



Train. Employ. Empower.

Cisco Certified Design Expert (CCDE)

Price
\$2,595.00

Duration
**5 Daytime Classes
Or
10 Evening Classes**

Delivery Methods
**Virtual, In-Person,
Private Group,**

Course Description:

CAREER SKILLS+™

This advanced-level course is designed to prepare participants for the Cisco Certified Design Expert certification, emphasizing network design principles, methodologies, and strategies required in complex networks. Participants will explore a variety of network designs that include large-scale data centers, service provider networks, and enterprise environments. The course combines theoretical knowledge with practical design scenarios to provide deep insights into network infrastructure planning, operational continuity, and cost-effective network solutions.

Certification Preparation:

This training is intended to prepare participants for the CCDE practical exam.

Learning Mode: Mixed (Instructor-Led and Self-Paced)

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

Materials Provided: Comprehensive digital courseware, including design scenarios and case studies.

Who Should Attend

This course is targeted at experienced network professionals who are involved in the design of complex network architectures such as network design engineers, network leads, and network architects.

Course Objectives

Advanced Design Principles: Master the principles of advanced network design, including architecture, topologies, protocols, and best practices.

Scalability and Resiliency: Understand how to design networks that are scalable, resilient, and capable of supporting growth and change.

Service Integration: Learn how to integrate and prioritize various network services and applications without compromising performance.

Operational Efficiency: Focus on designing networks that optimize operational efficiency and reduce overall maintenance costs.

Risk Management: Develop strategies to anticipate, identify, and mitigate risks in network design.

Customized Solutions: Learn to create customized solutions that meet specific business requirements while ensuring security and compliance.

Explain the use of VERIS to document security incidents in a standard format.

Describe the Windows operating system features and functionality.

Describe the Linux operating system features and functionality.

Course Prerequisites

Required Certifications: Ideally, participants should hold a valid CCNP or higher-level certification.



Experience: Extensive experience in deploying, operating, and troubleshooting complex networks.

Agenda

1. Lessons

- Network Design Requirements: Analysis and Planning
- Designing Scalable Network Architectures
- Advanced Routing and Addressing Solutions
- Data Center Networking Design
- Designing for Operational Efficiency and Network Optimization
- Security Frameworks and Best Practices in Network Design
- Integrating Wireless, VoIP, and Content Delivery Networks
- Multi-Area Networks: Design Considerations for Service Providers and Enterprises
- Network Resilience: Strategies for Disaster Recovery and Business Continuity
- The Future of Network Design: Trends and Innovations

2. Lab Outline

- Designing a Multi-Tier Network Architecture
- Implementing Advanced Routing Protocols in a Simulated Environment
- Designing and Configuring Scalable IPv4 and IPv6 Networks
- Building Resilient Network Infrastructures
- Simulating Data Center Migrations and Network Integrations
- Developing Security Policies and Compliance Measures
- Case Studies: Analyzing Real-World Network Design Challenges
- Creating Disaster Recovery Plans and Business Continuity Strategies
- Project: Comprehensive Network Design Proposal