

# Cisco CCNA

# ICND2v3 Interconnecting Cisco Networking Devices CCNA Part 2

New ICND2 v3 curriculum for CCNA Routing and Switching. Learn how to install, configure, operate small to medium enterprise networks and understand Quality of Service (QoS) and virtualized cloud services as they relate to enterprise networks in this 5-day CCNA Part 2 Certification course. This live class is available virtually with <u>RemoteLive™</u> or locally at our Phoenix, AZ location.

\$3,495.00

- 5 Days
- "Real Gear" and GNS3 Demos in Class
- Instructor Awarded "Cisco Top Quality" 5 Years Running
- Preps for Exam (200-105 ICND2) CCNA Routing and Switching ICND2 v3

# **Upcoming Dates**

# **Course Description**

This course provides students with the knowledge and skills needed to install, configure, operate, and troubleshoot a small enterprise network. It will ensure that students understand and are ready to deploy the latest shifts in technologies and solutions as follows:

- Understanding of Quality of Service (QoS) elements and their applicability
- How virtualized and cloud services will interact and impact enterprise networks

An overview of network programmability and the related controller types and tools that are available to support software defined network architectures A full suite of labs have been developed using the virtual IOS environment with flexible topologies that reinforce concepts with hands-on, guided discovery and challenge labs that align to each lesson module.

This course prepares for CCNA Routing and Switching ICND2 v3 Exam (200-105 ICND2)

# **Course Outline**

# Module 1 - Implement Scalable Medium-Sized Networks

- Troubleshooting VLAN Connectivity
- Building Redundant Switched Topologies
- Improving Redundant Switched Topologies with EtherChannel
- Understanding Layer 3 Redundancy

# Module 2 – Troubleshooting Basic Connectivity

- Troubleshooting IPv4 Network Connectivity
- Troubleshooting IPv6 Connectivity

# Module 3 – Implementing an EIGRP-Based Solution

- Implementing EIGRP
- Implementing EIGRP for IPv6
- Troubleshooting EIGRP

#### Module 4 – Summary Challenge

- Implementing and Troubleshooting Scalable Medium-Sized Network 1
- Implementing and Troubleshooting Scalable Medium-Sized Network 2

# Module 5 - Implement a Scalable OSPF-Based Solution

- Understanding OSPF
- Implementing Multiarea OSPF IPv4
- Implementing OSPFv3 for IPv6
- Troubleshooting Multiarea OSPF

#### Module 6 - Wide-Area Networks

- Understanding WAN Technologies
- Understanding Point-to-Point Protocols
- Configuring GRE Tunnels
- Configuring Single-Homed EBGP

# Module 7 – Network Device Management

- Implementing Basic Network Device Management and Security
- Evolution of Intelligent Networks
- Introducing QoS

# Module 8 - Summary Challenge

- Implementing and Troubleshooting Scalable Multiarea Network 1
- Implementing and Troubleshooting Scalable Multiarea Network 2

# **Audience**

This course is for individuals who are currently or desire to become a Cisco Network Administrator.

 $For those \ desiring \ certification, the \ course \ maps \ to \ the \ Cisco \ CCENT \ certification \ or \ Cisco \ CCNA \ Routing \ and \ Switching \ certification.$ 

Job roles can include: entry-level network engineer, network administrator, network support technician, and help desk technician.

# **Prerequisites**

Before attending this course, students should have successfully completed CCNA215: Interconnecting Cisco Networking Devices Part1 v3 or have equivalent work experience.

Students should also have the recommended knowledge and skills:

Understanding network fundamentals
Implementing local area networks
Implementing Internet connectivity
Managing network devices
Securing network devices
Implementing basic IPv6 connectivity

# What You Will Learn

Upon completing this course, you will be able to meet these objectives:

- Operate a medium-sized LAN with multiple switches supporting VLANs, trunking, switch stacking, chassis aggregation and spanning tree
  protocols
- Troubleshoot IP connectivity
- Configure and troubleshoot EIGRP and OSPF in IPv4 and IPv6 environments
- Define characteristics, functions and components of a WAN
- Describe SNMP, Syslog, and manage Cisco device configurations, IOS images and licenses
- · Understand QoS, virtualization and cloud services, and network programmability related to WAN, access and core segments