

## **Interconnecting Cisco Networking Devices, Part 2 - On Demand (ICND2 3.0)**

**Modality: On Demand**

**Duration: 40 Hours**

**CLC: 8 Units**

This course makes you ready for the Exam of 200-105 ICND4 leading to the Certification of 200-105 ICND4. No Exam Voucher includes in this course, but you have the option to request the purchase of a Voucher for the Official Exam separately.

### **About this course:**

This course of Interconnecting Cisco Networking Devices Part 2 (ICND2) v1.1 aims around using Cisco switches and Cisco Catalyst switches that are associated with WANs and LANs commonly found at medium-sized system sites. After this training course completion, you ought to have the ability to design, verify, and investigate the different Cisco networking gadgets in a little system condition. Also, this course helps the understudies in the groundwork for the exam of Cisco: 200-105 ICND2.

The normal compensation for a Certified Network Engineer of Cisco is \$77,484 every year

### **Course Objectives:**

- Troubleshooting VLANs and Trunks
- Building Redundant Switched Topologies
- Improving Redundant Switched Topologies with EtherChannel
- Implementing and Troubleshooting HSRP
- Troubleshooting IPv4 Connectivity
- Troubleshooting IPv6 Connectivity
- Implementing EIGRP
- Troubleshooting EIGRP
- Implementing Multi-area OSPF
- Implementing OSPFv3 for IPv6
- Troubleshooting OSPF
- Implementing WAN Using Point-to-Point Protocols
- Implementing GRE Tunnel
- Implementing Single-Homed EBGp
- Implementing Device Management and Security
- Troubleshoot VLANs and Trunks
- Configure Root Bridge and Analyze STP Topology
- Troubleshoot STP Issues
- Configure and Verify EtherChannel
- Configure and Verify HSRP
- Troubleshoot HSRP

- Use Troubleshooting Tools
- Configure and Verify IPv4 Extended Access Lists
- Troubleshoot IPv4 Network Connectivity
- Configure and Verify IPv6 Extended Access Lists
- Troubleshoot IPv6 Network Connectivity
- Configure and Verify EIGRP
- Configure and Verify EIGRP for IPv6
- Troubleshoot EIGRP
- Configure and Verify Single-Area OSPF
- Configure and Verify Multi-area OSPF
- Configure and Verify OSPFv3
- Troubleshoot Multi-area OSPF
- Configure Serial Interface and PPP
- Configure and Verify MLP
- Configure and Verify PPPoE Client
- Configure and Verify GRE Tunnel
- Configure and Verify Single Homed EBGp
- Configure External Authentication Using RADIUS and TACACS+
- Configure SNMP

## **Audience:**

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

## **Prerequisites:**

- ICND1
- Implement local area networks
- Secure network devices
- Understand network fundamentals
- Implement basic IPv6 connectivity
- Implement Internet connectivity
- Manage network devices

## **Course Outline:**

### **Module 1: Implementing Scalable Medium-Sized Networks**

- Lesson 1: Troubleshooting VLAN Connectivity
- Lesson 2: Building Redundant Switched Topologies
- Lesson 3: Improving Redundant Switched Topologies with EtherChannel
- Lesson 4: Understanding Layer 3 Redundancy

### **Module 2: Troubleshooting Basic Connectivity**

- Lesson 1: Troubleshooting IPv4 Network Connectivity
- Lesson 2: Troubleshooting IPv6 Network Connectivity

### **Module 3: Implementing an EIGRP-Based Solution**

- Lesson 1: Implementing EIGRP
- Lesson 2: Implementing EIGRP for IPv6
- Lesson 3: Troubleshooting EIGRP

### **Module 4: Summary Challenge**

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

### **Module 5: Implement a Scalable OSPF-Based Solution**

- Lesson 1: Understanding OSPF
- Lesson 2: Implementing Multiarea OSPF IPv4
- Lesson 3: Implementing OSPFv3 for IPv6
- Lesson 4: Troubleshooting Multiarea OSPF

### **Module 6: Wide-Area Networks**

- Lesson 1: Understanding WAN Technologies
- Lesson 2: Understanding Point-to-Point Protocols
- Lesson 3: Configuring GRE Tunnels
- Lesson 4: Configuring Single-Homed EBGp

### **Module 7: Network Device Management**

- Lesson 1: Implementing Basic Network Device Management and
- Lesson 2: Evolution of Intelligent Networks
- Lesson 3: Introducing QoS

### **Module 8: Summary Challenge**

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

### **Labs:**

- Challenge 1: Troubleshooting VLANs and Trunks
- Challenge 2: Building Redundant Switched Topologies
- Challenge 3: Improving Redundant Switched Topologies with EtherChannel
- Challenge 4: Implementing and Troubleshooting HSRP
- Challenge 5: Troubleshooting IPv4 Connectivity
- Challenge 6: Troubleshooting IPv6 Connectivity
- Challenge 7: Implementing EIGRP

- Challenge 8: Troubleshooting EIGRP
- Challenge 9: Summary Challenge Lab : 1
- Challenge 10: Summary Challenge Lab : 2
- Challenge 11: Implementing Multiarea OSPF
- Challenge 12: Implementing OSPFv3 for IPv6
- Challenge 13: Troubleshooting OSPF
- Challenge 14: Implementing WAN Using Point-to-Point Protocols
- Challenge 15: Implementing GRE Tunnel
- Challenge 16: Implementing Single-Homed EBGp
- Challenge 17: Implementing Device Management and Security
- Challenge 18: Summary Challenge Lab : 3
- Challenge 19: Summary Challenge Lab : 4
- Discovery 1: Troubleshoot VLANs and Trunks
- Discovery 2: Configure Root Bridge and Analyze STP Topology
- Discovery 3: Troubleshoot STP Issues
- Discovery 4: Configure and Verify EtherChannel
- Discovery 5: Configure and Verify HSRP
- Discovery 6: Troubleshoot HSRP
- Discovery 7: Use Troubleshooting Tools
- Discovery 8: Configure and Verify IPv4 Extended Access Lists
- Discovery 9: Troubleshoot IPv4 Network Connectivity
- Discovery 10: Configure and Verify IPv6 Extended Access Lists
- Discovery 11: Troubleshoot IPv6 Network Connectivity
- Discovery 12: Configure and Verify EIGRP
- Discovery 13: Configure and Verify EIGRP for IPv6
- Discovery 14: Troubleshoot EIGRP
- Discovery 15: Configure and Verify Single-Area OSPF
- Discovery 16: Configure and Verify Multiarea OSPF
- Discovery 17: Configure and Verify OSPFv3
- Discovery 18: Troubleshoot Multiarea OSPF
- Discovery 19: Configure Serial Interface and PPP
- Discovery 20: Configure and Verify MLP
- Discovery 21: Configure and Verify PPPoE Client
- Discovery 22: Configure and Verify GRE Tunnel
- Discovery 23: Configure and Verify Single Homed EBGp
- Discovery 24: Configure External Authentication Using RADIUS and TACACS+
- Discovery 25: Configure SNMP