



Certificate in Cisco Network Design

Overview: The Cisco Network Design program focuses on the concepts and technology to Design, configure and maintain a Cisco Network. These (2) courses also prepares an individual for the Cisco Certified Network Associate (CCNA) exam.

Certificate Duration: 80 hours

Program Tuition: \$3,600.00

Books: \$65.00

Prerequisites: The Student should have a basic background in computers and Networking. 4201-1 is required prior to taking 4201-2.

Certificate Requirements:

2104-1 Interconnecting Cisco Networking Part 1 (ICND1)

2104-2 Interconnecting Cisco Networking Part 2 (ICND2)

2104-1 Interconnecting Cisco Networking Devices Part 1 (ICND1)

This class teaches the student how networks function. You will spend time covering the following topics:

- *Describe how networks function, identifying major components, function of network components, and the OSI reference model*
- *Using the host-to-host packet delivery process, describe issues related to increasing traffic on an Ethernet LAN and identify switched LAN technology solutions to Ethernet networking issues*
- *Describe the reasons for extending the reach of a LAN and the methods that can be used, with a focus on RF wireless access*
- *Describe the reasons for connecting networks with routers and how routed networks transmit data through networks using TCP / IP*
- *Describe the function of WANs, the major devices of WANs, and configure PPP encapsulation, static and dynamic routing, PAT, and RIP routing*
- *Use the command-line interface to discover neighbors on the network and manage the router start up and configuration*

Prerequisites: *This class has no formal prerequisites. The student should have a basic understanding of computers and networks.*

2104-2 Interconnecting Cisco Networking Devices Part 2 (ICND2)

This class will cover the following topics:

- *Review how to configure and troubleshoot a small network.*
- *Expand the switched network from a small LAN to a medium-sized LAN with multiple switches, supporting VLANs, trunking, and spanning tree.*
- *Describe routing concepts as they apply to a medium-sized network and discuss considerations when implementing routing on the network.*



- *Configure, verify, and troubleshoot OSPF*
- *Configure, verify, and troubleshoot EIGRP*
- *Determine how to apply ACLs based on network requirements, and to configure, verify, and troubleshoot ACLs on a medium-sized network*
- *Describe when to use NAT or PAT on a medium-sized network and configure NAT or PAT on routers*
- *Identify and implement the appropriate WAN technology based on network requirements.*

Prerequisites: *The student must have taken the 4201-1 class*