# CompTIA Network+ N10-008 Exam Prep
## Florida Cybersecurity Training Program
## Offered by the University of West Florida Center for Cybersecurity

## Course Overview

**Course / Cyber Skills Exercise Dates:** September 16 – November 15, 2024

**Cyber Skills Exercise Times:** N/A

**Duration:** 9 weeks. 8 course weeks. 1 test week.

**Estimated Time Commitment:** 20 hours per week for individuals with pre-requisite knowledge; 20+ per week for individuals with no prior professional experience or technical education.

**Instructional Hours:** 40 contact hours

**Delivery Format:** Asynchronous online with weekly instructor Zoom sessions.
- Orientation September 16, 2024, 6-7 p.m. CST; 7-8 p.m. EST. (Recorded)
- Weekly Meetings on Wednesday, 6-7 p.m. CST; 7-8 p.m. EST. (Recorded)

**Target Audience:** Entry-level IT practitioners (1+-years' experience recommended), college graduates/students in hands-on IT degree/certificate/vocational programs, uniformed and civilian personnel subject to DoD Regulation 8570/8140.

**Required Prerequisites / Background:** CompTIA A+ Certification and a minimum of 9-12 months of hands-on experience working a junior network administration/network support technician job role. Source CompTIA https://www.comptia.org/certifications/network#examdetails

**CEU's:** 4.0, **CPE's:** 48

**Course Instructor**

| Instructor | Email Address |
|---|---|
| Guy Garrett, M.S., M.B.A. | ggarrett@uwf.edu |

## Course Description

This course has one purpose – preparing you to take and pass the CompTIA Network+ exam. The goal is mastering concepts, terminology, processes, and procedures to the point that you can accurately apply them to various situations.

**What is Network+**

Network+ certification is the vendor-neutral dominant entry-level IT certification – one million+ are already Network+ certified. It is an ideal starting point for new career entrants, career changers but also existing Networking Administrators that want more credibility to achieve better employability and higher pay. Successful candidates will have the knowledge required to: perform network configuration, management, and troubleshooting of common wired and wireless network devices. As a Network Administrator you will employ skills that pertain to critical security concepts, key cloud computing best practices and typical service models, newer hardware and virtualization techniques and concepts to give individuals the combination of skills to keep the network resilient.

**What should a successful candidate know and be able to do?**
- Explain basic networking concepts including network services, physical connections, topologies and architecture, and cloud connectivity.
- Explain security concepts and network attacks in order to harden against threats.
- Explain routing technologies and networking devices; deploy ethernet solutions and configure wireless technologies.
- Troubleshoot common cable, connectivity, and software issues related to networking.
- Monitor and optimize networks to ensure business continuity.
- Calculate subnet values to segment networks.

**How to succeed in this course.**
- Manage your time. Most students average 20-30 hours/week for exam prep.
- Actively engage your instructor.
- Do the labs and watch the demonstrations. This test is performance-based. Hands-on work is the key to conquering situation-based questions.

## NIST NICE Cybersecurity Workforce Framework Mapping

**Work Roles**
**Operate and Maintain**
> Technical Support Specialist (OM-STS-001)
> Network Operations Specialist (OM-NET-001)
> System Administrator (OM-ADM-001)

## Course Information

**Materials**
- Course organization, including assignments, grading, and instructor-student communication will be done through the Canvas learning management system (LMS).
- This course uses a variety of materials, including the official curriculum from CompTIA-TestOut. Students will be given access codes and instructions on the first day of class to access these resources and connect to the correct class.

**Technical Specifications**
- Reliable high speed Internet connection | Computer with up-to-date browser.
- Students should have a computer with microphone, speakers, camera (optional), capable of running Zoom sessions.

**Student Accessibility Resources:**

If you have a disability that impacts your full participation in this course, please email Student Accessibility Resources at 850.474.2387 or by email, sar@uwf.edu.

**Grading:**

This course is designed for workforce development and focuses on concept and task mastery learning. Students are required to complete 70% of all assigned material in order to pass the course and receive a digital badge. **Doing only 70% of the assignments is not sufficient to pass the certification exam.**

**Assignments are rated based on the following scale.**

| Proficiency Scoring System | | |
|---|---|---|
| **Rating** | **Requirements** | **Progress** |
| 4 | Scored 90% or higher on the assignment | Likely to pass cert exam |
| 3 | Scored 80%-89% on the assignment | Possibly pass cert exam |
| 2 | Scored 70%-79% on the assignment | Requires remediation to pass cert exam |
| 1 | Scored >70% on the assignment | Unlikely to pass cert exam |
| 0 | Failed to complete the assignment | Will not pass cert exam |

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**Industry Certification Alignment (if applicable)**

This course prepares students to sit for the CompTIA Network+ exam.

| Domain | %CompTIA Exam |
|---|---|
| 1.0 Networking Fundamentals | 24% |
| 2.0 Network Implementation | 19% |
| 3.0 Network Operations | 16% |
| 4.0 Network Security | 19% |
| 5.0 Network Troubleshooting | 22% |

**Course Versioning**

This course aligns to the N10-008 Exam.

## Course Overview / Schedule

**Course Schedule**

| Week | Lessons |
|---|---|
| 1 | Lesson 1 Comparing OSI Model Network Functions<br>Lesson 2 Deploying Ethernet Cabling<br>Lesson 3 Deploying Ethernet Switching |
| 2 | Lesson 4 Troubleshooting Ethernet Networks<br>Lesson 5 Explaining IPv4 Addressing |
| 3 | Lesson 6 Supporting IPv4 and IPv6 Networks<br>Lesson 7 Configuring & Troubleshooting Routers |
| 4 | Measure Up Practice Test<br>Voucher Distribution & Exam Scheduling<br>Lesson 8 Explaining Network Topologies & Types<br>Lesson 9 Explaining Transport Layer Protocols<br>Lesson 10 Explaining Network Services |
| 5 | Lesson 11 Explaining Network Applications<br>Lesson 12 Ensuring Network Availability |
| 6 | Lesson 13 Explaining Common Security Concepts<br>Lesson 14 Supporting & Troubleshooting Secure Networks<br>Lesson 15 Deploying & Troubleshooting Wireless Networks |
| 7 | Lesson 16 Comparing WAN Links & Remote Access Methods<br>Lesson 17 Explaining Organizational & Physical Security Concepts<br>Lesson 18 Explaining Disaster Recovery & High Availability Concepts |
| 8 | Lesson 19 Applying Network Hardening Techniques<br>Lesson 20 Summarizing Cloud & Data Center Architecture<br>Practice Exams |
| 9 | Exam Week |

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