

Cybersecurity Analyst (CySA+)

\$2,495.00

5 Daytime Classes or 10 Evening Classes Virtual, Private Group,

CAREER SKILLS+™

The course introduces tools and tactics to manage cybersecurity risks, identify various types of common threats, evaluate the organization's security, collect and analyze cybersecurity intelligence, and handle incidents as they occur.

Who Should Attend

This course is designed primarily for cybersecurity practitioners who perform job functions related to protecting information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This course focuses on the knowledge, ability, and skills necessary to provide for the defense of those information systems in a cybersecurity context, including protection, detection, analysis, investigation, and response processes. In addition, the course ensures that all members of an IT team—everyone from help desk staff to the Chief Information Officer—understand their role in these security processes.

Course Prerequisites

There are no prerequisites for this course.

Course Objectives

On course completion, participants will be able to:

Assess information security risk in computing and network environments.

Analyze reconnaissance threats to computing and network environments.

Analyze attacks on computing and network environments. Analyze post-attack techniques on computing and network

environments.

Implement a vulnerability management program.

Collect cybersecurity intelligence.

Analyze data collected from security and event logs.

Perform active analysis on assets and networks.

Respond to cybersecurity incidents.

Investigate cybersecurity incidents.

Address security issues with the organization's technology architecture.

Agenda

1 - ASSESSING INFORMATION SECURITY RISK

Identify the Importance of Risk Management

Assess Risk

Mitigate Risk

Integrate Documentation into Risk Management

2 - ANALYZING RECONNAISSANCE THREATS TO

COMPUTING AND NETWORK ENVIRONMENTS

Assess the Impact of Reconnaissance Incidents

Assess the Impact of Social Engineering

3 - ANALYZING ATTACKS ON COMPUTING AND NETWORK ENVIRONMENTS

Assess the Impact of System Hacking Attacks

Assess the Impact of Web-Based Attacks

Assess the Impact of Malware

Assess the Impact of Hijacking and Impersonation Attacks

Assess the Impact of DoS Incidents

Assess the Impact of Threats to Mobile Security

Assess the Impact of Threats to Cloud Security

4 - ANALYZING POST-ATTACK TECHNIQUES

Assess Command and Control Techniques

Assess Persistence Techniques

Assess Lateral Movement and Pivoting Techniques

Assess Data Exfiltration Techniques



Assess Anti-Forensics Techniques

5 - MANAGING VULNERABILITIES IN THE ORGANIZATION

Implement a Vulnerability Management Plan

Assess Common Vulnerabilities

Conduct Vulnerability Scans

Conduct Penetration Tests on Network Assets

6 - COLLECTING CYBERSECURITY INTELLIGENCE

Deploy a Security Intelligence Collection and Analysis Platform Collect Data from Network-Based Intelligence Sources

Collect Data from Host-Based Intelligence Sources

7 - ANALYZING LOG DATA

Use Common Tools to Analyze Logs

Use SIEM Tools for Analysis

8 - PERFORMING ACTIVE ASSET AND NETWORK ANALYSIS

Analyze Incidents with Windows-Based Tools

Analyze Incidents with Linux-Based Tools

Analyze Malware

Analyze Indicators of Compromise

9 - RESPONDING TO CYBERSECURITY INCIDENTS

Deploy an Incident Handling and Response Architecture Mitigate Incidents

Prepare for Forensic Investigation as a CSIRT

10 - INVESTIGATING CYBERSECURITY INCIDENTS

Apply a Forensic Investigation Plan

Securely Collect and Analyze Electronic Evidence

Follow Up on the Results of an Investigation

11 - ADDRESSING SECURITY ARCHITECTURE ISSUES

Remediate Identity and Access Management Issues

Implement Security During the SDLC

