

Cisco Certified Network Associate (CCNA)

The CCNA (Cisco certified network associate) is meant for all those looking to get a foothold in Networking. This forms the base of the Cisco training pyramid and offers different specializations for network engineers. The basic CCNA course is CCNA - Routing and Switching. We also offer the CCNA Security and the CCNA Voice both of which require the CCNA Routing and Switching as a prerequisite.

The CCNA course is taught by world class instructors in state of the art classrooms with labs equipped with cutting edge infrastructure, including high end routers, switches and servers. The course is taught in a hands on manner so that students can get an actual feel of the nitty gritty of networking.

Course Outline

☞ **CCNA Routing and Switching**


- Basics of IP networking
- Lan Switching
- IP Addressing IPv4 and IPv6
- Routing Protocols
- WAN Technologies
- Troubleshooting

☞ **CCNA Security**

- Common Security threats and attacks
- Security on Cisco Routers
- Cisco Firewall Technologies
- Cisco IPS
- VPN Technologies
- Secure Network Management and Reporting

☞ **CCNA Voice:**

- Cisco Unified Communications Manager Express
- Cisco IP Phone Concepts, Registration and EPhone-DNS
- VoIP
- PSTN and digital network convergence
- Cisco unified communications
- Enabling Telephony Features with CUCM



CCNA
Routing & Switching
Security
Voice

CCNA Security

Course Curriculum

Common Security Threats

- Describe common security threats

Security and Cisco Routers

- Implement security on Cisco routers
- Securing the control, data, and management plane
- Describe Cisco Security Manager
- Describe IPv4 to IPv6 transition

AAA on Cisco Devices

- AAA (authentication, authorization and accounting)
- Describe TACACS+
- Describe RADIUS
- Describe AAA
- Verify AAA functionality

IOS ACLs

- Describe ACL Filtering
- Standard
- Extended
- Named ACL
- Describe considerations when building ACLs
- Implement IP ACLs to mitigate threats in a network

Secure Network Management and Reporting

- Describe secure network management
- Implement secure network management

Cisco Firewall Technologies

- Operational strengths and weaknesses of firewall
- Describe stateful firewalls
- Describe the types of NAT used in firewall
- Implement zone-based policy firewall using CCP
- Implement Network Address Translation (NAT)
- Implement Port Address Translation (PAT)

Common Layer 2 Attacks

- Describe Layer 2 security using Cisco switches
- Describe VLAN security
- Implement VLANs and trunking
- Implement spanning tree

Cisco IPS

- Cisco Intrusion Prevention System (IPS) deployment
- Describe IPS technologies
- Configure Cisco IOS IPS using CCP

VPN Technologies

- Describe the different methods used in cryptography
- Describe VPN technologies
- Describe the building blocks of IPsec
- IPsec site-to-site VPN with pre-shared key
- Verify VPN operations
- Secure Sockets Layer (SSL) VPN using ASA device

Intro to Cisco ASA

- Implement the Cisco Adaptive Security Appliance