

TECHNOLOGY STUDIES: COMPUTER ENGINEERING TECHNOLOGY, AS

Program code: CETC-AS-COT

Location: Middlesex

Program Description

The College of Technology Pathway - Technology Studies: Computer Engineering Technology Option Associate Degree program prepares students for transfer to institutions with bachelor's degree programs in Computer Engineering Technology, Industrial Technology, Networking Technology, or other related fields, or for entry into computer-based industry positions. This is a hands-on, technically oriented program.

Learning Outcomes

1. Apply mathematical, scientific and technological principles and concepts to identify and formulate solutions to technical problems.
2. Apply critical thinking and problem-solving skills to solve technical problems.
3. Demonstrate the ability to function on teams.
4. Recognize the need to engage in life-long learning.

Computer Engineering Learning Outcomes

1. Provide students with a background in the application of electric circuits, computer programming, associated software applications, computer hardware, computer networking, and engineering standards to the building, testing, operation, and maintenance of computer systems and associated software systems.
2. Provide students with the ability to apply science, engineering, and mathematical analysis in solving computer engineering technology problems.
3. Prepare students to take industry-based certification exams.
4. Develop students' ability to apply written, oral, and graphical communication in both technical and non-technical environments and to identify and use appropriate technical literature.
5. Develop students' ability to learn new concepts and techniques as required for continuing professional development.

Degree Requirements

Code	Title	Credits
Technology Studies General Education Core		
ENG 1010	Composition	3
MATH 1610	Precalculus	4
ART Elective (course vetted for ARHX)		3
CHEM 1110 or CHEM 1210	Concepts of Chemistry General Chemistry I	4
Elective HISX - Historical Knowledge Course or Elective SBSX course in ECON		3
ENG 1080 or COMM 1301	Composition II: Technical Writing Public Speaking	3
CCS 1001	College and Career Success	3

Technology Studies Program Core

PHYS 1201 or PHYS 2201	General Physics I Calculus-Based Physics I	4
Elective BHEL - Behavioral Science Elective - choose an ANTH, PSY or SOC course		3
MATH 1200 or MATH 1201	Statistics I Statistics I with Computer Applications	3-4
Computer Engineering Technology Courses		
MATH 2600	Calculus I	4
EGR 1110	Introduction to Engineering	3
MATH 2610 or EGR 2221	Calculus II Introduction to Electrical Circuit Analysis	4
CIS 1001	Introduction to Computers	3
CSC 1211	Java I	3
CSC 2212	Java II	3
PHYS 1202 or PHYS 2202	General Physics II Calculus-Based Physics II	4
CST 1111	Computer Hardware	4
CST 1221	Networking I	4
Total Credits		65-66