

Designing Cisco Enterprise Networks (ENSLD)

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In this Designing Cisco Enterprise Networks course focuses on the design of scalable, resilient, and secure enterprise networks using Cisco routing, campus, WAN, and software-defined architectures. It is designed for network architects and senior engineers who need to make informed design decisions rather than simply configure technologies. The curriculum emphasizes architectural tradeoffs, protocol selection, resiliency strategies, and future-ready design principles aligned with modern enterprise requirements.

Students begin by examining routing design using EIGRP, OSPF, IS-IS, and BGP, including address families, attributes, and redundancy considerations. The course then transitions into enterprise campus design, covering Layer 2 and Layer 3 architectures, segmentation strategies, and high-availability considerations. Cisco SD-Access is explored in depth, including fabric architecture, site design strategies, and integration considerations for scalable campus deployments.

The WAN design portion covers enterprise-managed and service provider-managed VPNs, WAN resiliency, and Cisco SD-WAN architectures, including NAT, hybrid connectivity, routing, and high availability. Additional design topics include LAN and WAN QoS, multicast design using PIM-SM and rendezvous point placement, IPv4 and IPv6 address planning, and modern programmability concepts such as APIs, YANG, NETCONF, RESTCONF, and model-driven telemetry. Design-focused labs reinforce real-world decision-making by guiding students through enterprise connectivity, campus, WAN, QoS, and IPv6 network design scenarios.

How you'll 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 300-420 Designing Cisco Enterprise Networks (ENSLD) exam.

Why Attend with Current Technologies CLC

- Our Instructors are in 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 primary audience for this course is as follows:

- Network design engineers
- Network engineers

Course Duration

5 days

Course Price

\$4,095.00 or 41 CLCs

Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

- System administrators

Prerequisites

Before taking this offering, you should be familiar with the following:

- Understanding network fundamentals
- Implementing LANs
- Implementing LAN connectivity

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 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

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 22: Exploring Multicast with 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

LAB OUTLINE

- Discovery 1: Designing Enterprise Connectivity
- Discovery 2: Designing an Enterprise Network with BGP Internet Connectivity
- Discovery 3: Designing an Enterprise Campus LAN
- Discovery 4: Designing SD-Access in the Enterprise
- Discovery 5: Designing Resilient Enterprise WAN
- Discovery 6: Designing QoS in an Enterprise Network
- Discovery 7: Designing an Enterprise IPv6 Network