

## **Implementing and Administering Cisco Solutions (200-301 CCNA)**

**Modality: Virtual Classroom**

**Duration: 5 Days**

**SATV Value:**

**CLC: 40 Units**

**NATU:**

**SUBSCRIPTION: No**

### **About this Course:**

Implementing and Administering Cisco Solutions teaches professionals how to install, operate, configure, and verify a basic IPv4 and IPv6 network. You'll learn how to configure network components, such as a switch, router, and Wireless LAN Controller. You'll also gain skills needed to manage network devices, and identify basic security threats.

### **Course Objectives:**

After taking this course, you should be able to:

- Identify the components of a computer network and explain their basic characteristics
- Describe the features and functions of the Cisco IOS Software
- Explain IPv4 and IPv6 addressing scheme
- Implement basic configurations on a Cisco router
- Identify and resolve common switching and routing networking issues
- Describe network and device architectures and explain virtualization
- Describe the smart network management solutions like Cisco DNA Center, SD-Access and SD-WAN
- Outline threat defense technologies
- And many, many more aspects of a basic IPv4 and IPv6 network

### **Audience:**

- Entry-level network engineer
- Network administrator
- Network support technician
- Help desk technician

### **Prerequisites:**

Before taking this course, you should have:

- Basic computer literacy
- Basic PC operating system navigation skills

- Basic Internet usage skills
- Basic IP address knowledge

## **Course Outline:**

- Section 1: Exploring the Functions of Networking
- Section 2: Introducing the Host-To-Host Communications Model
- Section 3: Operating Cisco IOS Software
- Section 4: Introducing LANs
- Section 5: Exploring the TCP/IP Link Layer
- Section 6: Starting a Switch
- Section 7: Introducing the TCP/IP Internet Layer, IPv4 Addressing, and Subnets
- Section 8: Explaining the TCP/IP Transport Layer and Application Layer
- Section 9: Exploring the Functions of Routing
- Section 10: Configuring a Cisco Router
- Section 11: Exploring the Packet Delivery Process
- Section 12: Troubleshooting a Simple Network
- Section 13: Introducing Basic IPv6
- Section 14: Configuring Static Routing
- Section 15: Implementing VLANs and Trunks
- Section 16: Routing Between VLANs
- Section 17: Introducing OSPF
- Section 18: Building Redundant Switched Topologies
- Section 19: Improving Redundant Switched Topologies with EtherChannel
- Section 20: Exploring Layer 3 Redundancy
- Section 21: Introducing WAN Technologies
- Section 22: Explaining Basics of ACL
- Section 23: Enabling Internet Connectivity
- Section 24: Introducing QoS
- Section 25: Explaining Wireless Fundamentals
- Section 26: Introducing Architectures and Virtualization
- Section 27: Explaining the Evolution of Intelligent Networks
- Section 28: Introducing System Monitoring
- Section 29: Managing Cisco Devices
- Section 30: Examining the Security Threat Landscape
- Section 31: Implementing Threat Defense Technologies
- Section 32: Securing Administrative Access
- Section 33: Implementing Device Hardening