

CCNA Training

Objective:

This course is designed to impart knowledge about detailed knowledge of Computer Networks, various protocols used in Communication, Managing and configuring Cisco Switches and Routers and various WAN technologies.

As organizations transition and move to adapt to controller based architectures, the job of network engineer becomes more vital than ever. CCNA Routing and Switching certification will not only prepare you with the knowledge of basic networking but it will build you with core technical networking concepts so that one stays relevant with skill set needed to Install, Configure, Manage, Maintain and troubleshoot computer networks.

Prerequisites to CCNA Training:

As per Cisco guideline, there are no prerequisites to take CCNA R&S course training as well as to attempt the CCNA certification exam.

However, CCENT (the entry-level course training) certification is recommended.

Overview of Training:

- In this course students will learn all of the CCNA fundamentals. Each section includes easy to understand diagrams and configuration examples. Starting with the TCP/IP and OSI Models, this course will take you through each component of networking.
- With these basics mastered, the course will take you through actual device configurations and troubleshooting techniques teaching you how to network with the best of them. You will have instant access to the course material. All of the course videos can be streamed at any time. Students completing this course will have the knowledge to pass the exam and start a

career in networking. *The sooner you start the course.....the sooner you will have your CCNA certification.*

Why take this course:

- CCNA validates the ability to understand, operate, configure, and troubleshoot routed and switched network.
- It helps to resolve a customer's problem more efficiently.
- Once you are CCNA certified, you can get a higher salary.
- It teaches the candidate how to create a point-point connection.
- It explains how to construct network addresses.

Gain in the outcome:

A Cisco **CCNA** Routing and Switching certification provides you with the knowledge and expertise to succeed in networking, even as technologies continue to evolve. The program teaches you to install, monitor, and troubleshoot the network infrastructure products that are at the very heart of the Internet of Things

Cisco offers Cisco Certified Network Associate (**CCNA**) Routing and Switching is an ideal platform for an entry-level network engineers to enhance their **basic** knowledge in networking field. ... The candidate will be able to Install, Configure and troubleshoot the cisco devices like routers, switches etc.

Who this course is for:

- This course is a perfect fit for beginners and test ready students
- Anyone that wants to start a career in networking

- Stream : CSE/IT/ECE/EE/ME/BCA/MCA

Learning Outcomes:

- After completion of the course the student will be able to manage Network for an Organization.
- Students will learn: How to pass the CCNA exam, All of the CCNA exam topics, How to configure Cisco routers and switches, How to Deploy a LAN, How to troubleshoot networking issues

Course Outline:

Module: 1	CCNA 1 Introduction to Network Course	5 hours
Content		
Chapter 1	Exploring the Network	
Chapter 2	Configuration a Network Operating System	
Chapter 3	Network Protocols and Communications	
Chapter 4	Network Access	
Chapter 5	Ethernet	
Chapter 6	Network Layer	
Chapter 7	Transport Layer	
Chapter 8	IP Addressing	
Chapter 9	Sub-netting IP Networks	
Chapter 10	IP mapping	
Chapter 11	Application Layer	
Chapter 12	It's a Network	
Module: 2	CCNA 2 Routing and Switching Essentials	5 hours

	Course	
Content		
Chapter 1	Introduction to Switched Networks	
Chapter 2	Basic Switching Concepts and Configuration	
Chapter 3	VLANs	
Chapter 4	Routing Concepts	
Chapter 5	Inter-VLAN Routing	
Chapter 6	Static Routing	
Chapter 7	Routing Dynamically	
Chapter 8	Single-Area OSPF	
Chapter 9	Access Control Lists	
Chapter 10	DHCP	
Chapter 11	Network Address Translation for IPv4	
Module: 3	CCNA 3 Scaling Network Course	10 hours
Content		
Chapter 1	Introduction to Scaling Networks	
Chapter 2	LAN Redundancy	
Chapter 3	Link Aggregation	
Chapter 4	Wireless LANs	
Chapter 5	Adjust and Troubleshoot Single-Area OSPF	
Chapter 6	Multi area OSPF	
Chapter 7	EIGRP	
Chapter 8	EIGRP Advanced Configurations and Troubleshooting	
Chapter 9	IOS Images and Licensing	

Module: 4	CCNA 4 Connecting Network Course	10 hours
Content		
Chapter 1	Hierarchical Network Design	
Chapter 2	Connecting to the WAN	
Chapter 3	Point-to-Point Connections	
Chapter 4	Frame Relay	
Chapter 5	Network Address Translation for IPv4	
Chapter 6	Broadband Solutions	
Chapter 7	Securing Site-to-Site Connectivity	
Chapter 8	Monitoring the Network	
Chapter 9	Troubleshooting the Network	