

# COMPUTER ENGINEERING TECHNOLOGY

**Contact(s):** Jeff Swaringen (<https://www.stanly.edu/college-information/directory?id=1290>)

The Computer Engineering Technology curriculum provides the skills required to install, service, and maintain computers, peripherals, wired and wireless networks, and microprocessor and computer-controlled equipment. It includes training in both hardware and software with emphasis on operating systems concepts, data security, and data recovery.

Coursework includes mathematics, physics, electronics, digital circuits, and programming with an emphasis on the operation, use, and interfacing of memory and devices to the CPU. Additional topics may include communications, networks, operating systems, programming languages, Internet configuration and design, and industrial applications.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

## Learning Outcomes

Upon completion of this program, students will be able to:

- Integrate computer hardware and operating systems to create a functional computer.
- Install and configure a printer on a computer.
- Identify the Basic Methodology of the steps in troubleshooting a network.

- Computer Engineering Technology - Associate in Applied Science (p. 1)
- Computer Engineering Technology - CCP (p. 1)

## Computer Engineering Technology – Associate in Applied Science – A40160

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
ACA 111	College Student Success	1
DFT 151	CAD I	3
ELC 131	Circuit Analysis I	4
ELC 131A	Circuit Analysis I Lab	1
NOS 110	Operating Systems Concepts	3
SEC 110	Security Concepts	3
Credit Hours		15
<b>Spring</b>		
CIS 110	Introduction to Computers	3
ELN 131	Analog Electronics I	4
ELN 133	Digital Electronics	4

NOS 130	Windows Single User	3
Humanities Elective *		3
Credit Hours		17
<b>Summer</b>		
ELN 232	Introduction to Microprocessors	4
ENG 111	Writing and Inquiry	3
Credit Hours		7
<b>Second Year</b>		
<b>Fall</b>		
CTS 120	Hardware/Software Support	3
NET 125	Introduction to Networks	3
MAT 171	Precalculus Algebra	3-4
or MAT 121	or Algebra/Trigonometry I	
NET 126	Routing Basics	3
ENG 112	Writing and Research in the Disciplines	3
or ENG 114	or Professional Research & Reporting	
Credit Hours		15-16
<b>Spring</b>		
CSC 139	Visual BASIC Programming	3
CTS 220	Advanced Hardware/Software Support	3
NET 225	Routing & Switching I	3
NET 226	Routing and Switching II	3
PHY 131	Physics-Mechanics	4
Social/Behavioral Science Elective *		3
Credit Hours		19
Total Credit Hours		73-74

\*Please see the Suggested Humanities and Social/Behavioral Science Elective List for AAS Majors webpage (<http://catalog.stanly.edu/curriculum-programs-study/suggested-humanities-social-science-electives-list-for-aas-majors>).

## Computer Engineering Technology - CCP

Tuition-waived program for Career & College Promise (<https://www.stanly.edu/future-students/career-college-promise>) (high school juniors and seniors)

Code	Title	Credit Hours
CTS 120	Hardware/Software Support	3
ELC 131	Circuit Analysis I	4
ELC 131A	Circuit Analysis I Lab	1
ELN 133	Digital Electronics	4
NOS 110	Operating Systems Concepts	3
Total Credit Hours		15

View our Videos (<https://www.stanly.edu/future-students/educational-offerings/computer-engineering-technology/view-our-videos>)