



## Computers & Networking Technology

### A.S. Degree and Certificate Program (S0725 & T0726)

Total units for certificate – 45

A.S. Degree program requires certificate courses shown below plus an additional 26 units of general education coursework.

The course sequence below is not the only possible arrangement and assumes you are starting in the Fall.  
See [www.mtsac.edu/electronics](http://www.mtsac.edu/electronics) for more info on class scheduling.

#### 1<sup>st</sup> Semester – 12 Units

<b>Electronics Theory (DC)</b> <b>ELEC 50A*</b> <b>4 Units</b> <b>CSU Transferable</b>	<b>Electronics Theory (AC)</b> <b>ELEC 50B*</b> <b>4 Units</b> <small>(advisory ELEC50A)</small> <b>CSU Transferable</b>	<b>PC Servicing</b> <b>CNET 50**</b> <b>4 Units</b>
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#### 2<sup>nd</sup> Semester – 6 Units

<b>Customer Relations for the Technician</b> <b>TECH 60</b> <b>2 Units</b>	<b>Digital Electronics</b> <b>ELEC 56*</b> <b>4 Units</b> <b>CSU Transferable</b>
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#### Summer Semester – 4 Units

<b>A+ Certification Preparation</b> <b>CNET 60</b> <b>2 Units</b>	<b>Network+ Certification Preparation</b> <b>CNET 62</b> <b>2 Units</b>
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#### 3<sup>rd</sup> Semester – 11 Units

<b>PC Operating Systems</b> <b>CNET 52**</b> <b>4 Units</b>	<b>PC Troubleshooting</b> <b>CNET 54**</b> <small>(advisory CNET50)</small> <b>4 Units</b>	<b>Technical Applications in Microcomputers</b> <b>ELEC 11</b> <b>3 Units</b> <b>CSU Transferable</b>
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#### Winter Semester – 4 Units

<b>Server+ Certification Preparation</b> <b>CNET 64</b> <b>2 Units</b>	<b>Security+ Certification Preparation</b> <b>CNET 66</b> <b>2 Units</b>
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#### 4<sup>th</sup> Semester – 8 Units

<b>Computer Networks</b> <b>CNET 56</b> <small>(advisory CNET54)</small> <b>4 Units</b>	<b>Server Systems</b> <b>CNET 58</b> <small>(advisory CNET54 and CNET56) CNET56 can be taken concurrently</small> <b>4 Units</b>
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#### Other HIGHLY Recommended Courses:

<b>ELEC 51 Electronic Devices 4 Units</b>
<b>ELEC 74 Microcontroller Systems 4 Units</b>



\*After completing ELEC 50A, 50B, and 56, students qualify to receive the Electronics Technology Level 1 Certificate. (M0679)

\*\*After completing CNET 50, 52, and 54, students qualify to receive the Computer Networking Technology Fundamentals Certificate (M0682)

For more info including our future class offerings and class scheduling, see:

**[www.mtsac.edu/electronics](http://www.mtsac.edu/electronics)**

# Computers and Networking Technology

The Computers and Networking Technology A.S. Degree and mini-certificates (Level I & II) prepare students to become computer and networking service technicians. The program provides foundations in basic electricity and electronics, operating systems, and computer service and troubleshooting, 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. Mt. SAC is an authorized testing center for CompTIA license examination. 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.

The major consists of 45 semester units of required courses, comprising 648 hours of classroom instruction and 486 hours of laboratory work. Students will receive specialized training on the following hardware and software:

- PCs with single-, dual-, and quad-core processors
- Servers and workstations
- Network interface cards
- Hubs and gateways
- Uninterruptible power supplies
- Laser & inkjet printers
- Multimedia sound cards
- Network analyzer (Fluke)
- Cable/DSL routers
- Wireless networks
- Modems
- Patch panels
- LAN toolkits
- Print servers
- DVD/RW
- CD/RW
- RAID controllers
- Firewalls
- Dual CPU motherboards
- Bridges, routers, switches, and repeaters
- Operating systems

A course in customer service training is provided to help meet the needs of service technicians working with customers.