Implementing and Administering Cisco Solutions (CCNA) v2.1

Duration: 5 days

COURSE CONTENT

Implementing and Administering Cisco Solutions (CCNA) training 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 (WLNs), manage network devices, and identify basic security threats. This training also covers the introduction of AI and machine learning (ML) in network operations.

This training prepares you for the Cisco Certified Network Associate (200-301 CCNA) v1.1 exam. If passed, you earn the CCNA certification. This training also earns you 30 Continuing Education (CE) credits towards recertification.

COURSE OUTLINE

- 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
- 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

WHO SHOULD ATTEND

The job roles best suited to the material in this training are:
- Entry-level Network Engineers
- Entry-level Network Administrators
- Entry-level Network Support Technicians
- Entry-level Help Desk Technicians

PREREQUISITE

Before taking this training, you should have:
- Basic computer literacy
- Basic PC operating system navigation skills
- Basic Internet usage skills
- Basic IP address knowledge