

## EC-Council Certified SOC Analyst (C|CSA) + Exam voucher

**Duration: 3 Days**    **Course Code: EC-CSA**    **Version: 1.0**    **Delivery Method: Virtual Learning**

### Overview:

The Certified SOC Analyst (CSA) program is the first step to joining a security operations center (SOC). It is engineered for current and aspiring Tier I and Tier II SOC analysts to achieve proficiency in performing entry-level and intermediate-level operations.

CSA is a training and credentialing program that helps the candidate acquire trending and in-demand technical skills through instruction by some of the most experienced trainers in the industry. The program focuses on creating new career opportunities through extensive, meticulous knowledge with enhanced level capabilities for dynamically contributing to a SOC team. Being an intense 3-day program, it thoroughly covers the fundamentals of SOC operations, before relaying the knowledge of log management and correlation, SIEM deployment, advanced incident detection, and incident response. Additionally, the candidate will learn to manage various SOC processes and collaborate with CSIRT at the time of need.

**This is the recommended training for those students looking to achieve the EC-Council Certified SOC Analyst Certification.**

### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

### Target Audience:

SOC Analysts ( Tier I and Tier II), Cybersecurity Analysts, Entry-level cybersecurity professionals. Network and Security Administrators

### Objectives:

■ **After completing this course you should be able to:**

- Articulate SOC processes, procedures, technologies, and workflows.
- Understand and security threats, attacks, vulnerabilities, attacker's behaviors, cyber kill chain, etc.
- Recognize attacker tools, tactics, and procedures to identify indicators of compromise (IOCs) that can be utilized during active and future investigations.
- Monitor and analyze logs and alerts from a variety of different technologies across multiple platforms (IDS/IPS, end-point protection, servers and workstations).
- Apply Centralized Log Management (CLM) processes.
- Perform Security events and log collection, monitoring, and analysis.
- Understand Security Information and Event Management.
- Administer SIEM solutions (Splunk/AlienVault/OSSIM/ELK).
- Understand the architecture, implementation and fine tuning of SIEM solutions (Splunk/ AlienVault/OSSIM/ELK).
- Gain hands-on experience on SIEM use case development process.
- Recognize use cases that are widely used across the SIEM deployment.
- Plan, organize, and perform threat monitoring and analysis in the enterprise.
- Monitor emerging threat patterns and perform security threat analysis.
- Gain hands-on experience in alert triaging process.
- Escalate incidents to appropriate teams for additional assistance.
- Use a Service Desk ticketing system.
- Prepare briefings and reports of analysis methodology and results.
- Integrate threat intelligence into SIEM for enhanced incident detection and response.
- Make use of varied, disparate, constantly changing threat information.
- Articulate knowledge of Incident Response Process.
- Understand SOC and IRT collaboration for better incident response.

- Develop threat cases (correlation rules), create reports, etc.

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## Prerequisites:

**Attendees should meet the following prerequisites:**

- Network Administration or Security Domain experience

## Testing and Certification

**Recommended as preparation for the following exam:**

- **312-39** - Certified SOC Analyst

*The CSA program requires a candidate to have one year of work experience in the Network Admin/Security domain and should be able to provide proof of the same as validated through the application process unless the candidate attends official training.*

## Content:

### SOC Essential Concepts

- Computer Network Fundamentals
- TCP/IP Protocol Suite
- Application Layer Protocols
- Transport Layer Protocols
- Internet Layer Protocols
- Link Layer Protocols
- IP Addressing and Port Numbers
- Network Security Controls
- Network Security Devices
- Windows Security
- Unix/Linux Security
- Web Application Fundamentals
- Information Security Standards, Laws and Acts

### Security Operations and Management

- Security Management
- Security Operations
- Security Operations Center (SOC)
- Need of SOC
- SOC Capabilities
- SOC Operations
- SOC Workflow
- Components of SOC: People, Process and Technology
- People
- Technology
- Processes
- Types of SOC Models
- SOC Maturity Models
- SOC Generations
- SOC Implementation
- SOC Key Performance Indicators
- Challenges in Implementation of SOC
- Best Practices for Running SOC
- SOC vs NOC

### Understanding Cyber Threats, IoCs and Attack Methodology

- Cyber Threats
- Intent-Motive-Goal
- Tactics-Techniques-Procedures (TTPs)
- Opportunity-Vulnerability-Weakness
- Network Level Attacks
- Host Level Attacks
- Application Level Attacks
- Email Security Threats
- Understanding Indicators of Compromise
- Understanding Attacker's Hacking Methodology

### Incidents, Events and Logging

- Incident
- Event
- Log
- Typical Log Sources
- Need of Log
- Logging Requirements
- Typical Log Format
- Logging Approaches
- Local Logging
- Centralized Logging

### Incident Detection with Security Information and Event Management (SIEM)

- Security Information and Event Management (SIEM)
- Security Analytics
- Need of SIEM
- Typical SIEM Capabilities
- SIEM Architecture and Its Components
- SIEM Solutions
- SIEM Deployment
- Incident Detection with SIEM
- Examples of Commonly Used Use Cases Across all SIEM deployments
- Handling Alert Triaging and Analysis

### Enhanced Incident Detection with Threat Intelligence

- Understanding Cyber Threat Intelligence
- Why-Threat Intelligence-driven SOC?

### Incident Response

- Incident Response
- Incident Response Team (IRT)
- Where does IRT Fit in the Organisation
- SOC and IRT Collaborator
- Incident Response (IR) Process Overview
- Step 1: Preparation for Incident Response
- Step 2: Incident Recording and Assignment
- Step 3: Incident Triage
- Step 4: Notification
- Step 5: Containment
- Step 6: Evidence Gathering and Forensic Analysis
- Step 7: Eradication
- Step 8: Recovery
- Step 9: Post-Incident Activities
- Responding to Network Security Incidents
- Responding to Application Security Incidents
- Responding to Email Security Incidents
- Responding to Insider Incidents
- Responding to Malware Incidents

## Further Information:

For More information, or to book your course, please call us on 0800/84.009

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[www.globalknowledge.com/en-be/](http://www.globalknowledge.com/en-be/)