



Designing for Cisco Internetwork Solutions v2.1 (DESGN)

BUILDING TRAINING SOLUTIONS
FOR THE IT WORLD

Number of Days: 5

Format: Instructor-Led

Class Code: DESGN

Recommended Course Sequence

Knowledge of prerequisites
noted below.

*Course content is subject to change
without notice.*

Course Description:

This course focuses on the foundational skills and knowledge necessary for professionals entering the specialization of network design or working as an apprentice to a more experienced network design engineer. Topics include design of routed and switched network infrastructures and services involving LAN, WAN, and broadband access for businesses and organizations, including service virtualization. The Enterprise Composite Model used in the course facilitates the design, planning, implementation, operation and optimization (PDIOO) through modular design and focus on the relations between modules.

Target Student:

- Individuals seeking the Cisco CCDA certification
- Individuals seeking the Cisco CCDP certification
- Presales and postsales network engineers who are involved in enterprise network design, planning, and implementation. (Postsales network engineers who are involved in the implementation will be involved in providing feedback to the presales network engineers and correct possible design flaws.)

Prerequisites:

- Cisco CCNA®_ level knowledge
- Practical experience deploying and operating networks built with Cisco network devices and Cisco IOS software
- CCNP®_ level knowledge of Cisco switching, as found in the Cisco SWITCH (or BCMSN) courses

At Course Completion:

Upon successful completion of this course, students will be able to:

- Discuss methodology in network design
- Describe how to structure and modularize the network design using the Cisco Network Architectures for the Enterprise
- Design the enterprise campus, and describe the architectural approach to the data center and virtualization market
- Design the enterprise edge and remote modules as needed
- Design a network addressing plan and select suitable routing protocols for a given network design
- Evaluate security solutions for the network
- Discuss voice and video networking considerations in the enterprise network design
- Recommend a design for a basic wireless solution

Course Outline

Module 1: Applying a Methodology to Network Design
Module 2: Structuring and Modularizing the Network
Module 3: Designing Basic Campus and Data Center Networks
Module 4: Designing Remote Connectivity
Module 5: Designing IP Addressing and Selecting Routing Protocols
Module 6: Evaluating Security Solutions for the Network
Module 7: Identifying Voice Networking Considerations
Module 8: Identifying Wireless Networking Considerations
Module 9: Implementing and Operating the Network Design