

Networking 3

Enterprise Networking, Security, and Automation



Course Overview

This course prepares you for designing, securing, operating, and troubleshooting enterprise networks. In addition, you will learn about wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitalization of networks.

Learning Objectives

- Understand, configure and troubleshoot enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), VLAN Spanning Tree Plus Protocol (PVST+), and EtherChannel
- Manage IOS Software licensing and configuration files



Student Experience

- Through experience configure and troubleshoot routers in a complex routed IPv4 or IPv6 network using single-area OSPF, multi-area OSPF, and Enhanced Interior Gateway Routing Protocol (EIGRP)

Course Details

- 14 Units
- 36 Lab Simulations
- 12 Hands-on labs
- 2 Interactive activities
- Other course materials and projects
- Earn three (3) college credits

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Networking
Academy

Enterprise Networking Security & Automation

Students will complete 9 virtual lab simulations, 43 virtual lab simulations, 24 hands-on labs, 8 unit exams and pass the **CCNA 3** Final based on the CCNA Introduction to Networking learning objectives. Other course materials, hands-on labs, and projects are used in addition to Cisco Netacad courseware. Total time spent **120** hours.

Cisco CCNA Introduction to Networking Learning Objectives

Upon completion of this course, students will be able to:

- Understand, configure and troubleshoot enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Plus Protocol (PVST+), and EtherChannel
- Understand, configure, and troubleshoot first hop redundancy protocols (HSRP) in a switched network
- Understand, configure, and troubleshoot wireless routers and wireless clients
- Configure and troubleshoot routers in a complex routed IPv4 or IPv6 network using single-area OSPF, multi-area OSPF, and Enhanced Interior Gateway Routing Protocol (EIGRP)
- Manage Cisco IOS® Software licensing and configuration files

Network Engineer Average Salary

ComputerCareers.org

