

## Interconnecting Cisco Networking Devices 1 (ICND1 v3.0)

**Length:** 5 Days

**Prerequisites:**

- Basic computer literacy
- Basic Internet usage skills
- Basic PC operating system navigation skills
- Basic IP address knowledge

**Summary:** Interconnecting Cisco Networking Devices, Part 1 (ICND1) v3.0 is a five-day, instructor-led training course that teaches learners how to install, operate, configure, and verify a basic IPv4 and IPv6 network, including configuring a LAN switch, configuring an IP router, managing network devices, and identifying basic security threats.

**What You Will Learn:**

- Network fundamentals and build simple LANs
- Establish Internet connectivity
- Manage and secure network devices
- Expand small- to medium-sized networks
- IPv6 basics

---

## COURSE CONTENT

### **BUILDING A SIMPLE NETWORK**

- Exploring the Functions of Networking
- Understanding the Host-to-Host Communication
- Introducing LANs
- Operating Cisco IOS Software
- Starting a Switch
- Understanding Ethernet and Switch
- Troubleshooting Common Switch Media

### **ESTABLISHING INTERNET CONNECTIVITY**

- Understanding the TCP/IP Internet
- Addressing and Subnets
- Understanding the TCP/IP Transport
- Exploring the Functions of Routing
- Configuring a Cisco Router
- Exploring the Packet-Delivery Process
- Enabling Static Routing
- Managing Traffic Using ACLs
- Enabling Internet Connectivity

### **MANAGING NETWORK DEVICE SECURITY**

- Securing Administrative Access
- Implementing Device Hardening
- Implementing Traffic Filtering

### **BUILDING A MEDIUM-SIZED NETWORK**

- Implementing VLANs and Trunks
- Routing Between VLANs
- Using a Cisco Network Device
- Introducing WAN Technologies
- Introducing Dynamic Routing Protocol
- Implementing OSPF

### **INTRODUCING IPV6**

- Introducing basic IPv6
- Understanding IPv6
- Configuring IPv6 Routing

### **LABS**