York Technical College

One College. Many Opportunities.

Computer Engineering Technology

Program Educational Objectives

1. A graduate should have the ability to work with his/her coworkers, customers, clients, be able to communicate with written reports, give oral presentations and manage his/her time effectively.
2. A graduate should possess knowledge of the internal and external components of computer systems, computer programming, basic operating systems, local networks and the Internet in order to install, test, maintain, analyze, and troubleshoot computers effectively.
3. A graduate should possess the ability to apply current knowledge of mathematics, science and technology to solve and interpret experiments and apply results to improve the process.
4. A graduate should have basic worker traits such as being a self-starter, being creative, and should understand professional, ethical, and social responsibilities.
5. A graduate should be committed to continue developing knowledge and skills after graduation by obtaining certifications and staying current with technology.

Student Outcomes

a) demonstrate knowledge and hands-on competence appropriate to the goals of the program in: the application of electric circuits, computer programming, associated software applications, analog and digital electronics, microcomputers, operating systems, and local area networks to the building, testing, operation, and maintenance of computer systems and associated software systems

b) demonstrate knowledge and hands-on competence appropriate to the goals of the program in: the applications of physics or chemistry to computer systems in a rigorous mathematical environment at or above the level of algebra and trigonometry.

c) have strengths in the building, testing, operation, and maintenance of existing computer systems and their associated software systems

d) demonstrate an ability to apply creativity in the design of systems, components, or processes appropriate to the computer engineering technology program

e) demonstrate an ability to function effectively in teams

f) demonstrate an ability to identify, analyze, and solve technical problems, (critical thinking)

g) demonstrate an ability to communicate effectively

h) demonstrate recognition of the need for, and an ability to engage in lifelong learning,

i) demonstrate an ability to understand professional, ethical, and social responsibilities,

j) demonstrate respect for diversity and a knowledge of contemporary professional, societal, and global issues

k) demonstrate a commitment to quality, timeliness and continuous improvement