

# Cisco Certified Network Associate (CCNA) Training Course

The Cisco Certified Network Associate (CCNA) course provides foundational networking knowledge and skills, preparing you for managing and optimizing advanced network solutions.

**R** NET-200

Course Outcomes

# Professional, practical, & hands-on live instructor-led training

Further your skills and graduate as a certified professional, with the skills, experience, and job-search know how to get your career started.

# 🗬 🐓 Start Today

# **Potential Career Tracks**

- Network Administrator Network Engineer
- IT Help Desk Technician Systems Administrator

**Telecommunications Engineer** 

Network Support Specialist



Taught by Industry Veterans & World Class Instructors

# Introduction to Cisco Certified Network Associate (CCNA)

# Course Overview

Intellectual Point's Cisco Certified Network Associate (CCNA) Training Course is meticulously crafted to provide you with a robust understanding of networking fundamentals, effectively gearing you up for the CCNA certification exam . This course delivers a thorough dive into essential networking topics such as network access, IP services, IP connectivity, security fundamentals, and automation. Through a blend of theoretical knowledge and practical exercises, you'll develop the proficiency required to install, configure, and troubleshoot various kinds of networks. By the program's conclusion, you'll be fully prepared to pass the CCNA exam and apply your networking skills in real-world scenarios with confidence.

Throughout the training, you'll explore the configuration, management, and troubleshooting of network devices, including routers and switches, to ensure optimal performance. The course integrates interactive labs and activities to reinforce key concepts and enhance your practical abilities in executing network management tasks. By the end of the training, you will be skilled in implementing basic security practices and have a grasp of emerging networking technologies relevant to today's IT environments.

# Obtainable Skills

IP Addressing and Subnetting Network Protocols Configuration	Basic Security Modelling
Routing and Switching Fundamentals Wireless LAN Implementation	CCNA Exam Preparation
Automation and Programmability Network Device Troubleshooting	

# **Course Insights**

# ( Audience Profile

The CCNA Training Course is tailored for aspiring network engineers, IT support professionals, and students with a foundational understanding of computers who wish to advance their knowledge in networking. It is ideally suited for individuals who are just entering the field of networking or those seeking to solidify their skills with validated Cisco knowledge. Professionals who wish to shift their careers towards networking infrastructure or those interested in obtaining an industry-recognized certification are the perfect candidates for this course.

Course Outcomes	By the end of this course, participants will:	
<b>1</b> Gain a comprehensive understanding of networking principles and practices.		
2 Develop proficiency in configuring and managing Cisco routers and switches.		
3 Acquire skills to troubleshoot network issues and optimize network performance.		
4 Implement basic security measures to protect network infrastructure.		
5 Be well-prepared to successfully pass the CCNA certification exam.		

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# Module by Module Learning Outline

# Hodule 1: Networking Fundamentals

# Learning Objectives:

- Understand core networking principles and architectures.
- Differentiate between various networking models and technologies.

# Topics Covered

#### Introduction to Networking:

- OSI and TCP/IP models.
- Fundamentals of network topologies and types.

## IP Addressing and Subnetting:

- Understanding IPv4 and IPv6 addressing schemes.
- Calculating and implementing subnet masks.

# 🗇 Module 3: IP Connectivity

## Learning Objectives:

- Develop skills in routing protocols and IP connectivity solutions.
- Configure and verify router functionalities and operations.

# Topics Covered

## Routing Fundamentals:

- Static vs dynamic routing overview.
- Introduction to routing protocols like OSPF and EIGRP

## Configuring Cisco Routers:

- Basic router setup steps.
- Implementing routing protocols in network topologies.

# 🗇 Module 5: Security Fundamentals

## Learning Objectives:

- Implement basic security mechanisms for network protection.
- Develop skills necessary to secure network devices.

# Topics Covered

# Network Security Concepts:

- Introduction to fundamental security protocols.
- Protecting network assets with ACLs.

#### Securing Network Devices:

- Applying basic security settings on routers and switches.
- Introduction to VPN and encryption technologies.

# Hodule 2: Network Access

# Learning Objectives:

- Grasp the concepts of switching and access layer networking
- Learn to configure and manage basic network devices.

# Topics Covered

#### Switching Concepts:

- Functions and operations of network switches.
- VLANs and trunking protocols.

#### Configuring Cisco Switches:

- Initial configuration tasks for switches.
- Securing access to the console and VTY lines.

# Hodule 4: IP Services

#### Learning Objectives:

- Learn to implement various IP services in network environments.
- Understand the application and verification of network services.

Topics Covered

#### DHCP and DNS Operations:

- Configuration and management of DHCP server.
- DNS functions and its role in networks.

#### NAT and PAT Implementation:

- Configure Network Address Translation (NAT).
- Understanding Port Address Translation (PAT).

# Hodule 6: CCNA Exam Preparation

#### Learning Objectives:

- Review key concepts and practical exercises to ensure preparedness for the CCNA exam.
- Develop effective strategies for approaching and passing the certification exam.

## Topics Covered

#### Comprehensive Review:

- Consolidation of networking, security, and automation topics.
- Practice exams and assessment tools for self-evaluation.

#### Exam Taking Techniques:

- Time management and question analysis skills.
- Resources and tips for the exam day experience.



