

Basic Network Design

This course is based on CCDA certification (Cisco Certified Design Associate 640-861 DESGN) which indicates a foundation or apprentice knowledge of network design and implementing it using Cisco Internetwork Infrastructure.

Participants are expected to be able to design routed and switched network infrastructures involving LAN, WAN, and dial access services for businesses and organizations.

This 5 day course will be followed up with a 2 days hands on work shop (with 1 to 1 attention) covering design case studies which will further help master the concepts learnt and apply them to real life scenarios. Specific case studies can be developed along with your teams to reflect your current business operating environment.

Duration: 7 days

Batch Size: 7 – 10

Prerequisites

- Cisco CCNA certification
- Practical experience with deploying and operating networks based on Cisco network devices and Cisco IOS software, as well as BCMSN level knowledge of wireless and QoS topics.
- Building Cisco Multilayer Switched Networks (BCMSN)

Course Objectives

After completing this course the student should be able to:

- Describe the principles of network design for building a network design solution
- Describe how the Enterprise Composite Network Model simplifies the complexity of modern networks
- Design the enterprise campus in a hierarchical modular fashion
- Design the enterprise WAN network
- Design a network addressing plan
- Select optimal routing protocols for the network
- Evaluate security solutions for the network
- Assess the design implications of voice transport across the network
- Recognize the network management criteria for the network

Course Outline

- Module 1: Applying a Methodology to Network Design
- Module 2: Structuring and Modularizing the Network
- Module 3: Designing Basic Campus-Switched Networks
- Module 4: Designing an Enterprise WAN
- Module 5: Designing IP Addressing for the Network
- Module 6: Selecting Routing Protocols for a Network
- Module 7: Evaluating Security Solutions for the Network
- Module 8: Designing Networks for Voice Transport
- Module 9: Applying Basic Network Management Design Concepts