

Implementing and Administering Cisco Solutions (CCNA)

Course Outline

- Implementing VLANs and Trunks
- Routing Between VLANs
- Introducing OSPF
- Building Redundant Switched Topologies
- Improving Redundant Switched Topologies with EtherChannel
- Exploring Layer 3 Redundancy
- Introducing WAN Technologies
- Explaining Basics of ACL Lecture
- Enabling Internet Connectivity
- Introducing QoS
- Explaining Wireless Fundamentals
- Introducing Architectures and Virtualization
- Explaining the Evolution of Intelligent Networks
- Introducing System Monitoring
- Managing Cisco Devices
- Examining the Security Threat Landscape
- Implementing Threat Defense Technologies
- Securing Administrative Access
- Implementing Device Hardening

Lab outline

- Get Started with Cisco Command-Line Interface (CLI)
- Observe How a Switch Operates
- Perform Basic Switch Configuration
- Implement the Initial Switch Configuration
- Inspect TCP/IP Applications
- Configure an Interface on a Cisco Router
- Configure and Verify Layer 2 Discovery Protocols
- Implement an Initial Router Configuration
- Configure Default Gateway
- Explore Packet Forwarding
- Troubleshoot Switch Media and Port Issues
- Troubleshoot Port Duplex Issues
- Configure Basic IPv6 Connectivity
- Configure and Verify IPv4 Static Routes
- Configure IPv6 Static Routes
- Implement IPv4 Static Routing
- Implement IPv6 Static Routing
- Configure VLAN and Trunk
- Troubleshoot VLANs and Trunk

- Configure a Router on a Stick
- Implement Multiple VLANs and Basic Routing Between the VLANs
- Configure and Verify Single-Area OSPF
- Configure and Verify EtherChannel
- Improve Redundant Switched Topologies with EtherChannel
- Configure and Verify IPv4 ACLs
- Implement Numbered and Named IPv4 ACLs
- Configure a Provider-Assigned IPv4 Address
- Configure Static NAT
- Configure Dynamic NAT and Port Address Translation (PAT)
- Implement PAT
- Log into the WLC
- Monitor the WLC
- Configure a Dynamic (VLAN) Interface
- Configure a DHCP Scope
- Configure a WLAN
- Define a Remote Access Dial-In User Service (RADIUS) Server
- Explore Management Options
- Explore the Cisco DNA™ Center
- Configure and Verify NTP
- Configure System Message Logging
- Create the Cisco IOS Image Backup
- Upgrade Cisco IOS Image
- Configure WLAN Using Wi-Fi Protected Access 2 (WPA2) Pre-Shared Key (PSK) Using the GUI
- Secure Console and Remote Access
- Enable and Limit Remote Access Connectivity
- Secure Device Administrative Access
- Configure and Verify Port Security
- Implement Device Hardening