

CENTER FOR PROFESSIONAL DEVELOPMENT**COMPTIA™ NETWORK+/SECURITY+ CERTIFICATION TRAINING**

160 Hours/12 Months/Instructor-Facilitated
Course Code: **CPD053** | Course Cost: **\$2990**

OVERVIEW

The Computing Technology Industry Association (CompTIA) reports that more than 32,000 people around the world have earned their Network+ and Security+ certifications. That tells you that computer security and network protection are major concerns in today's ever-growing global marketplace.

Excelsior College's **CompTIA Network+ Certification Training** program will prepare you for a career as a network technician and qualify you to take the Network+ exam. You'll learn the skills you need to manage, maintain, troubleshoot, install, and configure basic network infrastructure. You'll also learn basic networking concepts and gain knowledge in the areas of network design, security, routing, and switching.

The Network+ program follows a simple step-by-step approach to learning and covers topics including the OSI model; network topologies; cabling and connectors; ethernet standards; TCP/IP and subnetting; protocols and services; routers and switches; DNS and WINS; remote connections; network performance, optimization, and security; wireless networking; and troubleshooting.

The **CompTIA Security+ Certification Training** program is for computer techs with knowledge of TCP/IP and Network+ certification or equivalent knowledge and experience. The program, built on the key objectives of CompTIA's Security+ examination, takes you through all aspects of general, communication, infrastructure, and operational security concepts. You will learn about cryptography, access control, and authentication.

The Security+ program covers seven specific topics -- all of which are directly correlated to CompTIA's Security+ Certification examination. They include Hacking, Cracking, and Attacks; Mitigation Techniques; Hardening; Infrastructure Access Points; Protocols; Topologies; and Management. An added-value to the program is its in-depth look at protocols used in Linux, UNIX, and Windows 2000 as well as in the TCP/IP Suite component protocols and Ethernet operations. In addition, you will learn how to capture, analyze, and generate IP traffic; how to exploit protocol weaknesses; and how to examine defensive solutions. Other critical topics to computer security include packet filtering, password policies, and file integrity.

Whether or not you seek certification, the information and knowledge you learn in this program will give you the skills to keep your data and your network protected.

OBJECTIVES

Upon completion of the Network+ course, students will be able to:

- Explain the function of each layer of the OSI model
- Identify common physical network topologies
- Categorize WAN and LAN technology types and properties
- Install, configure, and troubleshoot common networking devices
- Explain the purpose and properties of routing

At the end of the Security+ course, students will be able to:

- Demonstrate knowledge of security threats
- Understand communication and infrastructure security
- Understand cryptography, access control and authentication
- Prevent against external attack
- Demonstrate knowledge of operational and organization security

MATERIALS INCLUDED

- *CompTIA Network+ All-in-One Exam Guide, Fourth Edition*
- *CompTIA Security+ All-in-One Exam Guide*

OUTLINE

Network+

1. OSI model; Network Topologies; Cabling and Connectors
2. Ethernet Standards; Network Devices; TCP/IP and Subnetting
3. TCP/IP Ports; Protocols and Services; DNS and WINS; Routers and Switches
4. Remote Connections; Wireless Networking; Network Performance and Optimization; Network Security; Network Management and Documentation
5. Network Troubleshooting

Security+

1. Organizational Security; Social Engineering; General Cryptography Concepts; Cryptographic Algorithms and Protocols; Public Key Infrastructure (PKI)
2. Access Control; Physical Device and Media Security; Network Infrastructure Attacks; Network Design Elements and Components; Network Security; Threat Mitigation
3. Wireless Security; Operating System Hardening; Application Security; Security Baselines
4. Vulnerability Assessments and Auditing; Redundancy, Disaster Recovery, and Incident Response

COMPUTER REQUIREMENTS

High-speed Internet is recommended. This program can be taken on a PC or a Mac. This program is compatible with the Windows XP and later operating systems and IE 7 and later browsers.

You will also need to have the latest versions of Adobe Flash and Adobe Reader to properly view all program content. In addition, you will need PowerPoint, Windows Media Player Series 11 or later, DirectX 9+, and Java.

INSTRUCTOR BIOS

Network+ is taught by **Brock Stout**, an IT professional and instructor who has honed his skills as by working as a contractor with a multitude of Fortune 500 companies over the last 15 years. A graduate of the University of Dayton, Brock has an extensive background in CCNA curriculum development and is currently teaching at the collegiate level. Brock also owns an IT consulting firm providing a wide range of services including remote labs. Brock has designed and taught numerous networking classes for public and private adult education programs.

Terry Ladouceur, instructor for **Security+**, is a veteran online instructor. His impressive list of credentials includes MCT, MCSE, MCSA, MCDBA, MCP, A+, and CNA certifications. Terry has a wealth of real life experience that he brings to his students. He spent 15 years as a Contract Database Administrator/Programmer for a number of corporations such as the City of Toronto and University of Ottawa. He has also successfully run his own Website hosting business and has been instrumental in developing some of the hands-on components of our courses. Terry maintains a personal philosophy of life-long learning with a sincere desire to stay at the cutting-edge of technology and innovation. Technical training is his passion and he is very interested in its revolutionary impact on today's business processes. Terry thrives on the challenges of translating business requirements into functional programs. This coupled with excellent communication skills makes him the ideal person to facilitate online learning of our very technical courses.