

# COMPUTER AND NETWORKING TECHNOLOGY - LEVEL II (CERTIFICATE T0726)

## Technology and Health Division

### Certificate T0726

The Computer and Networking Technology Level I and II certificate programs prepare students to become computer and networking service technicians. Courses required for the Level I certificate provide foundations in basic electricity and electronics, operating systems, computer service and troubleshooting, and preparation for the A+ certification examination sponsored by CompTIA and offered at testing centers throughout the country. In addition to the Level I certificate requirements, students seeking the Level II certificate cover computer networks, servers, and customer relations, and will take preparatory courses for the CompTIA Network+, Server+, and Security+ certification exams. These industry certifications are recognized worldwide as benchmarks for the computer and networking technician. Further, students will have requisite skills upon which to seek additional I.T. certifications available for the computer and networking fields.

## Required Courses

Course Prefix	Course Name	Units
	Completion of the Computer and Networking Technology - Level I coursework	29-29.5
PLUS		
	Completion of the Computer and Networking Technology - Level II coursework	16
<b>Total Units</b>		<b>45-45.5</b>

Course Prefix	Course Name	Units
<b>Computer and Networking Technology - Level I Coursework</b>		
CNET 50	Personal Computer (PC) Servicing	4
CNET 52	PC Operating Systems	4
CNET 54	PC Troubleshooting	4
CNET 60	A+ Certification Preparation	2
ELEC 11	Technical Applications in Microcomputers	3-3.5
or CISB 15	Microcomputer Applications	
ELEC 50A	Electronic Circuits - Direct Current (DC)	4
ELEC 50B	Electronic Circuits (AC)	4
ELEC 56	Digital Electronics	4
<b>Total Units</b>		<b>29-29.5</b>

Course Prefix	Course Name	Units
<b>Computer and Networking Technology - Level II Coursework</b>		
CNET 56	Computer Networks	4
CNET 58	Server Systems	4
CNET 62	Network+ Certification Preparation	2
CNET 64	Server+ Certification Preparation	2
CNET 66	Security+ Certification Preparation	2
TECH 60	Customer Relations for the Technician	2
<b>Total Units</b>		<b>16</b>

## Recommended Electives

Course Prefix	Course Name	Units
ELEC 51	Semiconductor Devices and Circuits	4
ELEC 74	Microcontroller Systems	4

Electronics and Computer Technology Website (<http://www.mtsac.edu/electronics/>)

## Program Learning Outcomes

*Upon successful completion of this program, a student will be able to:*

- Apply knowledge of fundamental electronics principles, including voltage, current, and signal levels, to the analysis and troubleshooting of computers and data-communications networks.
- Apply knowledge of computers and their components to the development and implementation of interconnected systems of computers.
- Apply knowledge of computer technology, with an emphasis on hardware, to the development and deployment of complete computer networks.
- Demonstrate an understanding of the physical and logical characteristics needed to support and secure network and server environments.
- Function effectively as a member of a technical team including documenting work, writing clearly and appropriately in an Information Technology context, respecting user data, and considering the ethical consequences of decisions.
- Articulate knowledge of the CompTIA certification processes, including potential exam content, philosophy, and test taking and study strategies.

Review Student Learning Outcomes (SLOs) (<http://www.mtsac.edu/instruction/outcomes/sloinfo.html>) for this program.