

CCNP

Online Certification Program



Fast Lane US introduces its new CCNP Online Certification Program. This new program utilizes the 360 degree approach to learning that allows students to complete their CCNP training and exam preparation in an online environment without sacrificing the quality of their education. This comprehensive program is scheduled so that you complete your preparation for CCNP in three months including passing the associated certification exams.

This program combines a 360 degree learning approach and a training regimen that includes course assessments, mentoring services, remote hands-on labs, and Instructor-Led Online (ILO) sessions into a comprehensive learning environment. This learning program is designed to support training requirements and budget constraints for individuals and organizations worldwide while providing an experience similar to traditional classroom training.

Pre-Req: Valid CCNA

- **Assessment:** Through the Fast Lane Learning Center, students can access the Cisco assessment exams created for each CCNP course. These exams will help you understand topics to be covered in the courses as well as areas where you need additional focus to ensure mastery of the topics.
- **Planning:** Understanding the areas where you need additional preparation helps you identify and utilize the resources available in this program to shore up those skills gaps.
- **Learning:** ILO sessions conducted by Fast Lane instructors provide you with information you will need to successfully complete the program and become a CCNP. You will have access to mentoring services through forums and scheduled online sessions (CCNP Round Table).
- **Practice:** Remote Hands-on labs are completed between ILO sessions during the CCNP Online Certification Program. You will have access to the remote labs throughout the entire program.
- **Review:** You can discuss your lab and/or assessment exam results with your program mentor to help plan your next learning activity.
- **Mastery:** Utilizing the program resources to create your individual plan will guarantee subject mastery that will be confirmed through your exam scores.

Course Objectives

The CCNP Online Certification Program will provide you with resources and tools needed to properly prepare for the CCNP certification. These resources will be available to you at your location and convenience. Students can complete hands-on labs, view recorded ILO sessions and chat with fellow students and Fast Lane SMEs when the time is right for you.



Part 1 - BSCI

Session 1 - EIGRP Implementation and Configuration

- Implementing and Verifying EIGRP
- Configuring Advanced EIGRP Options
- Configuring EIGRP Authentication

Session 2 - Introduction to OSPF and OSPF Configuration

- OSPF Packet Types
- Configuring OSPF Routing
- OSPF Route Summarization

Session 3 - IS-IS Protocol and Manipulating Routing Updates

- Configuring Basic Integrated IS-IS
- Operating a Network Using Multiple IP Routing Protocols
- Configuring and Verifying Route Redistribution
- Implementing Advanced Cisco IOS Features: Configuring DHCP

Session 4 - Implementing BGP

- Explaining EBGP and IBGP
- Configuring Basic BGP Operations
- Using Route Maps to Manipulate Basic BGP Paths

Session 5 - Implementing Multicast and IPv6

- IGMP and Layer 2 Issues
- Introducing IPv6
- Using IPv6 with OSPF and Other Routing Protocols
- Using IPv6 with IPv4

Part 2 – BCMSN

Session 6 - Intro to Catalyst Equipment

- Introducing Campus Networks
- Quiz 1-1: Describing the Campus Infrastructure Module

Session 7 - VLAN Topologies

- Implementing VLANs
- Implementing Trunks
- Propagating VLAN Configurations with VTP

Session 8 - STP/MSTP

- Implementing RSTP and MSTP
- Configuring Link Aggregation with EtherChannel
- Enabling Routing Between VLANs on a Multilayer Switch

Session 9 - CEF/HSRP

- Deploying CEF-Based Multilayer Switching
- Configuring Layer 3 Redundancy with HSRP
- Configuring Layer 3 Redundancy with VRRP and GLBP

Session 10 - WLAN Introduction

- Describing WLAN Topologies
- Explaining WLAN Technology and Standards

Session 11 - Planning Voice Implementation

- Accommodating Voice Traffic on Campus Switches
- Understanding Switch Security Issues
- Protecting Against VLAN and Spoof Attacks

Session 12 - WLAN/Security

- Configuring Cisco WLAN Clients
- Implementing and Configuring WLANs
- Describing STP Security Mechanisms
- Securing Network Switches

Part 3 - ISCW

Session 13 - Teleworker Connectivity

- Describing Topologies for Facilitating Remote Connections
- Describing Cable Technology
- Describing DSL Technology

Session 14 - Introduction to MPLS

- Configuring the CPE as the PPPoE or PPPoA Client
- Introducing MPLS Networks
- Assigning MPLS Labels to Packets

Session 15 - Frame Mode MPLS Implementation

- Implementing Frame Mode MPLS
- Describing MPLS VPN Technology

Session 16 - IPsec VPNs

- Configuring IPsec Site-to-Site VPN Using SDM
- Configuring GRE Tunnels over IPsec
- High Availability Options

Session 17 - Cisco VPN Client

- Configuring Cisco Easy VPN and Easy VPN Server Using SDM
- Implementing the Cisco VPN Client
- Cisco Self-Defending Network

Session 18 - Cisco Device Hardening and Cisco IOS

Threat Defense Features

- Disabling Unused Cisco Router Network Services and Interfaces
- Securing Cisco Router Installations and Administrative Access
- Mitigating Threats and Attacks with Access Lists

Session 19 - Cisco IOS Firewall/IPS

- Implementing Cisco IOS Firewalls
- Introducing Cisco IOS IPS
- Configuring Cisco IOS IPS

Part 4 – ONT

Session 20 - Introducing VOIP Networks

- Introducing VoIP Networks
- Digitizing and Packetizing Voice
- Encapsulating Voice Packets for Transport

Session 21 - Implementing Voice in the Enterprise Network

- Calculating Bandwidth Requirements
- Implementing Voice Support in an Enterprise Network

Session 22 - Introduction to IP QoS

- Introducing QoS
- Identifying Models for Implementing QoS
- Identifying Methods for Implementing QoS

Session 23 - Implementing the DiffServ QoS Model

- Using NBAR for Classification
- Introducing Queuing Implementations
- Configuring CBWFQ and LLQ

Session 24 - Traffic Policy, Shaping and Implementing Cisco AutoQoS

- Understanding WAN Link Efficiency Mechanisms
- Implementing QoS Preclassify
- Deploying End-to-End QoS

Session 25 - Implementing Wireless Scalability

- Implementing WLAN QoS
- Introducing 802.1x
- Configuring Encryption and Authentication on Lightweight Access Points