Cisco Certified Internetwork Expert (CCIE) Enterprise Infrastructure

Price	Duration	Delivery Methods
$3,295.00	5 Daytime Classes Or 10 Evening Classes	Virtual, In-Person, Private Group,

CAREER SKILLS+™

Course Description:

This intensive training program is designed for experienced network engineers and architects aiming to achieve the highest level of expertise in enterprise infrastructure networking. Participants will gain comprehensive knowledge and hands-on experience in designing, deploying, managing, and optimizing complex enterprise networks using Cisco technologies. The course prepares participants for the CCIE Enterprise Infrastructure certification, emphasizing real-world scenarios and advanced networking concepts.

Certification Preparation:

Prepares participants for the CCIE Enterprise Infrastructure certification exam, focusing on practical skills and theoretical knowledge required for complex network environments.

Learning Mode: Instructor-Led and Self-Paced

Duration: Varied, typically between 5-10 days of instructor-led training supplemented by extensive self-study.

Materials Provided: Extensive digital courseware, lab exercises, and scenario-based simulations.

Who Should Attend

This course is ideal for senior network engineers, network architects, and network professionals with extensive experience in designing, implementing, and managing enterprise networking solutions.

Course Objectives

Network Design and Architecture: Master advanced network design principles and methodologies for enterprise environments.
Routing and Switching: Deep dive into advanced routing protocols (OSPF, EIGRP, BGP) and switching technologies (VLANs, STP, EtherChannel).
WAN Technologies: Understand WAN technologies including MPLS, DMVPN, and SD-WAN.
Network Security: Implement advanced network security measures and best practices.
Network Services: Manage network services such as DHCP, DNS, NTP, and QoS in enterprise networks.
Automation and Programmability: Learn automation techniques and programmability for network management and operations.
Troubleshooting and Optimization: Develop skills in troubleshooting complex network issues and optimizing network performance.

Course Prerequisites

Required Certifications: Extensive hands-on experience in enterprise network design, implementation, and troubleshooting.
Certifications: Recommended to hold Cisco CCNP Enterprise certification or equivalent knowledge and experience.

Technical Skills: Proficiency in routing and switching technologies, network security, and network automation concepts.

Agenda

1. Lessons

Advanced Network Design Principles and Methodologies
Routing Protocols: OSPF, EIGRP, BGP
Switching Technologies: VLANs, STP, EtherChannel
Enterprise Campus Architecture and Design
WAN Technologies: MPLS, DMVPN, SD-WAN
Network Security: Firewall Technologies, VPNs, AAA Services
Network Services: DHCP, DNS, NTP, QoS
Network Automation and Programmability
Troubleshooting Complex Enterprise Networks
Network Optimization and Performance Tuning

2. Lab Outline

Designing and Implementing Enterprise Network Architectures
Configuring Advanced Routing Protocols and Redistribution
Implementing Switching Technologies and Virtualization
Deploying MPLS and DMVPN Solutions
Configuring SD-WAN and Hybrid WAN Deployments
Implementing Network Security Measures and Best Practices
Managing Network Services: DHCP, DNS, NTP, QoS
Automating Network Operations with Python and Ansible
Troubleshooting Real-World Enterprise Network Scenarios
Optimization Strategies for Enterprise Networks