CCNA Exam Prep

Description:
Cisco’s CCNA certification has become one of the IT industry’s “must-have” certifications. While some may consider the CCNA a foundational certification it is really the basis for all Cisco certifications to follow. Routing and Switching skills and knowledge developed in the CCNA program are an absolute requirement to successfully grow into IT positions in Cisco voice/unified communications, security, wireless and data center technologies.

DCTC’s CCNA course has prepared hundreds of learners to be successful in passing the CCNA exam. Our delivery model of two evenings per week allows learners ample time to practice and apply routing and switching configuration concepts. The class combines lecture, demonstration, in-class labs and outside lab work. Our industry consultant trainers bring their real-world experiences into the classroom every session. This class will prepare you for the CCNA exam (220-120) or the two individual exams (100-101 and 200-101).

Course Objectives
- Describe network fundamentals and build simple LANs
- Establish Internet connectivity
- Manage network device security
- Describe IPv6 basics
- Troubleshoot VLAN issues, explain how STP works, configure EtherChannel, and understand the idea behind Layer 3 redundancy
- Troubleshoot IP connectivity
- Define the characteristics, functions, and components of a WAN
- Configure and troubleshoot EIGRP in an IPv4 environment, and configure EIGRP for IPv6
- Configure, verify, and troubleshoot multi-area OSPF
- Describe SNMP, syslog and NetFlow, and manage Cisco device configurations, IOS images, and licenses

Course Outline
- The TCP/IP and OSI Networking Models
- Fundamentals of Ethernet LANs
- Fundamentals of WANs
- Fundamentals of IPv4 Addressing and Routing
- Fundamentals of TCP/IP Transport and Applications
- Building Ethernet LANs with Switches
- Installing and Operating Cisco LAN Switches
- Configuring Ethernet Switching
- Implementing Ethernet Virtual LANs
- Troubleshooting Ethernet LANs
- Perspectives on IPv4 Subnetting
- Analyzing Classful IPv4 Networks
- Analyzing Subnet Masks
- Analyzing Existing Subnets
Computers & Technology

- Operating Cisco Routers
- Configuring IPv4 Addresses and Routes
- Learning IPv4 Routes with OSPFv2
- Configuring and Verifying Host Connectivity
- Subnet Design
- Variable-Length Subnet Masks
- Basic IPv4 Access Control Lists
- Advanced IPv4 ACLs and Device Security
- Network Address Translation
- Fundamentals of IP Version 6
- IPv6 Addressing and Subnetting
- Implementing IPv6 Addressing on Routers
- Implementing IPv6 Addressing on Hosts
- Implementing IPv6 Routing