



# C)CSO: Certified Cloud Security Officer

Course ID #: 7000-774-ZZ-Z

Hours: 35

## Course Content

### Course Description:

This course will provide you something you will not find in other class! The Cloud is being widely adopted today for a diverse set of reasons. However, many are finding that security in the cloud is a huge challenge. The C)CSO looks to fill the gap in cloud security education and give you the skills you need to develop strong cloud security.

What makes this course powerful is the pairing of knowledge from leading cloud security authorities, with practical lab exercises. You will leave the course with a solid understanding of the cloud stack having been introduced to many technologies used in the cloud. Whether you are implementing private cloud architecture or managing solutions from various vendors, this course is for you.

### Course Objectives:

Upon successful completion of this course, students will:

- Understand Cloud security from a real-world viewpoint
- Comprehend the industry security standards
- Be prepared to take the C)CSO exam

### Prerequisites:

- 12 months experience with virtualization technology or equivalent knowledge.
- General understanding of cloud architectures
- Minimum 12 months experience with general security

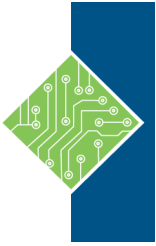
### Target Audience:

- Virtualization Admins
- Cloud Security Officers
- CIO
- Virtualization and Cloud Auditors
- Virtualization and Cloud Compliance Officers

### Topics:

#### Module 1 – Introduction to Cloud Computing and Architecture

- Cloud Computing Terminology
- Cloud Computing Definition
- Cloud Computing Characteristics
- Cloud Computing Benefits
- Cost Benefit Analysis Reference Model
- What is Security for the Cloud?



mile2 AUTHORIZED TRAINING CENTER

# C)CSO: Certified Cloud Security Officer

Course ID #: 7000-774-ZZ-Z

Hours: 35

## Module 2 – Cloud Risks

- Cloud Migration Security Evaluation
- ENISA Risk Evaluation
- Cloud Controls Matrix
- Relevant CCM Controls

## Module 3 – ERM and Governance

- Application of Governance and Risk Management to the Cloud
- Importance of the SLA
- Relevant CCM controls

## Module 4 – Legal Issues

- Understanding Unique Risks in the Cloud International Law and Potential Conflicts eDiscovery
- Contract Considerations
- Relevant CCM Controls

## Module 5 – Virtualization

- Virtualization Principles
- Key Components Mapped to Cloud Layer
- Key Security Concerns
- Other Technologies Used in the Cloud
- The Layers
- Relevant CCM Controls

## Module 6 – Data Security

- Cloud Data Life Cycle
- Design and Implement Cloud Data Storage Architectures
- Design and Apply Data Security Strategies Understand and Implement Data Discovery and Classification Technologies
- Design and Implement Relevant Jurisdictional Data Protection for PII
- Design and Implement Data Rights Management
- Plan and Implement Data Retention, Deletion and Archival Policies
- Design and Implement Auditability, Traceability, and Accountability of Data Events
- Relevant CCM Controls

## Module 7 – Data Center Operations

- Build Logical Infrastructure for Cloud Environment
- Manage Logical Infrastructure for Cloud Environment
- Manage Communications with Relevant Parties
- Relevant CCM Controls

## Module 8 – Interoperability and Portability

- Interoperability
- Portability
- Relevant CCM Controls

## Module 9 – Traditional Security

- The Physical Environment
- Support the Planning Process for the Data Center Design
- Run Physical Infrastructure for Cloud Environment
- Implement and Build Physical Infrastructure for Cloud Environment
- Manage Physical Infrastructure for Cloud Environment
- Relevant CCM Controls

## Module 10 – BCM and DR

- Disaster Recovery and Business Continuity Management
- Examples
- Relevant CCM Controls

## Module 11 – Incident Response

- Incident Response
- Forensics
- Relevant CCM Controls



# C)CSO: Certified Cloud Security Officer

Course ID #: 7000-774-ZZ-Z

Hours: 35

## Module 12 – Application Security

- Training and Awareness
- Secure Software Development Life Cycle Process
- Application of the Secure Software Development Life Cycle
- Verifying the use of Secure Software
- Identity and Access Management (IAM) Solutions
- Additional components for the Cloud Software Assurance and Validation
- Relevant CCM Controls

## Module 13 – Encryption and Key Management

- Review from other chapters
- Key Management in today's cloud services
- Recommendations
- Relevant CCM Controls

## Module 14 – Identity, Entitlement and Access Management

- Introduction to Identity and Access Management Identities and Attributes
- Architectures for Interfacing to Identity and Attribute Providers
- The Identity Recommendations
- Relevant CCM Controls

## Module 15 – Auditing and Compliance

- Compliance and Audit Cloud Issues Assurance Frameworks
- Auditing
- Relevant CCM Controls

## Labs:

- Lab 1 – Cloud Migration Evaluation
- Lab 2 – Service Level Agreement Compliance
- Lab 3 – Virtualization 101
- Lab 4 – Understanding Network Traffic
- Lab 5 – Hardening Your Virtual Machines
- Lab 6 – ESXi Hosting Hardening
- Lab 7 – Hardening vCenter
- Lab 8 – Basics of Data Security in Azure
- Lab 9 – IaaS
- Lab 10 – Deploying a Cloud
- Lab 11 – Basic Data Center Operations in Azure
- Lab 12 – Interoperability and Portability
- Lab 13 – Business Continuity in Azure
- Lab 14 – PaaS in Azure
- Lab 15 – Encryption in Azure
- Lab 16 – Identity and Access Management in Azure
- Lab 17 – SaaS
- Lab 18 – S-P-I Model Exercise
- Lab 19 – Cloud Business Driver Audit Exercise
- Lab 20 – IaaS Risk Assessment
- Lab 21 – Identity and Access Control Management in the Private Cloud
- Lab 22 – VM Security Audit
- Lab 23 – Encryption/Key Management in SaaS

\*All labs are performed in the Cyber Range® on Mile2's Ghost Pentesting Platform®

## Accreditations:



Register for this class by visiting us at:

[www.tcworkshop.com](http://www.tcworkshop.com) or calling us at 800-639-3535