



Course Title: Cisco Implementing and Administering Cisco Solutions v2.0 (CCNA)	Course Duration: 5.0 Days
Exam: Not Included	Exam Type: Proctored Exam
Qualification: Cisco Certified Network Associate (CCNA) – upon passing the exam	

Course Syllabus

Course Outline

- Exploring the Functions of Networking Lecture
- Introducing the Host-to-Host Communications Model Lecture
- Operating Cisco IOS Software Lecture
- Introducing LANs Lecture
- Exploring the TCP/IP Link Layer Lecture
- Starting a Switch Lecture
- Introducing the TCP/IP Internet Layer, IPv4 Addressing, and Subnets Lecture
- Explaining the TCP/IP Transport Layer and Application Layer Lecture
- Exploring the Functions of Routing Lecture
- Configuring a Cisco Router Lecture
- Exploring the Packet Delivery Process Lecture
- Troubleshooting a Simple Network Lecture
- Introducing Basic IPv6 Lecture
- Configuring Static Routing Lecture
- Implementing VLANs and Trunks Lecture
- Routing Between VLANs Lecture
- Introducing OSPF Lecture
- Building Redundant Switched Topologies Self-study
- Improving Redundant Switched Topologies with EtherChannel Lecture
- Exploring Layer 3 Redundancy Self-study
- Introducing WAN Technologies Self-study
- Explaining Basics of ACL Lecture
- Enabling Internet Connectivity Lecture
- Introducing QoS Self-study
- Explaining Wireless Fundamentals Self-study
- Introducing Architectures and Virtualization Self-study
- Explaining the Evolution of Intelligent Networks Lecture
- Introducing System Monitoring Lecture
- Managing Cisco Devices Lecture
- Examining the Security Threat Landscape Self-study

Course Overview



This course provides foundational knowledge and hands-on experience in networking concepts, including network access, IP connectivity, IP services, security fundamentals, automation, and programmability. Learners configure, manage, and troubleshoot routed and switched networks in medium-sized enterprises. The course emphasizes practical application through lab exercises and real-world scenarios using Cisco equipment and simulators.

Course Learning Outcomes

By the end of this course, learners will be able to install, configure, and operate a small to medium-sized network using Cisco devices; configure and verify VLANs and inter-VLAN routing; implement IPv4 and IPv6 addressing; apply security and network management concepts; troubleshoot common network issues; and understand network automation and programmability basics. Learners gain the practical and theoretical skills required to succeed in the CCNA certification exam and in entry-level networking roles.

Audience

Aspiring network engineers, IT professionals, system administrators, and anyone preparing for the Cisco CCNA certification

Entry-Level Requirements

Basic understanding of computer networks recommended; no prior Cisco experience required

Recommended Reading

Cisco CCNA Official Cert Guide, Cisco Networking Academy materials, Cisco Learn online tutorials and labs

What's Included

Instructor-led training, course materials and exam preparation guide

Exam Information

The course prepares learners for the CCNA 200-301 certification exam. The exam measures knowledge and skills in network fundamentals, network access, IP connectivity, IP services, security fundamentals, and automation/programming. It includes multiple-choice, simulation, and scenario-based questions. Passing the exam earns the Cisco Certified Network Associate (CCNA) credential.

What's Next

After completing this course, learners can advance to CCNP (Cisco Certified Network Professional) certifications or specialized Cisco tracks in security, wireless, and data center technologies.

Additional Information



The Implementing and Administering Cisco Solutions (CCNA) v2.0 course gives you a broad range of fundamental knowledge for all IT careers. Through a combination of lecture, hands-on labs, and self-study, you will learn how to install, operate, configure, and verify basic IPv4 and IPv6 networks. The course covers configuring network components such as switches, routers, and wireless LAN controllers; managing network devices; and identifying basic security threats. The course also gives you a foundation in network programmability, automation, and software-defined networking. This course helps you prepare to take the 200-301 Cisco® Certified Network Associate (CCNA®) exam. By passing this one exam, you earn the CCNA certification. This course also earns you 30 Continuing Education (CE) credits towards recertification.