

Career Majors in Technical Occupations

Computer and Business Skills

Computer Networking

Electronics/Robotics/Computer Repair



Computer & Business Skills

Certiport Authorized Testing Center



COMPUTER and BUSINESS SKILLS will provide students with the opportunity to immerse themselves into a virtual work environment. This program will explore, simulate and analyze the different skills necessary for a business to be successful. Students will actually visit other businesses (Tech programs) in order to discover business needs and, at a basic level, apply organizational strategies to the "businesses" explored. Students will have the opportunity to experience working for both service and product-focused businesses. In addition, students will be provided with instruction in basic money management on a personal and business level. Opportunities will be available for students to work together as entrepreneurs and provide the school with a service or product for their enjoyment.

Work Environment

Today, most large and small companies require their employees to have skills in using personal computers and to have an understanding of business applications.

Workspaces are usually located in well-lighted, comfortable areas. Workers will be expected to participate in group projects as well as work individually.

Career Opportunities

Knowledge and skills obtained from this program can be applied to all fields in which computer applications, office knowledge and business skills are utilized. Office work, clerical duties, basic computer programs, telephone skills, customer services are some of the skills required.

Advanced Standing Available*

Berkeley College
Dowling College
Five Towns College
Monroe College
New England Institute of Technology

*Advanced Standing may be available to those who successfully complete this Tech course. See Articulation Agreements in Handbook.

Student Supplies

1. 1gb or higher flash drive

Academic credits integrated:

Tech Math, Tech Phys Sci, Eng 12, Eco, CFM, Comp App

CTE Endorsement

Students must successfully meet the academic and attendance criteria for a two-year Wilson Tech Certificate of Completion, be High School diploma eligible and pass the following national certification exam: Microsoft Office Specialist Exam (MOS).

Average Annual Wage

National entry-level to experienced:

\$22,810 - \$34,500

NY entry-level to experienced:

\$21,960 - \$36,200

For more information:

www.careerzone.ny.gov

Helpful Preparatory Courses

Keyboarding

Course Outline

Advertising
Basic Record Keeping
Co-Worker Collaborations
Customer Service
Data Entry
Entrepreneurship
Interpersonal/ Communication Skills
Job Interview Skills
Microsoft Office Instruction
Office Routines
Paychecks
Record Keeping
Resume Development
Telephone Skills
Using/ Creating forms
Workplace Professionalism



Computer Networking

CompTIA Academy Partner Program



COMPUTER NETWORKING consists of instruction in operating systems and networking. This class will provide opportunities for students to test, troubleshoot, and install computer equipment and networks. Instruction will be provided in upgrading computer hardware and installing software in preparation to enter this expanding technical field. Students taking this advanced 2nd year class are typically provided a foundation in Electronics/Robotics/Computer Repair during their 1st year at Tech.

Pre-requisite

Students must successfully complete the Electronics/ Robotics/ Computer Repair program during their junior year.

Work Environment

This is a service-related job in which technicians troubleshoot, install and configure network devices in homes, industrial sites or offices. A workweek will vary from 37 hours to 40 hours and is generally performed during a daytime shift. Technicians may be required to travel.

Career Opportunities

Junior Network Administrator
Network Field Technician
Network Technician

Advanced Standing Available*

Island Drafting and Technical Institute
Monroe College
Pennsylvania College of Technology
SUNY Canton

*Advanced Standing may be available to those who successfully complete this Tech course. See Articulation Agreements in Handbook.

Student Supplies

No specific supplies are required.

Academic credits integrated:

Tech Math, Tech Phys Sci, Eng 12, CFM, Comp App

Technical Diploma Endorsement

Students must meet the academic and attendance criteria for a two-year Wilson Tech Certificate of Completion, be High School diploma eligible, and pass the national Certification exam: CompTIA Networking & Certification Exam.

Average Annual Wage

National entry-level to experienced:
\$56,470 - \$92,370

NY entry-level to experienced:
\$53,340 - \$97,970

For more information:
www.careerzone.ny.gov

Course Outline

Introduction to Networking
Networking Fundamentals
Networking Media
Cabling LAN and WAN
IP Addressing
Routing Fundamentals and Subnetting
Routing and Protocols
Access Control Lists
Switching Concepts
Switches
Switches Configuration
Virtual LANS
VLAN Trunking Protocol
Scaling IP Addresses
WAN Technologies
VOIP – Voice Over IP
Introduction to Network Administration
Network+ Certification



Electronics/Robotics/Computer Repair

ELECTRONICS/ROBOTICS/COMPUTER REPAIR program consists of a first year of instruction and practice in basic electronic theory with emphasis on circuit analysis and construction. Students will be provided with opportunities to learn electronic principles through theoretical class discussions coupled with experimentation and computer-aided instruction. Students will be introduced to Robotic Concepts and Kit Building. After the 1st year of instruction, students who successfully pass this class may advance to the 2nd year of Computer Networking.

Work Environment

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

Career Opportunities

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

Student Supplies

1. Scientific calculator
2. Small hand-tools
3. ESD wrist strap

Helpful Preparatory Courses

Math
Science

Academic credits integrated:

Tech Math, Tech Phys Sci, Eng 12, CFM, Comp App

Average Annual Wage

National entry-level to experienced:
\$28,330 - \$46,530
NY entry-level to experienced:
\$29,350 - \$49,500
For more information:
www.careerzone.ny.gov

Course Outline

Game Console Repair
Introductory Electronics
Digital Electronics Concepts
Computer Software Application
Network Cabling
Troubleshooting and Diagnosis
Computer Components/ Installation
Computer Peripherals
Telecommunication
Introduction to Robotics
Routers and Switching Devices
Introduction to Computer Networks
Test Equipment
Power Supplies
Solid State Circuits
Transmitters/ Receivers
Audio Amplification
Digital Concepts and Circuits
Digital Test Equipment
Computer Hardware Upgrades
Computer Software
Solar Panel Electronic Systems
Home Theatre Design.