

Cisco Certified Network Associate (CCNA)

Course Outline

Module 1: Network Fundamentals

- Learn about network components and their functions
- Understand IPv4 and IPv6 addressing schemes
- Explore the OSI model, TCP/IP models, and protocols

Module 2: Routing and Switching

- Introduction to the fundamentals of routing and switching
- Configure and troubleshoot routing protocols like OSPF and EIGRP
- Implement VLANs, trunking, and Inter-VLAN routing

Module 3: Network Security

- Learn to secure networks using firewalls, VPNs, and access control lists (ACLs)
- Explore AAA (Authentication, Authorization, and Accounting) mechanisms

Module 4: IP Services and Automation

- Understand DHCP, DNS, and NAT configuration
- Get started with automation using Python and network APIs
- Learn how programmability can enhance network performance and efficiency