IT Network Technician Program

Admission Requirements: Students must be 18 years of age or older at the time of enrollment, must present a valid ID for verification, and must present evidence of completing high school or high school equivalency.

Program Description: The IT Network Technician Certification Program is an immersive and accelerated training program with a focus on creating the next generation of IT professionals. You will attend courses, do hands on labs, and apply your learning to successfully complete projects that address different topics such as Computer hardware, software, and networking fundamentals. Throughout the program you will interact with experts who will guide you through the program, answer questions, and help with labs and projects. The program will end with a capstone project where you will apply your learnings to real life information technology challenges. This is a 12-weeks program that includes 10 weeks of certification training and 2 weeks for exam preparation. Graduates of this program will learn critical skills for different information technology careers and will have access to career services as well.

Prerequisites: This program is aimed at those considering a career in IT and computer-related fields. There are no prerequisites for you to meet to successfully start this course.

Objectives:

This program covers following topics:

Computer/ Systems Fundamentals

- Hardware architecture
- Operating Systems (Windows and Linux)
- Install, configure, and maintain operating systems.
- Install, configure, and troubleshoot internal system components.
- Install, configure, and troubleshoot display and multimedia devices.
- Configure and troubleshoot network connections.
- Maintain and troubleshoot Microsoft Windows.
- Implement physical security.
- Implement client virtualization and cloud computing.
- Manage users, workstations, and shared resources.

Networking Fundamentals

- Explain what bounded networking media is
- Identify major network communication methods along with basic network theory concepts.
- Explain what unbounded network media is
- Identify TCP/IP data delivery and addressing methods
- Analyze switching and routing technologies
- Identity the major kinds of network deployments
- Identify TCP/IP deployment components

- Deploy network security
- Analyze network security
- Identify virtualization and cloud computing components
- Identity WAN deployment components
- Identify remote network deployment components
- Troubleshoot and manage networks

Program Outline:

CIP Number: 11.0901

Code	Course		Lecture	Lab	Total Hours
ITNP	CompTIA A+		16	14	30
ITNP	CompTIA Net+		12	24	36
Total Hours		28	38	66	

Associated Industry Certifications*:

CompTIA A+, CompTIA Network+

^{* 1} Examination voucher included. It is the student's responsibility to take all certification exams within twelve months of completion of their original program completion date at that time, all exam vouchers expire. All extensions must be approved by the school director.

	4
Program Fee*:	\$4,000

^{*(}Inclusive of registration, tuition fee, 1 exam cost, curriculum guides)

Cost Per Single Subject*: N/A

Class Schedule: This program is offered on-demand with optional weekly hours scheduled with course mentors. Students may access their program and complete coursework at any time within their enrollment term.

Instructional Methods: 1. Lecture 2. Laboratory

Class Dates: This program is offered on-demand with optional weekly hours scheduled with course mentors. Students may access their program and complete coursework at any time within their enrollment term.

See the school catalog for student technology requirements for online participation and school holidays and office hours.

ITNP: IT Network Technician Program

Subject Description:

1. CompTIA A+

The CompTIA A+ covers the following content:

- Increased reliance on SaaS applications for remote work
- More on troubleshooting and how to remotely diagnose and correct common software, hardware, or connectivity problems
- Changing core technologies from cloud virtualization and IoT device security to data management and scripting
- Multiple operating systems now encountered by technicians on a regular basis, including the major systems, their use cases, and how to keep them running properly
- Reflects the changing nature of the job role, where many tasks are sent to specialized providers as certified
 personnel need to assess whether it's best to fix something on site, or to save time and money by sending
 proprietary technologies directly to vendors

2. CompTIA Network+

CompTIA Network+ validates the technical skills needed to securely establish, maintain and troubleshoot the essential networks that businesses rely on.

- Establish network connectivity by deploying wired and wireless devices.
- Understand and maintain network documentation.
- Understand the purpose of network services, basic datacenter, cloud, and virtual networking concepts.
- Monitor network activity, identifying performance and availability issues.
- Implement network hardening techniques.
- Manage, configure, and troubleshoot network infrastructure.

