

Cisco Certified Design Associate

Course Duration: 5 Days

In this course, you will learn how to design a strong and effective network as you prepare for the Cisco Certified Design Associate (CCDA) certification. Our enhancements to Cisco's authorized content, combined with case-study practice and our exclusive exam practice homework, will prepare you for the exam in only five days.

Upon completing this course, you will be able to meet these objectives:

- Identify designed requirements and characterize (baseline) the existing network
- Understand the principles of network design and the guidelines for building a network design solution
- Understand how the Enterprise Composite Network model simplifies the complexity of today's networks
- Design an Enterprise Campus in a hierarchical modular fashion using Cisco Borderless Networks and modular design
- Design Enterprise Campus and Enterprise Edge networks
- Select the appropriate Network Management Solution
- Design the WAN and branch office
- Design a network addressing plan for IPv4 and IPv6
- Select optimal routing protocols for the network
- Design a modern data center using Cisco and industry best practices
- Evaluate security solutions for the network
- Design Voice, Video, and Collaboration solutions
- Design a wireless solution using lightweight access points and the Cisco Wireless LAN Controller
- Understand the role of software defined networks in a design

Course Content:

General Network Design

- Network Design Methodology
- Network Design Models

LAN and WAN Design

- Enterprise LAN Design
- Data Center Design
- Wireless LAN Design
- WAN Technologies and the Enterprise Edge
- WAN Design

The Internet Protocol and Routing Protocols

- Internet Protocol Version 4 Design
- Internet Protocol Version 6 Design
- Routing Protocol Characteristics, RIP, EIGRP, and IS-IS
- OSPF, BGP, Route Manipulation, and IP Multicast

Security, Convergence, Network Management

- Managing Security
- Security Solutions
- Voice and Video Design
- Network Management Protocols