

# PROGRAMS

## COMPUTER ENGINEERING TECHNOLOGY - HARDWARE AND SOFTWARE SUPPORT (A40160SU)

**Pathway Description:** These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

**Computer Engineering Technology:** A course of study that prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computer-controlled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

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.

### Associate in Applied Science Degree Program

		Course Hours Per Week		Semester Hours
First Semester (Fall)		Class	Lab	Credit
ACA-115	Success & Study Skills	0	2	1
CIS-110 or EGR-125	Introduction to Computers or Appl Software for Tech	1	2	2
ELC-131	Circuit Analysis I	3	3	4
NET-125	Introduction to Networks	2	3	3
SEC-110	Security Concepts	2	3	3
<b>Credit Hours</b>		<b>7</b>	<b>13</b>	<b>13-14</b>
Second Semester (Spring)				
ELN-131	Analog Electronics I	3	3	4
ENG-111	Writing and Inquiry	3	0	3
MAT***	MAT-121 or MAT-171	2-3	2	3-4
NET-126	Switching and Routing	2	3	3
NOS-130	Windows Single User	2	2	3
<b>Credit Hours</b>		<b>12-13</b>	<b>10</b>	<b>16-17</b>

		Course Hours Per Week		Semester Hours
<b>Third Semester (Summer)</b>				
ELN-133	Digital Electronics	3	3	4
NOS-120	Linux Single User	2	3	3
PHY-131 or PHY-151	Physics-Mechanics or College Physics I	3	2	4
<b>Credit Hours</b>		<b>8</b>	<b>8</b>	<b>11</b>
<b>Fourth Semester (Fall)</b>				
CET-111	Computer Upgrade/Repair I	2	3	3
CSC-134	C++ Programming	2	3	3
ENG-112 or ENG-114	Writing/Research in the Disc or Prof Research & Reporting	3	0	3
***	Humanities/Fine Arts Elective	3	0	3
<b>Credit Hours</b>		<b>10</b>	<b>6</b>	<b>12</b>
<b>Fifth Semester (Spring)</b>				
CET-211	Computer Upgrade/Repair II	2	3	3
ELN-232	Intro to Microprocessors	3	3	4
***	Social/Behavioral Sciences Elective	3	0	3
***	Technical Elective	0-2	2-30	3
<b>Credit Hours</b>		<b>8-10</b>	<b>8-36</b>	<b>13</b>
Total Required Minimum Semester Hours Credit				65
<b>Technical Electives: Please select one of the following:</b>				
CIS-115	Intro to Prog & Logic	2	3	3
CSC-111	Intro to Ethical Hacking	2	2	3
CTI-140	Virtualization Concepts	1	4	3
CTI-175	Intro to Wireless Technology	2	2	3
ELC-128	Intro to PLC	2	3	3
NET-225	Enterprise Networking	2	3	3
NOS-230	Windows Administration I	2	2	3
SEC-160	Security Administration I	2	2	3
<b>If you choose WBL as a Technical Elective, you must complete 3 Credit Hours from the classes below.</b>				
WBL-111E	Work-Based Learning I	0	10	1
WBL-112E	Work-Based Learning I	0	20	2
WBL-113E	Work-Based Learning I	0	30	3
WBL-115E	Work-Based Learning Seminar I	1	0	1
WBL-121E	Work-Based Learning II	0	10	1
WBL-122E	Work-Based Learning II	0	20	2

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