

Cisco Networking Program

Demand for computer technology skills remain a safe haven in these challenging economic times. Computer Network Technology skills provide business-critical positions in a variety of industries ranging from medicine and finance to entertainment and aerospace.

Inver Hills Community College's Center for Professional & Workforce Development offers a fast track Cisco Network Technology Certification Program. Students in this program get instructor led training; provided by top-rated industry professionals; offering students the hands-on experience needed to design, install, operate and maintain computer networks.

The program includes all course materials; Textbooks & Lab and Study Guides as well as the CCNA Certification exam voucher.



Industry Standard Certification

This program pre-pares individuals for the Cisco CCNA® network associate certification exam. CCNA is the industry standard, foundational certification for computer network technology careers. The CCNA certification validates the ability to install, configure, operate, and troubleshoot medium-size routed and switched networks, including the implementation and verification of connections to remote sites in a WAN.



Skills and Competencies

Skills individuals will be able to perform after completing each core program course:

Network Fundamentals:

- Use network protocol models to explain the layers of communications in data networks
- Design, calculate, and apply subnet masks and addresses
- Build a simple Ethernet network using routers and switches
- Employ basic cabling and network designs to connect devices
- Use Cisco CLI commands to perform basic router and switch configuration and verification
- Analyze the operations and feature of the transport and network layer protocols and services

Routing Protocols and Concepts

- Configure and verify router interfaces
- Demonstrate comprehensive RIPv1 configuration skills
- Design and implement a classless IP addressing scheme for a network
- Use advanced configuration commands with routers implementing EIGRP
- Apply the basic RIPv2 configuration commands and evaluate RIPv2 classes routing updates
- Identify the characteristics of distance vector routing protocols

LAN Switching and Wireless

- Troubleshoot common network problems at Layers 1, 2, 3, and 7 using a layered model approach
- Interpret network diagrams
- Perform and verify initial switch configuration tasks including remote access management
- Configure, verify & troubleshoot VLANs, interVLAN routing, VTP, trunking on Cisco switches & RSTP operation
- Manage IOS configuration files
- Identify the basic parameters to configure a wireless network and common implementation issues

Accessing the WAN

- Describe the impact of applications (Voice Over IP and Video over IP) on a network
- Configure, verify, and troubleshoot ACLs in a network environment
- Configure & verify a basic WAN serial connection, a PPP connection between Cisco routers & Frame Relay
- Configure and verify a PPP connection between Cisco routers, and Frame Relay on Cisco routers
- Troubleshoot WAN implementation issues