



CCDA v3.0 Prep Boot Camp

Course Details

Course Outline

1. Design Methodologies

- Design Life Cycle
- Characterizing Existing Network
- Top-Down Approach

2. Network Design Objectives

- Building a Modular Network
- Applying Modularity: Hierarchy in a Network
- Applying Modularity: Virtualization Overview

3. Campus Network Design

- Layer 2/Layer 3 Demarcation
- Layer 2 Design Considerations
- High Availability Considerations
- Layer 3 Design Considerations
- Traffic and Interconnections

4. Enterprise Network Design

- Designing a Secure Network
- Edge Connectivity Design
- WAN Design
- Branch Design
- Connecting to the Data Center

5. Design of Internal Routing and Connecting to the Internet

- Routing Protocol Considerations
- Expanding EIGRP Design
- Expanding OSPF Design
- Introducing IS-IS
- Expanding IS-IS Design



- Using BGP to Connect to the Internet

6. Expanding the Existing Network

- Understanding Quality of Service
- Supporting Wireless Access
- Integrating Collaboration

7. IP Addressing Design

- Concepts of Good IP Addressing
- Creating an Addressing Plan for IPv4
- IPv6 Addressing
- Supporting IP Addressing

8. Introduction to Software Defined Networks

- SDN Overview

9. Case Study:

- Ask the Right Questions
- Design a Branch LAN
- Branch Connections to Headquarters
- Branch Routing
- Design Support for Wireless and Collaboration
- Designing the IPv4 Addressing Plan
- Designing the IPv6 Addressing Plan