

Cisco Certified Network Associate – CCT209

Awarding Body:	Cisco Certified Network Associate
Schedule:	1 evening per week, 6.00pm – 9.00pm
Fees:	€1,600
Duration:	21 weeks – 80 lecture contact hours
Next Commencement Date:	August / February
Learning Mode:	Blended Learning with online support

Programme Overview and Audience

Cisco's CCNA certification is widely recognized as the entry level certification for Cisco technology networking skills. The CCNA certification validates an individual's networking skills at the foundation level. Candidates who pass the CCNA exam receive a CCNA certificate from Cisco and may display the CCNA designation on their business cards. CCNA forms the associate level of the Cisco Career Certifications program. It is the entry level certification that supports all of the career tracks within Cisco Certifications. The course covers topics on Extending Switched Networks with VLANS, Determining IP Routes, Managing IP traffic with Access Lists, Establishing Point-to-Point connections, and Establishing Frame Relay Connections.

Programme Aims and Objectives

- Understand networking topology and Cisco networking technology
- Configure and manage Cisco routers, hubs and switches
- Learn to configure Virtual Private Networks and gateways
- Learn to configure devices remotely and interconnect networks
- Understand how IP routing works
- Learn about switching technologies
- Work with CISCO tools and simulators
- Gain the internationally recognised Cisco CCNA qualification

Programme Content

Technology

- Describe network communications using layered models
- Evaluate rules for packet control
- Compare and contrast key characteristics of LAN environments
- Evaluate TCP/IP communication process and its associated protocols
- Evaluate the characteristics of routing protocols
- Describe the components of network devices
- Describe the Spanning Tree process
- Evaluate key characteristics of WANs

Planning & Designing

- Design a simple LAN using Cisco Technology
- Design an IP addressing scheme to meet design requirements
- Select an appropriate routing protocol based on user requirements
- Design a simple internetwork using Cisco technology
- Develop an access list to meet user specifications
- Choose WAN services to meet customer requirements

Implementation & Operation

- Configure routing protocols given user requirements
- Configure IP addresses, subnet masks, and gateway addresses on routers and hosts
- Configure a router for additional administrative functionality
- Configure a switch with VLANS and inter-switch communication
- Implement a LAN
- Customize a switch configuration to meet specified network requirements
- Manage system image and device configuration files

- Perform an initial configuration on a router
- Perform an initial configuration on a switch
- Implement access lists
- Implement simple WAN protocols

Troubleshooting

- Utilize the OSI model as a guide for systematic network troubleshooting
- Perform LAN and VLAN troubleshooting
- Troubleshoot routing protocols
- Troubleshoot IP addressing and host configuration
- Troubleshoot a device as part of a working network
- Troubleshoot an access list
- Perform simple WAN troubleshooting

Assessment

This course prepares candidates for the necessary globally accredited online ICND1 and ICND2 CCNA examinations.

Career Progression Opportunities and Further Study Options

The CCNA certification is an essential qualification for a Networking career. It can complement an academic qualification such as a Bachelors in Engineering, Computing, and be a great foundation for further Cisco and Microsoft certifications. This qualification can also lead to careers in the following role types: Network Engineer, Systems Engineer, Network Administrator, Security Analyst, Network Architect, Systems Architect, Systems Programmer, LAN Engineer, WAN Engineer, and the like.