Course Name: CCNA Boot Camp v2.0
Course Code: 5031

Course Overview: The need for highly skilled network professionals continues to remain steady. The CCNA designation is recognized as an important stepping stone for network professionals on their way to a successful career in the Cisco internetworking field.

Achieving CCNA certification benefits both you and your employer because of the close relationship between CCNA program goals and the fundamental job skills necessary to work in network support. Every student is eligible for our guarantee, the best available, to make sure you achieve your goals.

Course Length: 5 days

Who should attend:

Individuals who possess a general networking background, have some experience with Cisco IOS, and are seeking CCNA certification should consider this class as the quickest way to meet the requirements of the CCNA exam.

You will learn:
- How networks function, network components and their functions, and the Open Systems Interconnection (OSI) reference model
- Binary, decimal, and hexadecimal numbering
- Switching operations and theory
- Host-to-Host packet delivery process
- TCP/IP network addressing and routing
- IP subnetting
- Providing Local Area (LAN), Wide Area (WAN), and remote access services
- Advanced network theory, including Virtual Private Networks (VPN), Content Delivery Networks (CDN), Intranets and extranets, and wireless networking
- Introduction to Cisco Internet Operating System (IOS)
- Initial configuration of Cisco Catalyst Switches and Routers
- Network discovery and management using Cisco Discovery Protocol (CDP), telnet, and Trivial FTP (TFTP)
- Interconnect networks using TCP/IP
- Dangers of redundant switching
- Spanning Tree
- Concepts of VLANs and trunking
- Distance vector routing protocols
- Link state routing
- Review how to configure and troubleshoot a switch and router in a small network environment
- Expand the switched network from a small to medium network environment

- Implementing VLSM
- Configure, verify, and troubleshoot OSPF
- Configure, verify, and troubleshoot EIGRP
- Determine when to use access control lists (ACLs)
- Configure, verify, and troubleshoot ACLs
- Configure NAT and PAT
- IPv6 addressing
- Configure PPP, CHAP, and PAP
- Frame Relay operation
- VPN solutions

Prerequisites: Prior to attending CCNA, you should be very familiar with networking topics such as TCP/IP, IP configuration, peer-to-peer networking, subnetting, building a routing table, and other network protocols, standards, and architecture. If you're new to networking and to Cisco IOS, consider taking the ICND1 and ICND2 classes. We strongly encourage career changers and people new to internetworking to gain the foundation knowledge needed by taking our CCENT e-Camp.

Course Fee: Call for quote

Customizable: No

Course Content:
Building a Simple Network (ICND1)
- Exploring the Functions of Networking
- Securing the Network
- Host-to-Host Communication Model
- TCP/IP's Internet Layer
- TCP/IP's Transport Layer
- Packet Delivery Process
- Understanding Ethernet
- Connecting to an Ethernet LAN

Ethernet LANs (ICND1)
- Challenges of Shared LANs
- Solving Network Challenges with Switched LAN Technology
- Packet Delivery Process
- Operating Cisco IOS Software
- Starting the Switch
- Understanding Switch Security
- Maximizing the Benefits of Switching
- Troubleshooting Switch Issues

Wireless Local Area Networks (WLANS) (ICND1)

- Exploring Wireless Networking
- Understanding WLAN Security
- Implementing a WLAN

LAN Connections (ICND1)
- Functions of Routing
- Understanding Binary Basics
- Constructing a Network Addressing Scheme
- Starting a Router
- Configuring a Router
- Packet Delivery Process
- Understanding Router Security
- Using Cisco Router and Security Device Manager
- Using a Router as a DHCP Server
- Accessing Remote Devices

Network Environment Management (ICND1)
- Discovering Neighbors on the Network
- Managing Router Startup and Configuration
- Managing Cisco Devices

Small Network Implementation (ICND2)
- Review Lab: Review of a Small Network Environment

Medium-Sized Switched Network Construction (ICND2)
- Implementing VLANs and Trunks
- Improving Performance with Spanning Tree
- Routing Between VLANs
- Securing the Expanded Network
- Troubleshooting Switched Networks

Wide Area Networks (WANs) (ICND1)
- WAN Technologies
- Enabling the Internet Connection
- Enabling Static Routing
- Configuring Serial Encapsulation
- Enabling Routing Information Protocol (RIP)

LAN Extension into a WAN (ICND2)
- Establishing a Point-to-Point WAN Connection with PPP
- Establishing a WAN Connection with Frame Relay
- Troubleshooting Frame Relay WANs
- Introducing VPN Solutions

Medium-Sized Routed Network Construction (ICND2)

- Reviewing Routing Operations
- Implementing VLSM

Single Area OSPF Implementation (ICND2)
- Implementing OSPF
- Troubleshooting OSPF

EIGRP Implementation (ICND2)
- Implementing EIGRP
- Troubleshooting EIGRP

Access Control Lists (ACLs) (ICND2)
- Introducing ACL Operation
- Configuring and Troubleshooting ACLs

Address Space Management (ICND2)
- Scaling the Network with NAT and PAT
- Transitioning to IPv6