
Implementing and Administering Cisco Solutions (CCNA) V2.2

***WHERE GREAT TRAINING
HAPPENS EVERYDAY!***



Implementing and Administering Cisco Solutions (CCNA) V2.2

Course Duration

5 Days

Course Price

\$4,195.00

42 CLCs

Methods of Delivery

In-Person ILT

Virtual ILT

Onsite ILT

About this Class

The Implementing and Administering Cisco Solutions (CCNA) v2.2 course teaches you how to install, operate, configure, and verify a basic IPv4 and IPv6 network, configure network components, such as switches, routers, and wireless local area network (LAN) controllers (WLANs), manage network devices, and identify basic security threats. This training also covers the introduction of AI and machine learning (ML) in network operations.

This course helps you prepare to take the 200-301 Cisco® Certified Network Associate (CCNA®) exam. By passing this one exam, you earn the CCNA certification.

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How you will benefit

This class will help you:

- Learn the knowledge and skills to install, configure, and operate a small- to medium-sized network
- Gain a foundation in the essentials of networking, security, and automation
- Prepare for the 200-301 CCNA v1.1 exam
- Earn 30 CE credits toward recertification

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

This course is designed for anyone seeking CCNA certification.

- Entry-level Network Engineers
- Entry-level Network Administrators
- Entry-level Network Support Technicians
- Entry-level Help Desk Technicians

Prerequisites

Before taking this course, you should have:

- Basic computer literacy
- Basic PC operating system navigation skills
- Basic Internet usage skills
- Basic IP address knowledge

There are no formal prerequisites for CCNA certification, but you should make sure to have a good understanding of the exam topics.

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Objectives

After taking this course, you should be able to:

- Exploring the Functions of Networking
- Introducing the Host-To-Host Communications Model
- Operating Cisco IOS Software
- Introducing LANs
- Exploring the TCP/IP Link Layer
- Starting a Switch
- Introducing the TCP/IP Internet Layer, IPv4 Addressing, and Subnets
- Explaining the TCP/IP Transport Layer and Application Layer
- Exploring the Functions of Routing
- Configuring a Cisco Router
- Exploring the Packet Delivery Process
- Troubleshooting a Simple Network
- Introducing Basic IPv6
- Configuring Static Routing
- Implementing VLANs and Trunks
- Routing Between VLANs
- Introducing OSPF
- Building Redundant Switched Topologies
- Improving Redundant Switched Topologies with EtherChannel
- Explaining the Basics of ACL
- Enabling Internet Connectivity
- Introducing AI and ML in Network Operations
- Introducing System Monitoring
- Managing Cisco Devices

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Cont. Objectives

After taking this course, you should be able to:

- Securing Administrative Access
- Implementing Device Hardening
- Exploring Layer 3 Redundancy
- Introducing WAN Technologies
- Introducing QoS
- Explaining Wireless Fundamentals
- Introducing Architectures and Virtualization
- Explaining Software-Defined Networking
- Introducing Network Programmability
- Examining the Security Threat Landscape
- Implementing Threat Defense Technologies



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Course Outline

Module 1: Exploring the Functions of Networking

Module 2: Introducing the Host-To-Host Communications Model

Module 3: Operating Cisco IOS Software

Module 4: Introducing LANs

Module 5: Exploring the TCP/IP Link Layer

Module 6: Starting a Switch

Module 7: Introducing the TCP/IP Internet Layer, IPv4 Addressing, and Subnets

Module 8: Explaining the TCP/IP Transport Layer and Application Layer

Module 9: Exploring the Functions of Routing

Module 10: Configuring a Cisco Router

Module 11: Exploring the Packet Delivery Process

Module 12: Troubleshooting a Simple Network

Module 13: Introducing Basic IPv6

Module 14: Configuring Static Routing

Module 15: Implementing VLANs and Trunks

Module 16: Routing Between VLANs

Module 17: Introducing OSPF

Module 18: Building Redundant Switched Topologies

Module 19: Improving Redundant Switched Topologies with EtherChannel •

Module 20: Explaining the Basics of ACL

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Course Outline

- Module 21: Enabling Internet Connectivity
- Module 22: Introducing AI and ML in Network Operations
- Module 23: Introducing System Monitoring
- Module 24: Managing Cisco Devices
- Module 25: Securing Administrative Access
- Module 26: Implementing Device Hardening
- Module 27: Exploring Layer 3 Redundancy
- Module 28: Introducing WAN Technologies
- Module 29: Introducing QoS
- Module 30: Explaining Wireless Fundamentals
- Module 31: Introducing Architectures and Virtualization
- Module 32: Explaining Software-Defined Networking
- Module 33: Introducing Network Programmability
- Module 34: Examining the Security Threat Landscape
- Module 35: Implementing Threat Defense Technologies

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Lab Outline

Lab 1: Get Started with Cisco CLI

Lab 2: Observe How a Switch Operates

Lab 3: Perform Basic Switch Configuration

Lab 4: Inspect TCP/IP Applications

Lab 5: Configure an Interface on a Cisco Router

Lab 6: Configure and Verify Layer 2 Discovery Protocols

Lab 7: Configure Default Gateway

Lab 8: Explore Packet Forwarding

Lab 9: Troubleshoot Switch Media and Port Issues

Lab 10: Troubleshoot Port Duplex Issues

Lab 11: Configure Basic IPv6 Connectivity

Lab 12: Configure and Verify IPv4 Static Routes

Lab 13: Configure IPv6 Static Routes

Lab 14: Configure VLANs and Trunks

Lab 15: Configure Inter-VLAN Routing

Lab 16: Configure and Verify Single-Area OSPF

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Lab Outline Cont.

Lab 17: Configure and Verify EtherChannel

Lab 18: Configure and Verify IPv4 ACLs

Lab 19: Configure a Provider-Assigned IPv4 Address

Lab 20: Configure Static NAT

Lab 21: Configure Dynamic NAT and PAT

Lab 22: Configure and Verify NTP

Lab 23: Create the Cisco IOS Image Backup

Lab 24: Upgrade Cisco IOS Image

Lab 25: Secure Console and Remote Access

Lab 26: Enable and Limit Remote Access Connectivity

Lab 27: Configure and Verify Port Security

Lab 28: Log in to and Monitor the WLC

Lab 29: Configure an Open Wireless Network

Lab 30: Define a RADIUS Server and Enable SNMP and Syslog

Lab 31: Configure a WLAN to Use WPA2 PSK