



*Training Course:  
CCNA Routing and Switching*

*2 - 6 December 2024  
Barcelona (Spain)  
Grupotel Gran Via 678*

## Training Course: CCNA Routing and Switching

Training Course code: IT235225 From: 2 - 6 December 2024 Venue: Barcelona (Spain) - Grupotel Gran Via 678 Training Course Fees: 5775 € Euro

### Introduction

The CCNA Routing and Switching now consolidated under CCNA 200-301 training program is designed to equip aspiring and current network professionals with essential knowledge and skills to build, manage, and troubleshoot modern computer networks. This program offers a comprehensive foundation in networking, covering a wide range of topics vital for network administrators, engineers, and IT professionals. In this training program, you'll delve into the core concepts of network architecture, routing and switching, network security, and automation, providing you with the expertise needed for a successful career in the field of networking.

### Objectives

The primary objectives of this CCNA Routing and Switching training program are as follows:

- **Comprehensive Networking Understanding:** Gain a thorough understanding of networking fundamentals, including the OSI and TCP/IP models, IPv4 and IPv6 addressing, and subnetting.
- **Router and Switch Configuration:** Learn how to configure and manage Cisco routers and switches, enabling efficient network operations.
- **Routing Protocols:** Master the configuration and troubleshooting of dynamic routing protocols, such as OSPF, EIGRP, and RIP.
- **Network Access and Security:** Understand network security principles, VLANs, access control lists ACLs, and security best practices.
- **IP Services:** Explore essential network services like DNS, DHCP, and Network Time Protocol NTP.
- **WAN Technologies:** Discover various WAN technologies, including leased lines, Frame Relay, and VPNs.
- **Network Automation and Programmability:** Acquire skills in network automation, Python scripting, and working with REST APIs.

### Target Audience

This CCNA Routing and Switching training program is ideal for:

- **Aspiring Network Professionals:** Individuals looking to start a career in networking and seeking a solid foundation in network concepts and Cisco technologies.
- **IT Professionals:** Existing IT professionals who want to enhance their networking knowledge and skills to advance in their careers.
- **Network Administrators and Technicians:** Network administrators and technicians who want to refresh and update their networking knowledge.
- **System Administrators:** System administrators who need to understand networking to manage and troubleshoot network-related issues in their roles.
- **Cisco Networking Enthusiasts:** Individuals interested in Cisco networking technologies and certifications as

a step toward Cisco Certified Network Professional CCNP or Cisco Certified Internetwork Expert CCIE certification.

## Training Program Outline

### Day 1: Network Fundamentals

- Introduction to Networking
- OSI Model
- TCP/IP Model
- IPv4 and IPv6 Addressing
- Subnetting Basics

### Day 2: Network Access and Ethernet Switching

- Ethernet Switching
- VLANs and Trunking
- Basic Router Configuration
- DHCP and NAT

### Day 3: IP Routing and Connectivity

- Routing Basics
- Routing Protocols RIP, OSPF, EIGRP
- Router Configuration and Verification
- Inter-VLAN Routing

### Day 4: Network Services and Security

- DNS
- DHCP
- Security Fundamentals ACLs, Port Security
- Basic Firewall Concepts
- VPN and GRE Tunnels

### Day 5: Advanced Topics

- WAN Technologies Leased Lines, Frame Relay, PPP
- Network Automation Basics
- Introduction to Python for Network Engineers
- IPv6 Configuration

## Registration form on the Training Course: CCNA Routing and Switching

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

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### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....  
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### Payment Method

- Please find enclosed a cheque made payable to Global Horizon
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### Easy Ways To Register

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