

# Broadband Technician

## Core IT Pathway



In a world dependent on communication via cable and internet, Broadband Technicians play a vital role. They install, maintain and troubleshoot telecommunications networks and equipment. The Broadband Technician’s job also includes testing and configuring operating systems, repairing hardware, performing preventive maintenance and applying security measures to ensure that customer needs are met. As communication and collaboration across broadband networks

continues to grow, companies rely on broadband technicians to support the critical communications that keep organizations and communities connected.

**4 Courses, 5 Certifications, 8 Credits**

**254 Hours**

**Foundations in Information Technology**

**Network Installation, Security and Maintenance**

**Client and Server Technician Fundamentals Foundations in Fiber Optics**

**5 Certifications\***

**CompTIA | Microsoft**

CompTIA IT Fundamentals+

CompTIA A+

Microsoft Azure Fundamentals

Microsoft Security, Compliance, and Identity Fundamentals

CompTIA Network+

### Project

Students will install and troubleshoot a small enterprise branch network using Cisco simulation software with a Windows server virtualization.

#### Certificate of Completion

Students who pass all the courses and pass at least 50% of the certification exams receive a **Certificate of Completion** that represents successful completion of Network Technician program.

#### College Credits

Whether or not you plan to continue your formal education immediately after completing a NuPaths’ program, you’ll earn college credits that you can apply toward a college degree. Students have the potential to earn up to **8 college credits** in the Network Technician program.

## Course Descriptions

### Foundations in Information Technology

The course focuses on the basics of computer hardware, software, mobile computing, networking, troubleshooting, and emerging technologies. Students learn about configuring operating systems, file and folder management, networks and network configuration, and the role of the OSI model in networking and troubleshooting. A fundamental understanding of computer hardware, operating systems, computer application software, networking technologies and protocols, web browsers, identifying security risks, troubleshooting errors, and system maintenance is gained. The course also includes an exploration of cutting-edge technologies such as cloud computing and virtualization.

### Client and Server Technician Fundamentals

The course covers the principles of installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, and preventative maintenance on desktop, laptop, and server computers. Managing cloud services and storage with Microsoft Azure, along with monitoring and troubleshooting services is included. Windows Network Services and Applications are also addressed. Elements of customer service and communication skills are also explored.



### Network Installation, Security and Maintenance

Learn to design, implement, and analyze functional networks by configuring, managing, securing, and maintaining essential network devices. Security layers, authentication, authorization, and accounting are explored, along with network security to protect the Server and Client.

### Foundations in Fiber Optics

The course addresses the essential tools used by installers and technicians for use with fiber optic splicing, termination methods, cable configurations, and network testing. A portion of this course will require in-person attendance.

## Technology Experience Gained

Operating systems . Anti-malware software . Productivity software . Browser software . Backup software  
Wireless router/switch . Printers . Antivirus software . Azure. Cloud. Virtualization software . Software drivers . Windows . Mac . Linux . Monitors . Projectors . Access points . Surge suppressor . UPS Windows Server Virtualization . Windows System Center . External storage . Mobile devices

\*Third party certification providers give certification exams that must be successfully completed as per their requirements.

#### NuPaths, LLC

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