Designing Cisco Enterprise Networks V1.1

- 5 Days
- Lecture and Hands-on Labs

Course Overview

The Designing Cisco Enterprise Networks (ENSLD) v1.1 course gives you the knowledge and skills you need to design an enterprise network. This course serves as a deep dive into enterprise network design and expands on the topics covered in the Implementing and Operating Cisco® Enterprise Network Core Technologies (ENCOR) v1.0 course. This course also helps you prepare to take the 300-420 Designing Cisco Enterprise Networks (ENSLD) exam which is part of the CCNP® Enterprise and Cisco Certified Specialist – Enterprise Design certifications.

The course qualifies for 40 Cisco Continuing Education credits (CE) towards recertification.

Review this course online at https://www.alta3.com/courses/ensld

Who Should Attend

- Network design engineers
- Network engineers
- System administrators

What You'll Learn

- Design Core Enterprise Routing and WAN Solutions
- Build Secure, Scalable Campus and VPN Infrastructure
- Optimize Addressing, QoS, and Multicast Strategy
- Leverage Network Automation and Programmability

Outline

1. Designing EIGRP Routing
2. Designing OSPF Routing
3. Designing IS-IS Routing
4. Design Case Study Activity: Designing Enterprise Connectivity
5. Designing BGP Routing and Redundancy
6. Understanding BGP Address Families and Attributes
7. Design Case Study Activity: Designing an Enterprise Network with BGP Internet Connectivity
8. Designing the Enterprise Campus LAN
9. Designing Layer 2 Campus
10. Design Case Study Activity: Designing an Enterprise Campus LAN
11. Designing Layer 3 Campus
12. Discovering the Cisco SD-Access Architecture
13. Exploring Cisco SD-Access Fabric Design
14. Exploring Cisco SD-Access Site Design Strategy and Considerations
15. Design Case Study Activity: Designing Cisco SD-Access in the Enterprise
16. Designing Service Provider-Managed VPNs

17. Designing Enterprise-Managed VPNs
18. Designing WAN Resiliency
19. Design Case Study Activity: Designing Resilient Enterprise WAN
20. Examining Cisco SD-WAN Architectures
21. Examining Cisco SD-WAN Deployment Design Considerations
22. Designing Cisco SD-WAN Routing and High Availability
23. Design Case Study Activity: Designing Resilient Enterprise Cisco SD-WAN
24. Understanding QoS
25. Designing LAN and WAN QoS
26. Design Case Study Activity: Designing QoS in an Enterprise Network
27. Exploring Multicast with Protocol-Independent Multicast-Sparse Mode (PIM-SM)
28. Designing Rendezvous Point Distribution Solutions
29. Designing an IPv4 Address Plan
30. Exploring IPv6
31. Deploying IPv6
32. Design Case Study Activity: Designing an Enterprise IPv6 Network
33. Introducing Network APIs and Protocols
34. Exploring YANG, NETCONF, RESTCONF, and Model-Driven Telemetry

LAB OUTLINE

1. Designing Enterprise Connectivity
2. Designing an Enterprise Network with BGP Internet Connectivity
3. Designing an Enterprise Campus LAN
4. Designing Resilient Enterprise WAN
5. Designing QoS in an Enterprise Network
6. Designing an Enterprise IPv6 Network

Prerequisites

- CCNA® certification or be familiar with:
- Understand network fundamentals
- Implement LANs
- Implement LAN connectivity