COMPUTER AND NETWORKING TECHNOLOGY (AS DEGREE S0725)

Technology and Health Division
Degree S0725

The Computer and Networking Technology program prepares students to become computer and networking service technicians. The program provides foundations in basic electricity and electronics, operating systems, computer service and troubleshooting, and customer relations, as well as more advanced training in networks, servers, and security. Students learn to install, configure, maintain, troubleshoot, and repair computers and networks. Students will become fully prepared to take the A+, Network+, Server+, and Security+ certification tests sponsored by CompTIA and offered at testing centers throughout the country. 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. Two certificate programs in Computer and Networking Technology are also available. Please see the "Certificates" section of the college catalog for descriptions and course requirements.

This degree requires the completion of General Education coursework plus the following:

Required Courses

Course Prefix	Course Name	Units
CNET 50	Personal Computer (PC) Servicing	4
CNET 52	PC Operating Systems	4
CNET 54	PC Troubleshooting	4
CNET 56	Computer Networks	4
CNET 58	Server Systems	4
CNET 60	A+ Certification Preparation	2
CNET 62	Network+ Certification Preparation	2
CNET 64	Server+ Certification Preparation	2
CNET 66	Security+ 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
TECH 60	Customer Relations for the Technician	2
Total Units		**45-45.5**

Recommended Electives

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

Electronics and Computer Technology Website (https://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.