Course Training

Cisco Certificated Network Associated – CCNA (BOOTCAMP)

Course Content

Cisco CCNA Bootcamp, carefully crafted for a comprehensive understanding. This 15-day program strikes the perfect balance, dedicating 60% to engaging lectures and 40% to hands-on labs. Uncover the intricacies of CCNA 200-301 exam blueprints through an immersive blend of theory and practical application. Delve into technology-focused labs during the initial 13 days, followed by an intensive 3-day preparation with CCNA exam Mock Labs. Access our online racks 24/7 for exam-ready practice, ensuring you're fully equipped to excel. Ready to elevate your skills, conquer the exam, and propel your networking career forward? Welcome to the ultimate Cisco CCNA experience!

Course Objectives

After taking this course, you should be able to:

- Comprehensive understanding of networking essentials
- Mastery of CCNA 200-301 exam blueprints
- Strategic blend of lectures and hands-on labs
- Proficiency in configuring, managing, and troubleshooting network infrastructures
- In-depth knowledge of fundamental networking principles and advanced topics
- Real-world application of skills in routing, switching, security, and more
- Preparation to tackle challenges with confidence
- Emergence as a certified Cisco networking professional
- Broad range of fundamental knowledge for all IT careers
- Combination of lecture, hands-on labs, and self-study
- Learning installation, operation, configuration, and verification of basic IPv4 and IPv6 networks
- Configuration of network components like switches, routers, and wireless LAN controllers
- Training on managing network devices and identifying basic security threats
- Foundation in network programmability, automation, and software-defined networking

Course Prerequisite

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

Who should attend

- IT professionals seeking to enhance their networking skills
- Network administrators aiming to validate their expertise
- Entry-level professionals aspiring to enter the networking field
- Those preparing for the CCNA 200-301 certification exam
- Anyone looking to gain a solid foundation in networking technologies and practices

Course Outline

- Recognize the components of a computer network and articulate their fundamental characteristics
- Comprehend the model of host-to-host communication
- Detail the features and functions of Cisco Internetwork Operating System (IOS) software
- Define Local Area Networks (LANs) and elucidate the role of switches within LANs
- Explain Ethernet as the network access layer of TCP/IP and delineate the operation of switches
- Install a switch and perform the initial configuration
- Elaborate on the TCP/IP Internet layer, IPv4, its addressing scheme, and subnetting
- Describe the TCP/IP Transport and Application layers
- Explore routing functions
- Implement basic configurations on a Cisco router
- Clarify host-to-host communications across switches and routers
- Identify and resolve common switched network issues and problems associated with IPv4 addressing
- Describe IPv6 features, addresses, and configure/verify basic IPv6 connectivity
- Explain the operation, benefits, and limitations of static routing
- Detail, implement, and verify virtual local area networks (VLANs) and trunks
- Elaborate on the application and configuration of inter-VLAN routing
- Introduce the basics of dynamic routing protocols and describe Open Shortest Path First (OSPF) components and terms
- Explain the functionality of Spanning Tree Protocol (STP) and Rapid Spanning Tree Protocol (RSTP)
- Configure link aggregation using EtherChannel
- Describe the purpose of Layer 3 redundancy protocols
- Explain fundamental WAN and VPN concepts
- Explore the operation of access control lists (ACLs) and their applications in the network

- Configure Internet access with Dynamic Host Configuration Protocol (DHCP) clients and explain/configure network address translation (NAT) on Cisco routers
- Detail basic Quality of Service (QoS) concepts
- Describe wireless network concepts, types, and the use of Wireless LAN Controllers (WLCs)
- Explain network and device architectures and introduce virtualization
- Introduce the concept of network programmability and Software-Defined Networking (SDN), and describe smart network management solutions like Cisco DNA Center™, Software-Defined Access (SD-Access), and Software-Defined Wide Area Network (SD-WAN)
- Configure basic IOS system monitoring tools
- Describe Cisco device management
- Explain the current security threat landscape
- Describe threat defense technologies
- Implement a basic security configuration of the device management plane
- Implement fundamental steps to harden network devices