
Bachelor of Science in

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 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.

Computer Engineering Technology is accredited by the Technology Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700. In January 2005, the American Society for Engineering Educators (ASEE) ranked SUNYIT tenth in the nation based on the number of engineering technology bachelor's degrees awarded.

Computer Engineering Technology Employers

The following organizations have been reported as hiring CET graduates:

AFRL, Con Med, Eaton Corp. Powerware Division, ESPN, Hipotronics, New York State Technology Enterprise Corp. (NYSTEC), National Grid, Orion Industry, Special Metals, The Boeing Company, Virtual Medical Sales, U.S. Coast Guard, Welch Allyn.

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:

I. Arts & Science (24 Credits)

A. Liberal Arts

Oral Communications
Basic Communications
Upper-Division Writing
Humanities*
Social Science*
American History*
Western Civilization*
Non-Western Civilization*
Fine Arts*
Foreign Language*

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

B. Mathematics and Science (24 Credits)

Physics (lab) & Basic Science (lab)
(Biology/Chemistry/Physics/Environmental Science)
Mathematics, including the following:
Differential Calculus (MAT121)
Integral Calculus (MAT122)
Restricted Math Elective (MAT115, MAT230, MAT340, or MAT413)
Math/Science Elective (Balance of 24 credits)

II. Technical Courses (62 credits)

A. 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)
Object Oriented Programming (CS244)
Data Structures (CS240)
Two Programming Languages *(including one course in: C, C++, or Java)*
Integrative Capstone Course (CET 423 or ETC 445)
CET, CS, CSC, ETC, or IS (Balance of 62 credits)

III. Open Electives (Total Credits 128)

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