

Course Name: CCDA

Course Time: 80 Hrs.

Course Prerequisites: CCNA Routing & Switching – CCNP Routing & Switching

Course Outline:

- **Describe the Methodology Used to Design a Network**
 - ❖ Describe developing business trends
 - ❖ Identify network requirements to support the organization
 - ❖ Describe the tools and process to characterize an existing network
 - ❖ Describe the top-down approach to network design
 - ❖ Describe network management protocols and features
- **Describe Network Structure and Modularity**
 - ❖ Describe the network hierarchy
 - ❖ Describe the modular approach in network design
 - ❖ Describe network architecture for the enterprise
- **Design Basic Enterprise Campus Networks**
 - ❖ Describe campus design considerations
 - ❖ Design the enterprise campus network
 - ❖ Design the enterprise data center
 - ❖ Describe enterprise network virtualization tools
- **Design Enterprise Edge and Remote Network Modules**
 - ❖ Describe the enterprise edge, branch, and teleworker design characteristics
 - ❖ Describe physical and logical WAN connectivity
 - ❖ Design branch office WAN solutions
 - ❖ Describe access network solutions for a remote worker
 - ❖ Design the WAN to support selected redundancy methodologies
 - ❖ Identify design considerations for a remote data center
- **Design IP Addressing and Routing Protocols**
 - ❖ Describe IPv4 addressing
 - ❖ Identify routing protocol considerations in an enterprise network
 - ❖ Design a routing protocol deployment
- **Design Network Services**
 - ❖ Describe the security lifecycle
 - ❖ Identify Cisco technologies to mitigate security vulnerabilities
 - ❖ Select appropriate Cisco security solutions and deployment placement
 - ❖ Describe high-level voice and video architectures
 - ❖ Identify the design considerations for voice and video services
 - ❖ Describe Cisco Unified Wireless Network architectures and features
 - ❖ Design a wireless network using controllers