

## Description:

What is a network? You hear the word all of the time, and you may have a vague idea about what it means. However, in today's computing space, networks are EVERYTHING and a vague understand is just not enough.



In this fun and fast paced course you will learn concepts and skills needed to plan, install, maintain, and troubleshoot today's networks including wireless and server-based networks!

Want to learn about new technologies like virtual networks and SD Networks found in many cloud architectures? We've got you covered, and then we move to physical components, TCP/IP Stack, OSI Model, switches, routers, wireless, and Bluetooth.

Lastly, we finish up the CNP with the knowledge you need to perform the day to day operations of an organization, so you will be able to secure and maintain an entire network!

### Key Course Information

**Live Class Duration:** 5 Days

**CEUs:** 40

**Language:** English

**Class Formats Available:**

Instructor Led

Self-Study

Live Virtual Training

**Suggested Prerequisites:**

(Any of the following Mile2 Courses)

- C)HT/C)OST or equivalent knowledge

### Modules/Lessons

**Module 1** - Intro to Network Fundamentals

**Module 2** -The Physical Networking Fundamentals

**Module 3** - TCP/IP Primer

**Module 4** - Connecting Networks with Switches and Routers

**Module 5** - Wireless Networking

**Module 6** - Security Principles

**Module 7** - Defending the Network

**Module 8** - Network Technology Boom

**Module 9** - Day to Day Networking

**Module 10** - Network Planning

### Who Should Attend

- Everyone
- End Users
- Employees
- Managers

### Accreditations



## Upon Completion

Upon completion, the Certified Network Principles candidate will be able to competently take the C)NP exams well as the Comp TIA Network+ exam. You will have the knowledge to keep a companies' IP network infrastructure secure.

## Exam Information

The Certified Network Principles exam is taken online through Mile2's Learning Management System and is accessible on you Mile2.com account. The exam will take approximately 2 hours and consist of 100 multiple choice questions.

A minimum grade of 70% is required for certification.

## Re-Certification Requirements

All Mile2 certifications will be awarded a 3-year expiration date.

There are two requirements to maintain Mile2 certification:

- 1) Pass the most current version of the exam for your respective existing certification
- 2) Earn and submit 20 CEUs per year in your Mile2 account.

## Course FAQ's

**Question:** Do I have to purchase a course to buy a certification exam?

Answer: No

**Question:** Do all Mile2 courses map to a role-based career path?

Answer: Yes. You can find the career path and other courses associated with it at [www.mile2.com](http://www.mile2.com).

**Question:** Are all courses available as self-study courses?

Answer: Yes. There is however 1 exception. The Red Team vs Blue Team course is only available as a live class.

**Question:** Are Mile2 courses transferable/shareable?

Answer: No. The course materials, videos, and exams are not meant to be shared or transferred.

## Course and Certification Learning Options



## Detailed Outline:

### Course Introduction

#### Module 1 – Introduction to Network Fundamentals

- Section 1: Networking concepts
- Section 2: Classifying networks
- Section 3: Network models
- Section 4: The troubleshooting process

#### Module 2 – The Physical Networking Fundamentals

- Section 1: Connection technologies
- Section 2: Network devices
- Section 3: Copper media
- Section 4: Optical media
- Section 5: Ethernet standards

#### Module 3 – TCP/IP Primer

- Section 1: IP addressing
- Section 2: Core protocols
- Section 3: Network ports and applications

#### Module 4 – Connecting Networks with Switches and Routers

- Section 1: Switching
- Section 2: Routing

#### Module 5 – Wireless Networking

- Section 1: Wireless networks
- Section 2: Wireless LAN standards
- Section 3: Internet connections
- Section 4: WAN infrastructure

#### Module 6 – Security Principles

- Section 1: Goals and threats
- Section 2: Digital security
- Section 3: Transport encryption

## **Module 7 – Defending the Network**

Section 1: Network security components  
Section 2: Network authentication systems  
Section 3: Hardening networks

## **Module 8 – Network Technology Boom**

Section 1: Network convergence  
Section 2: Virtual and cloud systems

## **Module 9 – Day to Day Networking**

Section 1: Network convergence  
Section 2: Virtual and cloud systems

## **Module 10 – Network Planning**

Section 1: Network policy design  
Section 2: Network installation  
Section 3: Maintenance and upgrades