



# Computer Networking & Repair/ Technical Electronics



accredited by Cisco Systems and International Society of Certified Electronics Technicians (CompTia)

COMPUTER NETWORKING consists of instruction in repairing computers and installing operating systems and networking. Students completing this course will learn to test, troubleshoot, install, and repair computer equipment and networks. Students will learn to upgrade computer hardware and install software in preparation to enter this expanding technical field. Another component of this course is digital electronics, logic circuits, and their application to computers.

TECHNICAL ELECTRONICS consists of instruction and practice in basic electronic theory with emphasis on circuit analysis and construction. Students learn electronic principles through theoretical class discussions coupled with experimentation and computer-aided instruction.

## Work Environment

Computer repair technicians troubleshoot and repair computer equipment at homes, industrial sites, or offices. Electronic Technicians experiment, design, fabricate, and test a variety of circuits utilizing electronic instruments.

## Career Opportunities

Computer Repair Technicians  
Computer Equipment Repairperson  
Engineering Assistant  
Field Technician  
Communications Technician  
Electrical Assembler  
Electronic Equipment Repairperson  
Electronic Field Technician  
Electronics Marketing  
Engineer Design Assistant  
Inspector

## Advanced Standing Available\*

Briarcliffe College  
Monroe College  
Pennsylvania College of Technology  
SBI Campus  
SUNY Canton  
SUNY Farmingdale  
Vaughn College

\*Advanced Standing may be available to those who successfully complete this Tech course. See Articulation Agreements on page 41.

## Employment Outlook

There is a large demand, at present, for Computer Repair Technicians, Internet Technicians and Electronic Technicians with growth expected to increase much faster than in other careers. Advanced study in this industry would lead to

promotional opportunities.

**Starting Salary:** Entry-level wages average \$320-\$540/week, depending on ability, education, and experience.

## Student Supplies (approx. \$30)

1. Scientific calculator
2. Small handtools

## Helpful Preparatory Courses

- Math
- Science

## Academic credits integrated:

See chart, page 26

## CTE Endorsement

In order to be granted the Technical Diploma endorsement, students must successfully meet the academic and attendance criteria for a two-year Wilson Tech Certificate of Completion, including Career and Financial Management (CFM), and pass the following national certification exam: COMPTIA Network+ exam or the National Occupational Competency Testing Exam (NOCTI) - Electronic Technology Exam.

## Course Outline

- Comptia A+ Certification
- Game Console Repair
- Introductory Electronics
- Digital Electronics Concepts
- Computer Software Application
- Network Cabling
- Troubleshooting and Diagnosis
- Computer Components/Installation
- Computer Peripherals
- Telecommunication

- Routers and Switching Devices
- Introduction to Computer Networks
- Advanced Networking
- Network+ Certification
- Cisco Certified Network Associate
- Test Equipment
- Power Supplies
- Solid State Circuits
- Transmitters/Receivers
- Audio Amplification
- Digital Concepts and Circuits
- Digital Test Equip.
- Computer Hardware Upgrades
- Computer Software
- Solar Panel Electronic Systems
- Home Theatre Design

## Consider these classes at Tech

- Audio Production
- Computer Technology for Business
- Construction Electricity
- Electronic Manufacturing\*
- Video Production

All placements are based upon individual needs and approval from the district and parent/guardian.

\*Smaller class size.