

# Career Technical Education Computer Systems Technology Programs



The Ventura Adult and Continuing Education (VACE) Computer Systems Technology programs are designed to prepare students for employment in computer support, information technology and network security fields.

Instruction involves operating systems fundamentals, hardware troubleshooting and repair, network installation, configuration and administration, and core cybersecurity skills. An emphasis is placed on giving the students significant experience in hands-on work.

Students gain the confidence needed to perform successfully in the workplace due to the amount

of time they work with computers and solve problems in class.

Whether the goal of a student is to become a Computer Repair Technician, Systems Administrator, or cybersecurity professional, these courses will provide the fundamental skill set to achieve these goals. Graduates are prepared to provide valuable services and transition into the ever-changing world of technology.

At the conclusion of each program, students prepare for internationally recognized industry certification exams. VACE is also a certified Microsoft IT Academy institution.

**“New knowledge is the most valuable commodity on earth. The more truth we have to work with, the richer we become.”**

Kurt Vonnegut

# Career Technical Education Computer Systems Technology Programs

CBEDS Code 4633 Computer Repair and Support

## Computer Support Technician



22 Weeks (770 hours)

### ELEMENTS:

- Command Line Interface (CLI)
- Windows Fundamentals
- Computer Repair 1
- Computer Repair 2
- Network Fundamentals 1
- Network Fundamentals 2
- Network Fundamentals 3
- A+ Exam Preparation 1
- A+ Exam Preparation 2

### OPTIONAL COURSE ENHANCEMENTS:

CompTIA Network+ Exam Preparation

### EMPLOYMENT OPPORTUNITIES:

Computer Repair Technician  
Computer Service Technician  
Computer Specialist  
Field Service Technician  
Help Desk Support  
IT Specialist  
IT Technical Support  
PC Technician

### COURSE INFORMATION:

The Computer Support Technician Program provides training for both new and experienced students, giving them the skills needed to gain employment in a variety of industries. Designed for students with little or no previous computer experience, the course prepares students for entry-level employment.

The course teaches computer operating systems, computer hardware and software, and prepares students for the CompTIA A+ Industry certification. The A+ Certification is an entry point to the start of a graduate's career in the exciting field of information technology. The course also includes network concepts, TCP/IP fundamentals, printer fundamentals, and virtualization.

Students will build, upgrade, and troubleshoot a computer's hardware. Students will be able to identify and explain the purpose of a computer's internal components including type of CPU, RAM, and hard drive. The course also covers basic network setup and WiFi connectivity.

I appreciated the structure and resources provided to study and take the CompTIA exams. Anyone can take these through self-study and I was tempted to do that and save about \$8k. However, the ability to be around others pursuing the same thing, while making contacts and receiving career placement/help/advice, was worth the investment to me. I think the Job Placement Workshops and the relationships established are invaluable. The BEST part is that I literally achieved a set of highly desirable industry certifications in under a year and can look forward to a new start.

*Dustin C.*

*Network Security Technician Student, 2023*



For a complete list of program fees, see page 34

# Career Technical Education Computer Systems Technology Programs

CBEDS Code 4646 Network Security

## Network Security Technician



**38 Weeks (1330 hours)**

### ELEMENTS:

- Command Line Interface (CLI)
- Windows Fundamentals
- Computer Repair 1
- Computer Repair 2
- Network Fundamentals 1
- Network Fundamentals 2
- Network Fundamentals 3
- Network Fundamentals 4
- Network Fundamentals 5
- A+ Exam Preparation 1
- A+ Exam Preparation 2
- Network+ Exam Preparation
- Security+ Exam Preparation

### OPTIONAL COURSE ENHANCEMENTS:

Microsoft MCTS Exam Preparation

### EMPLOYMENT OPPORTUNITIES:

Information Systems Administrator  
IT Specialist  
Network Technician  
Network Administrator  
System/Network Engineer  
Technical Support Engineer/Specialist  
Technical Consultant

### COURSE INFORMATION:

The Network Security Technician program offers comprehensive training for students with little or no previous computer network or security experience as well as for experienced computer users, giving them the skills and training they need to enter today's competitive job market and start their careers in computer technology and network security. Cyber attacks have become commonplace, impacting business and other computer networks. There is a growing need for computer technicians with the skills to maintain secure networks, safeguard information, and address potential vulnerabilities.

The Network Security Technician program will cover all of the material in the Computer Support Technician and Network Systems Technician courses and add to that a study of computer security along with preparing the student for the CompTIA Security+ certification exam. The course covers topics essential to computer security, including cryptography and PKI, network security design, wireless security, client and application security, mobile device security, and risk management.

Students prepare for the CompTIA A+, CompTIA Network+, and CompTIA Security+ certification exams. These internationally recognized industry certifications serve as benchmarks that show expertise and proof of mastery of the latest technologies in the information technology field.



For a complete list of program fees, see page 34

# Career Technical Education Computer Systems Technology Programs

CBEDS Code 4604 Network Engineering

## Network Systems Technician



32 Weeks (1120 hours)

### ELEMENTS:

- Command Line Interface (CLI)
- Windows Fundamentals
- Computer Repair 1
- Computer Repair 2
- Network Fundamentals 1
- Network Fundamentals 2
- Network Fundamentals 3
- Network Fundamentals 4
- Network Fundamentals 5
- A+ Exam Preparation 1
- A+ Exam Preparation 2
- Network+ Exam Preparation

### OPTIONAL COURSE ENHANCEMENTS:

CompTIA Security+ Preparation

### EMPLOYMENT OPPORTUNITIES:

Computer Specialist  
Computer Systems Trainer  
Field Service Technician  
Help Desk Support  
Network Administrator  
Network Support Technician  
PC Technician/Technical Support  
System Administrator

### COURSE INFORMATION:

The Network Systems Technician program is designed for students who want to work with computer networks. This course includes all the components in the Computer Repair Technician program and expands on it with a greater focus on computer networks. Students set up and work with peer-to-peer and client server networks, configuring both workgroups and domains.

The course teaches the fundamentals of computer operating systems, hardware troubleshooting and repair, as well as network installation, configuration, and administration. The course involves hands-on assignments and allows the student to gain the skills needed to perform successfully in the workplace and meet the demands of ever-advancing technology.

Students prepare for the CompTIA A+ and Network+ Exams. The CompTIA A+ exam certifies expertise in computer hardware and operating systems while the CompTIA Network+ exam certifies strong knowledge of computer networks. Both certifications are internationally accepted and provide a competitive edge in today's job market.



For a complete list of program fees, see page 34