The Computer Support Specialist program is designed to prepare students to function as computer professionals in multiple technical, business, and healthcare settings. Computer technicians serve many technical support and IT operation roles with job titles such as Support Specialist, Field Service Technician, Desktop Support Analyst, and Help Desk Tier 2 Support. Net+ technicians serve many technical support and IT operation roles with job titles such as Network Administrator, Network Field Technician, System Engineer, IS Consultant, Help Desk Technician, Network Support Specialist, and Network Analyst.

The purpose of this program is to prepare students to support computer users by configuring, troubleshooting, managing wired and wireless networks, and problem-solve computer issues, and connect users to the data they need to do their jobs regardless of the devices being used. This program will also prepare students to support the IT infrastructure through installing and configuring systems to secure applications, networks, and devices as well as perform threat analysis and respond with appropriate mitigation techniques.

This course covers the following key areas and topics:

- **Hardware**: Identifying, using, and connecting hardware components and devices
- **Software Troubleshooting**: Troubleshooting PC and mobile device issues including application security support
- **Networking**: Understanding types of networks and connections including TCP/IP, WIFI, and SOHO
- **Mobile Devices**: Installing and configuring laptops and other mobile devices
- **Other OS and Technologies**: Understanding the Mac OS, Linux, and mobile OS
- **Networking Concepts**: Understanding the purpose of a variety of networking concepts and implementing them appropriately
- **Infrastructure**: Determining the appropriate cabling, device, and storage technologies for a given situation
- **Network Operations**: Using the best practices to manage the network
- **Network Security**: Understanding the common network attacks and securing wired and wireless networks
- **Network Troubleshooting**: Effectively implementing network troubleshooting methodologies

**Education & Certification**

- The CompTIA A+ student should have or be pursuing a high school diploma or GED.
- Students who complete this comprehensive course would be prepared to sit for CompTIA’s A+ Certification Exams Core 1 (Exam 220-1001) and Core 2 (Exam 220-1002) as well as CompTIA’s Network+ Exam (Exam N10-007).
- In addition to facilitating entry-level computer technician positions, this course is ideal for students interested in pursuing subsequent certifications such as the Net+, Sec+, cybersecurity, computer infrastructure, and advanced certifications.
- Students are eligible for an optional externship with a local employer after successful course completion.

**Detailed Course Topics Covered**

- Installing and configuring hardware and components
- Installing, configuring, and maintaining devices, PCs, and software for end users
- Installing, configuring, maintaining, and synchronizing mobile devices
- Understanding and applying the basics of network security/forensics
- Properly and safely diagnosing, resolving, and documenting common hardware and software issues
- Applying and documenting effective troubleshooting thought processes and skills
- Providing appropriate and excellent customer support and service
- Understanding the basics of virtualization, desktop imaging, and deployment
- Communicating effectively and professionally with clients, colleagues, subordinates, and supervisors to achieve the organization’s goals involving computer support and IT operations
The Computer Security Technician program is designed to prepare students to function as computer professionals in multiple technical, business, and healthcare settings. Sec+ technicians serve many technical support and IT operation roles with job titles such as Systems Administrator, Security Administrator, Junior IT/Auditor, Penetration Tester, and Security Consultant as well as Network Field Technician, Help Desk Technician, and Network Support Specialist.

The purpose of this program is to prepare students to support the IT infrastructure through installing and configuring systems to secure applications, networks, and devices as well as perform threat analysis and respond with appropriate mitigation techniques. It also prepares students to learn to manage, maintain, troubleshoot, install, operate, and configure basic network infrastructure as well as describe networking technologies, understand basic design principles, adhere to wiring standards, and use testing tools. This course covers the following key areas and topics:

- Threats, Attacks, and Vulnerabilities: Detecting various types of network compromises and develop a plan to secure the network
- Testing: Appropriately use penetration testing and vulnerability scanning tools and concepts
- Identity and Access Management: Installing and configuring identity and access services, including management controls
- Technologies and Tools: Installing, configuring, deploying, and troubleshooting network components while assessing and troubleshooting issues to support organizational security
- Risk Management: Implementing and summarizing risk management best practices and the business impact
- Architecture and Design: Implementing secure network architecture concepts and system design
- Cryptography and PKI: Installing and configuring wireless security settings and implementing public key infrastructure

Education & Certification
- The CompTIA Sec+ student should have or be pursuing a high school diploma or GED and have successfully completed CompTIA’s Net+ training or have 24 months’ experience of networking support or IT administration.
- Students who complete this comprehensive course would be prepared to sit for CompTIA’s Security+ Certification Exam (Exam SY0-501) and Network+ exam (Exam N10-007).
- In addition to facilitating entry-level computer technician positions, this course is ideal for students interested in pursuing subsequent certifications such as CompTIA Cybersecurity Analyst, CompTIA Advanced Security Practitioner, and other information security certifications.
- Students are eligible for an optional externship with a local employer after successful course completion.

Detailed Course Topics Covered
- Designing, implementing, configuring, managing, and maintaining networks and network devices
- Troubleshooting network problems
- Identifying strategies developed by cyber adversaries to attack networks and hosts and the countermeasures deployed to defend against them
- Applying the principles of organizational security and the elements of effective security policies
- Applying the technologies and uses of cryptographic standards and products
- Installing and configuring network- and host-based security technologies
- Enforcing wireless and remote access security
- Applying the standards and products used to enforce security on web and communications technologies
- Implementing strategies for ensuring business continuity, fault tolerance, and disaster recovery
- Identifying application and coding vulnerabilities and the development and deployment methods designed to mitigate them
- Communicating effectively and professionally