

### **Program Educational Objectives for all EAET Programs**

The program education objectives for the CET Program have been identified as:

1. Be employed in an engineering or engineering related industry.
2. Perform engineering duties in industry with progressive responsibilities or proceed to graduate school.
3. Engage in lifelong learning and professional development by acceptance and attendance in classes or being active members in one or more professional organizations related to their field.
4. Function as a responsible member of society demonstrating professionalism in their work assignments and exhibit the following characteristics
  - a. Ethics, including commitment to honesty and integrity
  - b. Quality performance and timeliness
  - c. A willingness to learn new material and train and mentor fellow employees
5. Apply their technical leadership and communication skills in oral, written, visual and graphic methods to practice professionally in a collaborative, team-oriented manner that embraces the multidisciplinary and multicultural environment of today's business world.

### **Student Outcomes for EAET Engineering Technology Programs**

The program must have documented student outcomes that support the program educational objectives. Attainment of these outcomes prepares graduates to enter the professional practice of engineering. Student outcomes are outcomes (1) through (5)

1. 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;
2. an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
3. 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;
4. an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
5. an ability to function effectively as a member as well as a leader on technical teams.

### **Student Outcomes for EAET Engineering Programs**

The program must have documented student outcomes that support the program educational objectives. Attainment of these outcomes prepares graduates to enter the professional practice of engineering. Student outcomes are outcomes (1) through (7), plus any additional outcomes that may be articulated by the program.

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 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.