Subject Hours:

Lecture-28 / Lab-38 / Total - 66

Prerequisites:

This program is aimed at those considering a career in IT and computer-related fields. There are no prerequisites for you to meet to successfully start this course

Objectives:

Computer/ Systems Fundamentals

- Hardware architecture
- Operating Systems (Windows and Linux)
- Install, configure, and maintain operating systems.
- Install, configure, and troubleshoot internal system components.

- Install, configure, and troubleshoot display and multimedia devices.
- Configure and troubleshoot network connections.
- Maintain and troubleshoot Microsoft Windows.
- Implement physical security.
- Implement client virtualization and cloud computing.
- Manage users, workstations, and shared resources.

Networking Fundamentals

- Explain what bounded networking media is
- Identify major network communication methods along with basic network theory concepts.
- Explain what unbounded network media is
- Identify TCP/IP data delivery and addressing methods
- Analyze switching and routing technologies
- Identity the major kinds of network deployments
- Identify TCP/IP deployment components
- Deploy network security
- Analyze network security
- Identify virtualization and cloud computing components
- Identity WAN deployment components
- Identify remote network deployment components
- Troubleshoot and manage networks

Required textbook(s): Not applicable.

Instructional Methods: 1 Lectures

2. Lab simulations

Student/Instructional Ratios: 18:1

Materials and Media Refences: Not Applicable

Content Outline:

Week 1

CompTIA A+: Installing System Devices

CompTIA A+: Troubleshooting PC Hardware

CompTIA A+: Comparing Local Networking hardware

CompTIA A+: Configuring Network Addressing and Internet Connections

Week 2	CompTIA A+: Supporting Network Services CompTIA A+: Summarizing Virtualization and Cloud Concepts CompTIA A+: Supporting Mobile Devices CompTIA A+: Supporting Print Devices			
Week 3	CompTIA A+: Configuring Windows CompTIA A+: Managing Windows			
	CompTIA A+: Identifying OS Types and Features			
	CompTIA A+: Supporting Windows			
	CompTIA A+: Managing Windows Networking			
	CompTIA A+: Managing Linux and macOS			
Week 4	CompTIA A+: Configuring SOHO Network Security			
	CompTIA A+: Managing Security Settings			
Week 5	CompTIA A+: Supporting Mobile Software			
	CompTIA A+: Using Support and Scripting Tools			
	CompTIA A+: Implementing Operational Procedures			
	CompTIA Network+: Comparing OSI Model Network Functions			
Week 6	CompTIA Network+: Deploying Ethernet Cabling			
	CompTIA Network+: Deploying Ethernet Switching			
	CompTIA Network+: Troubleshooting Ethernet Networks			
	CompTIA Network+: Explaining IPv4 Addressing			
Week 7	CompTIA Network+: Supporting IPv4 and IPv6 Networks			
	CompTIA Network+: Configuring and Troubleshooting Routers			
	CompTIA Network+: Explaining Network Topologies and Types			
	CompTIA Network+: Explaining Transport Layer Protocols			
Week 8	CompTIA Network : Explaining Network Applications			
	CompTIA Network+: Explaining Network Applications CompTIA Network+: Ensuring Network Availability			
	CompTIA Network+: Explaining Common Security Concepts			
	CompTIA Network+: Supporting and Troubleshooting Secure Networks			
Week 9	CompTIA Network+: Deploying and Troubleshooting Wireless Networks			
	CompTIA Network+: Comparing WAN Links and Remote Access Methods			
	CompTIA Network+: Explaining Organizational and Physical Security Concepts			
Week	CompTIA Network+: Explaining Disaster Recovery and High Availability Concepts			
10	CompTIA Network+: Applying Network Hardening Techniques			
	CompTIA Network+: Summarizing Cloud and Datacenter Architecture			
Week 11	EXAM Preparation			
Week 12	EXAM Preparation			

Grading and Certificate of Completion: Grades are assessed based on the student's attendance, online lab completions, and offline projects.

90%+ A – Excellent 80-89.9% B – Good 70-79.9% C – Satisfactory 60-69.9% D – Below Average Below 60% F – Very Poor/Fail I – Incomplete

- Attendance = 75% of grade
- Successful completion of labs = 15% of grade
- Projects/post-class assessment = 10% of grade

Upon program completion with a passing grade, students will receive a certificate of completion. Students are highly encouraged to take the industry-standard exam to receive a certification credential through the granting body or vendor.

See the school catalog for student technology requirements for online participation and school holidays and office hours.