SCANDINAVIAN ACADEMY
For Training and Development

Course: (CCNP) Routing and Switching

Code	City	Hotel	Start	End	Price	Language - Hours
824	London (UK)	Hotel Meeting Room	2025-11-03	2025-11-07	5450 €	En - 25

Course Description

Welcome to the Cisco Certified Network Professional (CCNP) Training and Exam Preparation course! This comprehensive training program is designed for networking professionals aiming to advance their skills and prepare thoroughly for the CCNP certification exam. The CCNP certification is a highly regarded credential in the IT industry, demonstrating expertise in enterprise networking solutions. The CCNP Routing and Switching course aims to equip network professionals with the knowledge and skills necessary to effectively plan, implement, verify, and troubleshoot both local and wide-area enterprise networks. This course is specifically designed for network technicians who aspire to advance their careers and move into higher-level network administrator positions.

Course Objectives

- Advanced Routing and Switching Knowledge
- Proficiency in Network Implementation
- Network Troubleshooting Skills
- Hands-on Practical Experience
- Infrastructure Security
- VPN and Network Services

Who Should Attend:

- Network engineers, administrators, and technicians seeking to enhance their career with a CCNP certification.

- IT professionals aiming to deepen their understanding of Cisco networking solutions.
- Individuals who have already attained the Cisco Certified Network Associate (CCNA) certification and want to advance to the next level.

Course Outline

1: 300-101 ROUTE (Implementing Cisco IP Routing)

- **Network Principles:**
    - Network Theory
    - Network Infrastructure
- **Layer 2 Technologies:**
    - Link Aggregation
- **Layer 3 Technologies:**
    - EIGRP (Enhanced Interior Gateway Routing Protocol)
    - OSPF (Open Shortest Path First)
    - BGP (Border Gateway Protocol)
    - Redistribution
    - Path Control
- **VPN Technologies:**
    - DMVPN (Dynamic Multipoint VPN)
    - GRE (Generic Routing Encapsulation)
    - IPsec (Internet Protocol Security)
- **Infrastructure Security:**
    - Routing Protocol Authentication
- **Infrastructure Services:**
    - DHCP (Dynamic Host Configuration Protocol)
    - NAT (Network Address Translation)
    - SNMP (Simple Network Management Protocol)

2: 300-115 SWITCH (Implementing Cisco IP Switched Networks)

- **Layer 2 Technologies:**
  - Switch Administration
  - VLAN (Virtual Local Area Network)
  - Trunking
  - EtherChannel
  - Spanning Tree Protocol (STP)
  - Security Features (Port Security, Storm Control, etc.)
- **Infrastructure Security:**
  - Device Security
  - VLAN Access Control Lists (VACLs)
  - Infrastructure Services:
  - First Hop Redundancy Protocols (HSRP, VRRP, GLBP)
  - Network Monitoring and Maintenance

3: 300-135 TSHOOT (Troubleshooting and Maintaining Cisco IP Networks)

- **Network Principles:**
  - Troubleshooting Methodologies
  - Network Maintenance
- **Layer 2 Technologies:**
  - Troubleshooting VLANs, Trunking, EtherChannel, STP
- **Layer 3 Technologies:**
  - Troubleshooting IPv4 and IPv6 Addressing and Subnetting
  - Troubleshooting EIGRP, OSPF, BGP
  - Troubleshooting Redistribution
  - Troubleshooting Path Control
- **VPN Technologies:**
  - Troubleshooting GRE and DMVPN
- **Infrastructure Security:**
  - Troubleshooting Device Security and AAA (Authentication, Authorization, and

Accounting)

- **Infrastructure Services:**
  - Troubleshooting DHCP, DNS, NAT, and NTP (Network Time Protocol)
  - Troubleshooting SNMP
  - Troubleshooting Network Management

The Scandinavian Academy for Training and Development employs modern methods in training and skills development, enhancing the efficiency of human resource development. We follow these practices:

- **Theoretical Lectures:**
    - We deliver knowledge through advanced presentations such as PowerPoint and visual materials, including videos and short films.
- **Scientific Assessment:**
    - We evaluate trainees skills before and after the course to ensure their progress.
- **Brainstorming and Interaction:**
    - We encourage active participation through brainstorming sessions and applying concepts through role play.
- **Practical Cases:**
    - We provide practical cases that align with the scientific content and the participants specific needs.
- **Examinations:**
    - Tests are conducted at the end of the program to assess knowledge retention.
- **Educational Materials:**
    - We provide both printed and digital scientific and practical materials to participants.
- **Attendance and Final Result Reports:**
    - We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.
- **Professionals and Experts:**
    - The programs scientific content is prepared by the best professors and trainers in various fields.
- **Professional Completion Certificate:**
    - Participants receive a professional completion certificate issued by the Scandinavian Academy for Training and Development in the Kingdom of Sweden, with the option for international authentication.
- **Program Timings:**
    - Training programs are held from 10:00 AM to 2:00 PM and include coffee break sessions during lectures.