

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

80 Hours/6 Months/Instructor-Facilitated

Course Code: **CPD054****OVERVIEW**

Excelsior College has partnered with ed2go to bring you the CompTIA™ Security+ Certification Training program. Gain the skills you need to be a security professional and prepare yourself to take the CompTIA™ Security+ certification exam as you master the basics of system security, network infrastructure, access control, and organizational security. Once you complete this program, you'll be proficient in basic security concepts such as attacks and mitigation, security applications, risk assessment, disaster recovery and incident reporting, and vulnerability assessment.

*This online program will prepare you to take your CompTIA™ Security+ certification exams, but the exam voucher is not offered as a part of this online program. It is your responsibility to register and schedule your certification exam.

OBJECTIVES

Upon successful completion of this program, you will be able to:

- Explain general cryptography concepts
- Explain basic hashing concepts and map algorithms
- Explain and implement basic encryption applications and tools
- Explain core concepts of PKI
- Implement PKI and Certificate Services
- Identify security threats
- Assess security risks for system hardware and peripherals
- Implement OS hardening practice and procedures
- Identify, explain and implement ports and protocols
- Identify network elements and components
- Identify network security tools and apply them appropriately
- Identify best practices for Access Control and identify the best models
- Organize users and computers into appropriate security groups
- Apply file and print permissions
- Implement logical access control methods
- Summarize the different authentication models and deploy them appropriately
- Explain and apply physical security methods
- Establish application security
- Implement Security Applications
- Explain hardware virtualization
- Identify the vulnerabilities of wireless networking
- Use monitoring tools on systems and networks
- Compare and contrast various monitoring methodologies

- Evaluate proper logging procedures
- Conduct audits of system security settings
- Conduct assessments on risk mitigation
- Carry out vulnerability assessments
- Explain the use of penetration testing versus vulnerability scanning
- Explain redundancy planning and its components
- Implement disaster recovery procedures
- Execute appropriate incident response procedures
- Identify and explain applicable legislation and organizational policies
- Explain environmental controls
- Reduce the risk of social engineering

MATERIALS INCLUDED

- *CompTIA Security+ All-in-One Exam Guide*

OUTLINE

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

- Operating System: PC (Windows XP/Vista/7) or Mac (OS X or later)
- Required Software/Plug-Ins: Adobe Flash Player, Adobe Acrobat Reader, PowerPoint, Windows Media Player Series 11 or later, DirectX 9+, Java
- Internet connection (high-speed recommended) and email capabilities

INSTRUCTOR BIO

Tracey Rossi is the Director of Curriculum Services for Cyanna Education Services, LLC. Prior to joining the Cyanna team, Ms. Rossi served for six years as Director of Academics for TechSkills, a 30-campus national private postsecondary institution. She also worked as Director of Community Relations for Elmhurst Memorial Hospital and Senior Consultant at The Haymarket Group in Chicago, a Public Affairs and Community Relations firm. Ms. Rossi has a Bachelor of Arts in Communications from the University of Illinois at Chicago.