

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
Total Units		45-45.5

Course Prefix	Course Name	Units
Computer and Networking Technology - Level I Coursework		
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 or CISB 15	Technical Applications in Microcomputers Microcomputer Applications	3-3.5
ELEC 50A	Electronic Circuits - Direct Current (DC)	4
ELEC 50B	Electronic Circuits (AC)	4
ELEC 56	Digital Electronics	4
Total Units		29-29.5

Course Prefix	Course Name	Units
Computer and Networking Technology - Level II Coursework		
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
Total Units		16

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.

Looking for guidance? A counselor can help. This Guided Pathways for Success (GPS) is a suggested sequence of coursework needed for program completion. It is not an official educational plan. Schedule an appointment (<https://esars2012.mtsac.edu/appointments/counseling/eSARS.asp?WCI=Init&WCE=Settings>) with a counselor or advisor as soon as possible to create an individualized Mountie Academic Plan (MAP) specific to your goals and needs.

Course	Title	Units
Fall Term 1		
CNET 50	Personal Computer (PC) Servicing ⁴	4
ELEC 50A	Electronic Circuits - Direct Current (DC) ⁴	4
ELEC 50B	Electronic Circuits (AC) ⁴	4
Units		12
Spring Term 1		
ELEC 56	Digital Electronics ⁴	4
TECH 60	Customer Relations for the Technician ²	2
Units		6
Summer Term 1		
CNET 60	A+ Certification Preparation ²	2
CNET 62	Network+ Certification Preparation ²	2
Units		4
Fall Term 2		
CNET 52	PC Operating Systems ⁴	4

CNET 54	PC Troubleshooting ⁴	4
Certificate: Comp. Networking Tech, L1 N0478 ⁸		
Submit petition to Admissions Records <small>Submit petition to Admissions Records</small>		
Units		8
Winter Term 2		
CNET 64	Server+ Certification Preparation ²	2
CNET 66	Security+ Certification Preparation ²	2
Units		4
Spring Term 2		
CNET 56	Computer Networks ⁴	4
CNET 58	Server Systems ⁴	4
Certificate: Comp. Netw. Tech (CNET) L2 T0726 ⁶		
Submit permit to Admissions Records <small>Submit permit to Admissions Records</small>		
Units		8
Total Units		42