CCDA

Cisco Certified Design Associate (CCDA) is for network design engineers, technicians, and support engineers, who enable efficient network environments with an understanding of network design fundamentals. A CCDA certified network professional demonstrates the skills required to design basic campus, data center, security, voice, and wireless networks.

Prerequisites: A valid CCNA Routing and Switching or any CCIE certification can act as a prerequisite.

Recommended Training: Designing for Cisco Internetwork Solutions (DESGN)

Exams : 640-864 DESGN

Syllabus:

1.0 Describe the Methodology Used to Design a Network

- 1.1 Describe developing business trends
- 1.2 Identify network requirements to support the organization
- 1.3 Describe the tools and process to characterize an existing network
- 1.4 Describe the top down approach to network design
- 1.5 Describe network management protocols and features

2.0 Describe Network Structure and Modularity

- 2.1 Describe the network hierarchy
- 2.2 Describe the modular approach in network design
- 2.3 Describe network architecture for the enterprise

3.0 Design Basic Enterprise Campus Networks

- 3.1 Describe campus design considerations
- 3.2 Design the enterprise campus network
- 3.3 Design the enterprise data center
- 3.4 Describe enterprise network virtualization tools

4.0 Design Enterprise Edge and Remote Network Modules

- 4.1 Describe the enterprise edge, branch, and teleworker design characteristics
- 4.2 Describe physical and logical WAN connectivity

- 4.3 Design the branch office WAN solutions
- 4.4 Describe access network solutions for a remote worker
- 4.5 Design the WAN to support selected redundancy methodologies
- 4.6 Identify Design Considerations for a Remote Data Center

5.0 Design IP Addressing and Routing Protocols

- 5.1 Describe IPv4 addressing
- 5.2 Describe IPv6 addressing
- 5.3 Identify routing protocol considerations in an enterprise network
- 5.4 Design a routing protocol deployment

6.0 Design Network Services

- 6.1 Describe the security lifecycle
- 6.2 Identify Cisco technologies to mitigate security vulnerabilities
- 6.3 Select appropriate Cisco security solutions and deployment placement
- 6.4 Describe high level voice and video architectures
- 6.5 Identify the design considerations for voice and video services
- 6.6 Describe Cisco Unified Wireless Network architectures and features
- 6.7 Design wireless network using controllers