

Computer Engineering Technology

Graduates of this program are prepared for positions which rely on an understanding of hardware and software applications of digital, microprocessor, and computer-based systems. An emphasis is placed on the technical, analytical, problem-solving and communications skills necessary to excel in the technical workplace. Some companies hire computer engineering technology graduates to install, maintain, calibrate and repair both hardware and software systems for their customers. Other students may work on integrated systems which are comprised of both hardware and software components.

The Program

The Bachelor of Science (B.S.) degree in computer engineering technology is designed for students wishing to prepare for professional careers, and whose interests lie at the intersection of computer science and electrical/electronics technology.

The B.S. Degree with a major in Computer Engineering Technology is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering & Technology.

Computer Engineering Technology Employers

The following organizations have been reported as hiring CET graduates:

Amerada Hess, Avis Car Rental, Cabletron Systems, Canon/MCS, CompUSA, E-systems, Eastman Kodak, Fujitsu-ICL, ISIS Corporation, MAPINFO, Northern Telecom, Inc., Performance Engineering Corporation, Photographic Sciences, Inc., Prisma Systems Corp., Rochester Telephone, SUNY Health Science Center at Syracuse, TDH Medical Systems, US Navy, Welch Allyn, West Point-Pepperell Foundation, Inc.

Placement

A degree in computer engineering technology has helped build rewarding careers for many of SUNYIT's graduates. Some students go on to obtain an M.S. Degree in Computer Engineering.

B.S. Degree Requirements

To earn a Bachelor of Science (B.S.) degree in computer engineering technology, a student must complete 128 credits, with a minimum of 60 credits in arts and sciences disciplines, and complete the following degree requirements:

Arts & Science Minimum Credits

Liberal Arts

Oral Communications
Basic Communications
Upper-Division Writing

Humanities*

Social Science*

American History*

Western Civilization*

Non-Western Civilization*

Fine Arts*

Foreign Language*

* Complete course work in at least four out of the above seven categories.

24 Credits

Mathematics and Science – 24 credits

Physics with lab & Basic Science with a lab
(Biology/Chemistry/Physics/Environmental Science)

Mathematics, including the following:

Differential Calculus (MAT121)

Integral Calculus (MAT122)

Restricted Math Elective (MAT115, MAT230, or MAT340)

Math/Science Elective for balance of 24 credits

24 Credits

Technical Courses – 62 credits

Required Core

QC and Workplace Issues (CET 299)

Microprocessors & Embedded System

Programming (CET342)

Data Communication and Computer Networks (CET416)

Microprogramming and Computer Architecture (CET429)

PC Integration and Maintenance (CET431)

Programming Foundations (CS108)

Programming Structures (CS109)

Data Structures (CS240)

Two Programming Languages (including one course in either C, C++, or Java)

Integrative Capstone Course (CET 423 or ETC 445)

Balance of 62 credits in CET, CSC, or ETC

62 Credits

Unrestricted Electives

Balance of 128 Credits

Total Credits 128

A residency of 24 hours in the major is required to graduate.