonstrate that their graduates attain the following outcomes:

a. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;

b. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;

c. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;

d. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and

e. An ability to function effectively as a member as well as a leader on technical teams.

The Bachelor of Science in Engineering and Engineering Technology degree programs accredited by the Computing Accreditation Commission (CAC) of ABET must demonstrate that their graduates will have the ability to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions

2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline

3. Communicate effectively in a variety of professional contexts

4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles

5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline

6. Apply computer science theory and software development fundamentals to produce computing-based solutions (CAC CS Program Criteria).

6. Use systemic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals. (IT Program Criteria).