Cisco CCNA Routing and Switching Boot Camp (CCNAX - Accelerated)

Duration: 5 Days **Course Code: CCNABC**

Overview:

This course will prepare you for the new version of the CCNA Composite Exam (640-802 CCNA).

Based on our Cisco ICND1 and ICND2 courses, our CCNA Boot Camp is an intensive program, designed to help you achieve your CCNA certification in the shortest period of time possible. To maximize your classroom experience and ensure that you get comprehensive coverage of the CCNA materials, our three-step, blended learning approach to the CCNA Boot Camp consists of:

Pre-Class Activity, Classroom Instruction, Post-Class Lab Practice, The Pre-Class Activity provides you with approximately ten hours of review materials and exercises, including a pre-test assessment, Self-Paced e-Learning content, and a readiness test, all designed to give you a firm foundation and get you focused and prepared to get the most out of Classroom Instruction.

Classroom Instruction includes intensive instructor-led training and hands-on labs where you'll learn to install, configure, operate, and troubleshoot medium-sized routed and switched networks. You'll also learn the basics of wireless networking as well as mitigating security threats. During Classroom Instruction, you'll have 24-hour lab access.

Following Classroom Instruction, ten e-Lab credits for Post-Class Lab Practice allow you to hone your skills using the same hands-on lab equipment you used in the classroom. And, to make learning even easier, we include both the ICND1 and ICND2 Self-Paced e-Learning CDs so you can continue your studying any time, anywhere.

We have delivered an Authorized CCNA Boot Camp longer than any other Cisco Partner, the best available, to make sure you achieve your goals.

You Get...Approximately 10 hours of pre-class activity, Enhanced content that exceeds standard authorized Cisco content, World-class Certified Cisco Systems instructors, CCNA workbook and lab guide, including exclusive additional labs, Additional study aids to help you pass the CCNA exam, Free ICND1 and ICND2 Self-Paced e-Learning CDs, 10 e-Lab credits for lab practice during the week following class, Access to Self Test Software's exam prep products.

Target Audience:

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.

Objectives:

- 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
- 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

- 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
- 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.

To determine the right path to choose, take our CCNA Boot Camp Skills Check now!

Testing and Certification

This course is part of the following programs or tracks:

- CCDP - Cisco Certified Design Professional
- CCNA - Cisco Certified Network Associate
- CCIP - Cisco Certified Internetwork Professional

Follow-on-Courses:

- BSCI - Building Scalable Cisco Internetworks v3.0
- BCMSN - Building Cisco Multilayer Switched Networks v3.0
- CCDA Boot Camp
- CVOICE - Cisco Voice over IP v6.0
- SND - Securing Cisco Network Devices

Content:

1. 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

2. 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

3. Wireless Local Area Networks (WLANS) (ICND1)

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

4. 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

5. Network Environment Management (ICND1)

- Discovering Neighbors on the Network
- Managing Router Startup and Configuration
- Managing Cisco Devices

6. Small Network Implementation (ICND2)

- Review Lab: Review of a Small Network Environment

7. 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

8. Wide Area Networks (WANs) (ICND1)

- WAN Technologies
- Enabling the Internet Connection
- Enabling Static Routing
- Configuring Serial Encapsulation
- Enabling Routing Information Protocol (RIP)

9. 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

10. Medium-Sized Routed Network Construction (ICND2)

- Reviewing Routing Operations
- Implementing VLSM

11. Single Area OSPF Implementation (ICND2)

- Implementing OSPF
- Troubleshooting OSPF

12. EIGRP Implementation (ICND2)

- Implementing EIGRP
- Troubleshooting EIGRP

13. Access Control Lists (ACLs) (ICND2)

- Introducing ACL Operation
- Configuring and Troubleshooting ACLs

14. Address Space Management (ICND2)

- Scaling the Network with NAT and PAT
- Transitioning to IPv6

Additional Information:

Class begins each day at 8:00 AM and may extend until 8:00 PM or later. Students should expect class to run late into the evening on most days. In a typical Boot Camp, it is not uncommon for some students to remain past 8:00 PM, depending upon the class size and experience of the students.

Further Information:

For More information, or to book your course, please call us on 353-1-814 8200

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