
Designing Cisco Enterprise Networks (ENSLD) V2.0

***WHERE GREAT TRAINING
HAPPENS EVERYDAY!***



Designing Cisco Enterprise Networks (ENSLD) V2.0

Course Duration

5 Days

Course Price

\$4,095.00

41 CLCs

Methods of Delivery

In-Person ILT

Virtual ILT

Onsite ILT

About this Class

The Designing Cisco Enterprise Networks (ENSLD) training deepens your knowledge of designing enterprise networks. Topics covered include enterprise network design, including protocols and media for wired and wireless networks, SD-Access, VPN, Quality of Service (QoS), IPv6, and network programmability.

This course also helps you prepare to take the exam, 300-420 Designing Cisco Enterprise Networks (ENSLD), which is part of the CCNP® Enterprise and Cisco Certified Specialist – Enterprise Design certifications.



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How you will benefit

This class will help you:

- Learn the skills, technologies, and best practices needed to design an enterprise network
- Deepen your understanding of enterprise design including advanced addressing and routing solutions, advanced enterprise campus networks, WAN, security services, network services, and software-defined access SDA
- Validate your knowledge and prepare to take the Designing Cisco Enterprise Networks (ENSLD) exam
- Earn 40 CE credits toward recertification

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The job roles best suited to the material in this course are:

- Network Design Engineers
- Network Engineers
- System Administrators

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Objectives

After taking this course, you should be able to:

- Design Enhanced Interior Gateway Routing Protocol (EIGRP) internal routing for the enterprise network
- Design Open Shortest Path First (OSPF) internal routing for the enterprise network
- Design Intermediate System to Intermediate System (IS-IS) internal routing for the enterprise network
- Design a network based on customer requirements
- Design Border Gateway Protocol (BGP) routing for the enterprise network
- Describe the different types and uses of Multiprotocol BGP (MP-BGP) address families
- Describe BGP load sharing
- Design a BGP network based on customer requirements
- Decide where the L2/L3 boundary will be in your Campus network and make design decisions
- Describe Layer 2 design considerations for Enterprise Campus networks
- Design a LAN network based on customer requirements
- Describe Layer 3 design considerations in an Enterprise Campus network
- Examine Cisco SD-Access fundamental concepts
- Describe Cisco SD-Access Fabric Design
- Design a Software-Defined Access (SD-Access) Campus Fabric based on customer requirements
- Design service provider-managed VPNs
- Design enterprise-managed VPNs
- Design a resilient WAN
- Design a resilient WAN network based on customer requirements

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Cont. Objectives

After taking this course, you should be able to:

- Examine the Cisco SD-WAN architecture
- Describe Cisco SD-WAN deployment options
- Understand Cisco SD-WAN – NAT and hybrid design considerations
- Design Cisco SD-WAN redundancy
- Explain the basic principles of Quality of Service (QoS)
- Design QoS for the WAN
- Design QoS for enterprise network based on customer requirements
- Explain the basic principles of multicast
- Explore multicast with PIM-SM
- Designing rendezvous point distribution solutions
- Describe high-level considerations when doing IP addressing design
- Create an IPv6 addressing plan
- Plan an IPv6 deployment in an existing enterprise IPv4 network
- Describe the challenges that you might encounter when transitioning to IPv6
- Design an IPv6 addressing plan based on customer requirements
- Describe Network APIs and protocols
- Describe Yet Another Next Generation (YANG), Network Configuration Protocol (NETCONF), and Representational State Transfer Configuration Protocol (RESTCONF)

Prerequisites

Before taking this course, you should have earned CCNA® certification or be able to:

- Understand network fundamentals
- Implement LANs
- Implement Internet connectivity



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Course Outline

Module 1: Designing EIGRP Routing

Module 2: Designing OSPF Routing

Module 3: Designing IS-IS Routing

Module 4: Designing BGP Routing and Redundancy

Module 5: Exploring BGP Address Families and Attributes

Module 6: Designing an Enterprise Campus LAN

Module 7: Designing a Layer 2 Campus

Module 8: Designing a Layer 3 Campus

Module 9: Discovering the Cisco SD-Access Architecture

Module 10: Exploring Cisco SD-Access Fabric Design

Module 11: Exploring Cisco SD-Access Site Design Strategy and Considerations

Module 12: Discovering Service Provider-Managed VPNs

Module 13: Designing Enterprise-Managed VPNs

Module 14: Designing WAN Resiliency

Module 15: Examining Cisco SD-WAN Architectures

Module 16: Examining Cisco SD-WAN Deployment Design Considerations

Module 17: Examining Cisco SD-WAN-NAT and Hybrid Design Considerations

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Course Outline

Module 18: Designing Cisco SD-WAN Routing and High Availability

Module 19: Exploring QoS

Module 20: Designing LAN and WAN QoS

Module 21: Introducing Multicast

Module 21: Exploring Multicast with Protocol-Independent Multicast-Sparse Mode (PIM-SM)

Module 23: Designing Rendezvous Point Distribution Solutions

Module 24: Designing an IPv4 Address Plan

Module 25: Exploring IPv6

Module 26: Deploying IPv6

Module 27: Introducing Network APIs and Protocols

Module 28: Exploring YANG, NETCONF, RESTCONF, and Model-Driven Telemetry

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Lab Outline

Lab 1: Designing Enterprise Connectivity

Lab 2: Designing an Enterprise Network with BGP Internet Connectivity

Lab 3: Designing an Enterprise Campus LAN

Lab 4: Designing Resilient Enterprise WAN

Lab 5: Designing QoS in an Enterprise Network

Lab 6: Designing an Enterprise IPv6 Network