

Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå oss här

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Implementing and Administering Cisco Solutions

CODE: LENGTH: PRICE:

CIS_CCNA 40 Hours (5 days) kr38,450.00

Description

The Implementing and Administering Cisco Solutions (CCNA) training teaches you how to install, operate, configure, and verify a basic IPv4 and IPv6 network, configure network components, such as switches, routers, and wireless local area network (LAN) controllers (WLNs), manage network devices, and identify basic security threats.

This training also covers the introduction of AI and machine learning (ML) in network operations. This training prepares you for the Cisco Certified Network Associate (200-301 CCNA) v1.1 exam. If passed, you earn the CCNA certification. This training also earns you 30 Continuing Education (CE) credits towards recertification.

This training will help you: • Learn the knowledge and skills to install, configure, and operate a small- to medium-sized network • Gain a foundation in the essentials of networking, security, and automation • Prepare for the 200-301 CCNA v1.1 exam

• Earn 30 CE credits toward recertification Technology areas • Networking • Security • Automation • Programmability

Objectives

- · Identify the components of a computer network and describe their basic characteristics
- Understand the model of host-to-host communication Describe the features and functions of the Cisco IOS Software
- · Describe LANs and the role of switches within LANs
- Describe Ethernet as the network access layer of transmission control protocol and the internet protocol (TCP/IP) and describe the operation of switches
- Install a switch and perform the initial configuration
- Describe the TCP/IP internet layer, IPv4, its addressing scheme, and subnetting
- · Describe the TCP/IP transport layer and application layer · Explore the functions of routing
- Implement basic configuration on a Cisco router Explain host-to-host communications across switches and routers
- · Identify and resolve common switched network issues and common problems associated with IPv4 addressing
- · Describe IPv6 main features, addresses and configure and verify basic IPv6 connectivity
- Describe the operation, benefits, and limitations of static routing
- · Describe, implement and verify virtual local area networks (VLANs) and trunks
- Describe the application and configuration of inter-VLAN routing
- Explain the basics of dynamic routing protocols and describe components and terms of open shortest path first (OSPF)
- Explain how spanning tree protocol (STP) and rapid spanning tree protocol (RSTP) work
- Configure link aggregation using EtherChannel
 Describe the purpose of Layer 3 redundancy protocols
- Describe basic wide-area network (WAN) and virtual private network (VPN) concepts
- Describe the operation of access control lists (ACLs) and their applications in the network

• Configure internet access using dynamic host configuration protocol (DHCP) clients and explain and configure network address translation (NAT) on Cisco routers

- · Describe the basic quality of service (QoS) concepts
- Describe the concepts of wireless networks, which types of wireless networks can be built and how to use WLC
- Describe network and device architectures and introduce virtualization Explain software-defined networks
- Configure basic Cisco IOS system monitoring tools Describe the management of Cisco devices
- Describe the current security threat landscape
 Describe threat defense technologies
- Implement a basic security configuration of the device management plane Implement basic steps to harden network devices
- Discuss the need of network programmability in Enterprise networks, common programmability protocols, and configuration
- management tools

 Describe AI and ML in network operations

Audience

• Entry-level Network Engineers • Entry-level Network Administrators • Entry-level Network Support Technicians

• Entry-level Help Desk Technicians

Prerequisites

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

• Basic computer literacy • Basic PC operating system navigation skills • Basic internet usage skills • Basic IP address knowledge

Programme

- Exploring the Functions of Networking Introducing the Host-To-Host Communications Model Operating Cisco IOS Software
- Introducing LANs Exploring the TCP/IP Link Layer Starting a Switch
- Introducing the TCP/IP Internet Layer, IPv4 Addressing, and Subnets
- Explaining the TCP/IP Transport Layer and Application Layer Exploring the Functions of Routing Configuring a Cisco Router
- Exploring the Packet Delivery Process Troubleshooting a Simple Network Introducing Basic IPv6 Configuring Static Routing
- Implementing VLANs and Trunks
 Routing Between VLANs
 Introducing OSPF
 Building Redundant Switched Topologies
- Improving Redundant Switched Topologies with EtherChannel Explaining the Basics of ACL Enabling Internet Connectivity
- Introducing AI and ML in Network Operations Introducing System Monitoring Managing Cisco Devices
- Securing Administrative Access Implementing Device Hardening Exploring Layer 3 Redundancy
- $\bullet \ Introducing \ WAN \ Technologies \bullet \ Introducing \ QoS \bullet Explaining \ Wireless \ Fundamentals$
- Introducing Architectures and Virtualization Explaining Software-Defined Networking Introducing Network Programmability
- Examining the Security Threat Landscape Implementing Threat Defense Technologies Lab Outline
- Get Started with Cisco CLI
 Observe How a Switch Operates
 Perform Basic Switch Configuration
 Inspect TCP/IP Applications
- Configure an Interface on a Cisco Router
 Configure and Verify Layer 2 Discovery Protocols
 Configure Default Gateway
- Explore Packet Forwarding
 Troubleshoot Switch Media and Port Issues
 Troubleshoot Port Duplex Issues
- Configure Basic IPv6 Connectivity
 Configure and Verify IPv4 Static Routes
 Configure IPv6 Static Routes
- Configure VLANs and Trunks
 Configure Inter-VLAN Routing
 Configure and Verify Single-Area OSPF
- Configure and Verify EtherChannel Configure and Verify IPv4 ACLs Configure a Provider-Assigned IPv4 Address
- Configure Static NAT
 Configure Dynamic NAT and PAT
 Configure and Verify NTP
 Create the Cisco IOS Image Backup
- Upgrade Cisco IOS Image
 Secure Console and Remote Access
 Enable and Limit Remote Access Connectivity
- Configure and Verify Port Security Log in to and Monitor the WLC Configure an Open Wireless Network
- Define a RADIUS Server and Enable SNMP and Syslog
 Configure a WLAN to Use WPA2 PSK

Test and Certification

What to expect on the exam

Cisco Certified Network Associate (200-301 CCNA) v1.1 is a 120-minute exam associated with the CCNA certification. The exam tests your knowledge and skills related to: • Network fundamentals • Network access • IP connectivity • IP services

Security fundamentals • Automation and programmability

Session Dates

Date	Location	Time Zone	Language	Туре	Guaranteed	PRICE
11 Aug 2025	Virtual Classroom (GMT)	BST	English	Instructor Led Online		kr38,450.00

Ytterligare information

Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.