

PROGRAMS

COMPUTER ENGINEERING TECHNOLOGY

Contact(s): [Jeff Swaringen](#)

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 Degree - A40160

First Year		
Fall		Credit Hours
ACA 111	College Student Success	1
DFT 151	CAD I	3
ELC 131	Circuit Analysis I	4
NOS 110	Operating Systems Concepts	3
SEC 110	Security Concepts	3
	Credit Hours	NaN
Spring		Credit Hours
CIS 110	Introduction to Computers	3
ELN 131	Analog Electronics I	4
ELN 133	Digital Electronics	4
MAT 121 or MAT 171	Algebra/Trigonometry I Precalculus Algebra	3-4
NOS 130	Windows Single User	3
	Credit Hours	17-18
Summer		Credit Hours
ELN 232	Introduction to Microprocessors	4
ENG 111	Writing and Inquiry	3
	Credit Hours	7
Second Year		
Fall		Credit Hours
CTS 120	Hardware/Software Support	3
ENG 112 or ENG 114	Writing and Research in the Disciplines Professional Research & Reporting	3
NET 125	Introduction to Networks	3
NET 126	Switching and Routing	3

Programs

Humanities Elective*		3
	Credit Hours	15
Spring		Credit Hours
CSC 134	C++ Programming	3
CTI 141 or ELN 236	Cloud and Storage Concepts Fiber Optics and Lasers	3-4
CTS 220	Advanced Hardware/Software Support	3
NET 225	Enterprise Networking	3
Social/Behavioral Science Elective*		3
	Credit Hours	15-16
	Total Credit Hours	NaN-NaN

Computer Engineering Technology Part-time Pathway

Term 1		Credit Hours
ACA 111	College Student Success	1
ELC 131	Circuit Analysis I	4
	Credit Hours	NaN
Term 2		Credit Hours
ELN 131	Analog Electronics I	4
ELN 133	Digital Electronics	4
	Credit Hours	8
Term 3		Credit Hours
ELN 232	Introduction to Microprocessors	4
	Credit Hours	4
Term 4		Credit Hours
DFT 151	CAD I	3
NOS 110	Operating Systems Concepts	3
SEC 110	Security Concepts	3
	Credit Hours	9
Term 5		Credit Hours
CIS 110	Introduction to Computers	3
MAT 121 or MAT 171	Algebra/Trigonometry I Precalculus Algebra	3-4
NOS 130	Windows Single User	3
	Credit Hours	9-10
Term 6		Credit Hours
ENG 111	Writing and Inquiry	3
	Credit Hours	3
Term 7		Credit Hours
CTS 120	Hardware/Software Support	3
Social/Behavioral Science elective*		3

	Credit Hours	6
Term 8		Credit Hours
CSC 134	C++ Programming	3
CTI 141 or ELN 236	Cloud and Storage Concepts Fiber Optics and Lasers	3-4
CTS 220	Advanced Hardware/Software Support	3
	Credit Hours	9-10
Term 9		Credit Hours
ENG 112 or ENG 114	Writing and Research in the Disciplines Professional Research & Reporting	3
	Credit Hours	3
Term 10		Credit Hours
NET 125	Introduction to Networks	3
NET 126	Switching and Routing	3
	Credit Hours	6
Term 11		Credit Hours
NET 225	Enterprise Networking	3
Humanities elective*		3
	Credit Hours	6
	Total Credit Hours	NaN-NaN

Computer Engineering Technology -Basic Electronics Certificate - C40160BE

First Year		
Fall		Credit Hours
ACA 111	College Student Success	1
DFT 151	CAD I	3
ELC 131	Circuit Analysis I	4
	Credit Hours	NaN
Spring		Credit Hours
ELN 131	Analog Electronics I	4
ELN 133	Digital Electronics	4
	Credit Hours	8
	Total Credit Hours	NaN

Computer Engineering Technology - Hardware/Software Certificate - C40160HS

First Year		
Fall		Credit Hours
ACA 111	College Student Success	1
CTS 120	Hardware/Software Support	3
ELC 131	Circuit Analysis I	4
	Credit Hours	NaN

Programs

Spring		Credit Hours
CTS 220	Advanced Hardware/Software Support	3
NOS 110	Operating Systems Concepts	3
SEC 110	Security Concepts	3
	Credit Hours	9
	Total Credit Hours	NaN

Computer Engineering Technology - CCP

Courses		Credit Hours
CTS 120	Hardware/Software Support	3
ELC 131	Circuit Analysis I	4
ELN 133	Digital Electronics	4
NOS 110	Operating Systems Concepts	3
	Total Credit Hours	NaN