

Cisco Certified Network Professional (CCNP) Training Course

Cisco Certified Network Professional (CCNP) certifies advanced skills in enterprise networking with a focus on planning, implementing, verifying, and troubleshooting local and wide-area enterprise networks.

NET-200

Course Outcomes

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

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

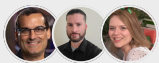
 Start Today

Potential Career Tracks

Network Engineer Data Center Engineer

Network Architect Systems Engineer

IT Manager Network Consultant



Taught by Industry Veterans &
World Class Instructors

Introduction to Cisco Certified Network Professional (CCNP)

Course Overview

The Cisco Certified Network Professional (CCNP) training course at Intellectual Point is crafted to equip professionals with advanced networking skills essential for modern IT infrastructures. This comprehensive course prepares participants for the CCNP certification exams while also building proficiency in managing, securing, and troubleshooting complex network environments. You will delve into key concepts of enterprise networking, implementation, and operations throughout the course, guided by expert instructors with practical industry experience. By its conclusion, participants will not only be ready to pass the CCNP exams but will also possess the capability to design and optimize large-scale networks.

The training will explore in-depth topics such as network architecture, virtualization, automation, and quality-of-service configurations. You will engage in rigorous labs and scenario-based exercises to develop practical expertise in operating multifaceted enterprise networks. By the end of the course, you will analyze network requirements, implement advanced solutions, and apply your skills to real-world networking challenges.

Obtainable Skills

Advanced Routing Techniques

Network Security Architecture

Enterprise Network Design

Network Automation and Programmability

Troubleshooting Complex Network Issues

Quality of Service Configuration

Virtualization Technologies

Wireless Network Implementation

Multi-Protocol Label Switching (MPLS)

Course Insights

Audience Profile

This CCNP training course is tailored for network professionals who have a fundamental understanding of networking concepts and wish to advance their careers in IT networking. Especially suitable for those with experience working as network engineers, support technicians, or IT professionals within enterprise environments, it serves those aspiring to elevate their technical proficiency. The training targets individuals aiming to deepen their knowledge of Cisco technologies and those who are driven to earn a globally recognized credential to validate their advanced networking skills. The course is perfect for professionals seeking to broaden their career paths by mastering both traditional and emerging networking technologies.

Course Outcomes

By the end of this course, participants will:

1 Develop and optimize enterprise network architectures to support organizational IT goals.

2 Implement network automation to increase operational efficiency and scalability.

3 Secure networks by applying best practices for security architecture and configuration.

4 Employ sophisticated troubleshooting methodologies to resolve network issues swiftly.

5 Prepare effectively for CCNP certification exams, enhancing career advancement opportunities.

Module by Module Learning *Outline*

6 Modules

Module 1: Advanced Enterprise Network Architectures

Learning Objectives:

- Understand enterprise network design and optimization.
- Evaluate network requirements to support organizational IT goals.

Topics Covered

Network Design Principles:

- Hierarchical network design models.
- Building resilient and scalable infrastructures.

Enterprise Networking Components:

- Core, distribution, and access layer functions.
- Integrating network services and applications.

Module 2: Network Automation and Programmability

Learning Objectives:

- Implement automation in network operations.
- Utilize programmability to enhance network efficiency.

Topics Covered

Network Automation Tools:

- Overview of automation frameworks and tools.
- Implementing automation scripts and workflows.

Programmability Concepts:

- Using APIs and controllers for network operations.
- Developing and deploying network automation scripts.

Module 3: Network Security Architecture

Learning Objectives:

- Design secure network infrastructures.
- Apply best practices for security configuration.

Topics Covered

Security Frameworks and Protocols:

- Implementing VPNs, firewalls, and intrusion detection.
- Addressing security threats and vulnerabilities.

Policy and Access Management:

- Designing access control policies.
- Implementing secure authentication and authorization.

Module 4: Advanced Routing and Switching Techniques

Learning Objectives:

- Master advanced routing strategies.
- Implement complex switching configurations.

Topics Covered

Routing Protocols and Techniques:

- Dynamic routing protocols: OSPF, EIGRP, BGP.
- Route optimization and redistribution strategies.

Switching Concepts:

- VLAN design and configuration.
- Spanning tree protocol and enhancements.

Module 5: Virtualization and Wireless Network Implementation

Learning Objectives:

- Integrate virtualization in network design.
- Deploy and manage enterprise wireless networks.

Topics Covered

Network Virtualization:

- Benefits and challenges of network virtualization.
- Virtual LANs (VLANs) and Virtual Private Networks (VPNs).

Wireless Technologies:

- Designing and implementing WLAN solutions.
- Security and management of wireless networks.

Module 6: Troubleshooting Complex Network Issues

Learning Objectives:

- Develop advanced troubleshooting skills.
- Apply methodologies to resolve network problems.

Topics Covered

Troubleshooting Methodologies:

- Systematic approaches to network diagnostics.
- Common tools and techniques for problem resolution.

Case Studies and Scenarios:

- Analyzing real-world network issues.
- Practical exercises and simulations in troubleshooting.