York Technical College

One College. Many Opportunities.

Mechanical Engineering Technology

Program Educational Objectives

1. Knowledge and problem solving skills: The ability to define a problem and analyze the technical issues using engineering principles and judgment.
2. Designing and specifying skills: The ability to design a solution to meet a specific need and specify the technical details of the solution using established engineering practices and tools (e.g., computer-aided design (CAD) systems).
3. Manufacturing & testing skills, including hands-on: The ability to utilize basic manufacturing and assembly skills to construct prototypes of parts or designs and test those parts or designs for acceptability.
4. Documenting, communicating, and professionalism skills: The ability to prepare required documentation for technical issues, communicates effectively, and exhibit professionalism.

Student Outcomes

a) an ability to apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities (those that involve limited resources, that involve the use of conventional processes and materials in new ways, and that require a knowledge of basic operating processes);
b) an ability to apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge;
c) an ability to conduct standard tests and measurements, and to conduct, analyze, and interpret experiments;
d) an ability to function effectively as a member of a technical team;
e) an ability to identify, analyze, and solve narrowly defined engineering technology problems;
f) an ability to apply written, oral, and graphical communication in both technical and nontechnical environments; and an ability to identify and use appropriate technical literature;
g) an understanding of the need for and an ability to engage in self-directed continuing professional development;
h) an understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity;
i) a commitment to quality, timeliness, and continuous improvement.
j) apply above principles to the specification, testing, or documentation of basic mechanical systems.