

# Career and Technology Education

## Cisco Networking Academy

### CNA Security Plus

#### Standards

Indicators

#### **CNA.SP.10 – Introduction to Security**

- CNA.SP.10.01 - Describe the challenges of securing information
- CNA.SP.10.02 - Define information security and explain why it is important
- CNA.SP.10.03 - Identify the types of attackers that are common today
- CNA.SP.10.04 - Identify the basic steps of an attack
- CNA.SP.10.05 - Describe the five basic principles of defense

#### **CNA.SP.20 - Malware and Social Engineering Attacks**

- CNA.SP.20.01 - Describe the differences between a virus and a worm
- CNA.SP.20.02 - Identify the types of malware that conceals its appearance
- CNA.SP.20.03 - Identify different kinds of malware that is designed for profit
- CNA.SP.20.04 - Describe the types of social engineering psychological attacks
- CNA.SP.20.05 - Explain physical social engineering attacks

#### **CNA.SP.30 - Application and Network Attacks**

- CNA.SP.30.01 - Identify and explain the different types of Web application attacks
- CNA.SP.30.02 - Define client-side attacks
- CNA.SP.30.03 - Explain how a buffer overflow attack works
- CNA.SP.30.04 - Identify different types of denial of service attacks
- CNA.SP.30.05 - Describe interception and poisoning attacks

#### **CNA.SP.40 - Vulnerability Assessment and Mitigating Attacks**

- CNA.SP.40.01 - Define vulnerability assessment and explain why it is important
- CNA.SP.40.02 - Identify vulnerability assessment techniques and tools
- CNA.SP.40.03 - Explain the differences between vulnerability scanning and penetration testing
- CNA.SP.40.04 - Identify techniques for mitigating and deterring attacks

#### **CNA.SP.50 - Host, Application, and Data Security**

- CNA.SP.50.01 - Identify the steps for securing a host computer
- CNA.SP.50.02 - Define application security
- CNA.SP.50.03 - Explain how to secure data using data loss prevention

#### **CNA.SP.60 - Network Security**

- CNA.SP.60.01 - Identify the different types of network security devices and explain how they can be used
- CNA.SP.60.02 - Define network address translation and network access control
- CNA.SP.60.03 - Explain how to enhance security through network design

## **CNA.SP.70 - Administering a Secure Network**

- CNA.SP.70.01 - Identify and describe the functions of common network protocols
- CNA.SP.70.02 - Explain how network administration principles can be applied
- CNA.SP.70.03 - Define the new types of network applications and how they can be secured

## **CNA.SP.80 - Wireless Network Security**

- CNA.SP.80.01 - Describe the different types of wireless network attacks
- CNA.SP.80.02 - Identify the vulnerabilities in IEEE 802.11 security
- CNA.SP.80.03 - Explain the solutions for securing a wireless network

## **CNA.SP.90 - Access Control Fundamentals**

- CNA.SP.90.01 - Define access control and Identify the four access control models
- CNA.SP.90.02 - Describe logical access control methods
- CNA.SP.90.03 - Explain the different types of physical access control
- CNA.SP.90.04 - Define authentication services

## **CNA.SP.100 - Authentication and Account Management**

- CNA.SP.100.01 - Describe the three types of authentication credentials
- CNA.SP.100.02 - Explain what single sign-on can do
- CNA.SP.100.03 - Identify the account management procedures for securing passwords
- CNA.SP.100.04 - Define trusted operating systems

## **CNA.SP.110 - Basic Cryptography**

- CNA.SP.110.01 - Define cryptography
- CNA.SP.110.02 - Describe hash, symmetric, and asymmetric cryptographic algorithms
- CNA.SP.110.03 - Identify the various ways in which cryptography is used

## **CNA.SP.120 - Advanced Cryptography**

- CNA.SP.120.01 - Define digital certificates
- CNA.SP.120.02 - Identify the various types of digital certificates and how they are used
- CNA.SP.120.03 - Describe the components of Public Key Infrastructure (PKI)
- CNA.SP.120.04 - Identify the tasks associated with key management
- CNA.SP.120.05 - Describe the different transport encryption algorithms

## **CNA.SP.130 - Business Continuity**

- CNA.SP.130.01 - Define environmental controls
- CNA.SP.130.02 - Describe the components of redundancy planning
- CNA.SP.130.03 - Identify disaster recovery procedures
- CNA.SP.130.04 - Describe incident response procedures

## **CNA.SP.140 - Risk Mitigation**

- CNA.SP.140.01 - Explain how to control risk
- CNA.SP.140.02 - Identify the types of security policies
- CNA.SP.140.03 - Describe how awareness and training can provide increased security