



# Certificate of Cloud Auditing Knowledge instructor-led training syllabus

Revision date - 03/17/2021

# **CCAK Overview**

The CCAK instructor-led training course curriculum consists of 5 major areas of coverage:

- 1. Cloud Governance
- 2. Cloud Compliance
- 3. Cloud Auditing
- 4. Cloud Assurance
- 5. CSA Tools: CCM, CAIQ and STAR Program

The areas of coverage or covered in 9 modules, with specific coverage areas as listed below.

# **CCAK Objectives**

The objectives of the CCAK training are to provide knowledge about:

- cloud security assessment methods and techniques and how to use them to evaluate a cloud service prior to and during the provision of the service and
- how to ensure that a cloud service is compliant with the company requirements and is aligned with the governance approach of the organization.
- In addition, the CCAK will give those individuals with an auditing role and background
  the necessary knowledge to be able to update their expertise from on-prem IT security
  auditing to cloud and hybrid security auditing.

# **Course Structure**

The CCAK course is divided into nine modules that cover the essential principles of auditing cloud computing systems.

## **MODULE 1: Cloud Governance (4 hrs)**

- Overview of governance
- Cloud assurance
- Cloud governance frameworks
- Cloud risk management
- Cloud governance tools





## **MODULE 2: Cloud Compliance Program (3 hrs)**

- Designing a cloud compliance program
- Building a cloud compliance program
- Legal and regulatory requirements
- Standards and security frameworks
- Identifying controls and measuring effectiveness
- CSA certification, attestation and validation

#### **MODULE 3: CCM and CAIQ Goals, Objectives and Structure (1.5 hrs)**

- CCM
- CAIQ
- Relationship to standards: mappings and gap analysis
- Transition from CCM V3.0.1 to CCM V4

#### MODULE 4: A Threat Analysis Methodology for Cloud Using CCM (1 hr)

- Definitions and purpose
- Attack details and impacts
- Mitigating controls and metrics
- Use case

#### **MODULE 5: Evaluating a Cloud Compliance Program (1.5 hrs)**

- Evaluation approach
- A governance perspective
- Legal, regulatory and standards perspectives
- Risk perspectives
- Services changes implications
- The need for continuous assurance/continuous compliance

#### **MODULE 6: Cloud Auditing (2 hrs)**

- Audit characteristics, criteria & principles
- Auditing standards for cloud computing
- · Auditing an on-premises environment vs. cloud
- Differences in assessing cloud services and cloud delivery models
- Cloud audit building, planning and execution

#### **MODULE 7: CCM: Auditing Controls (1 hr)**

- CCM audit scoping guidance
- CCM risk evaluation guide
- CCM audit workbook
- CCM an auditing example





## **MODULE 8: Continuous Assurance and Compliance (1 hr)**

- DevOps and DevSecOps
- Auditing CI/CD pipelines
- DevSecOps automation and maturity

#### **MODULE 9: STAR Program (1 hr)**

- Standard for security and privacy
- Open Certification Framework
- STAR Registry
- STAR Level 1
- STAR Level 2
- STAR Level 3

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- cloud security assessment methods and techniques, and how to use them to evaluate a cloud service prior to and during the provision of the service
- how to ensure that a cloud service is compliant with the company requirements and is aligned with the governance approach of the organization
- cloud and hybrid security auditing for those with on-prem IT security auditing roles and backgrounds

#### Who should take this course?

The CCAK is designed to provide CISOs, security and compliance managers, internal and external auditors and practitioners of tomorrow with the proven skillset to address the specific concerns that arise from the use of various forms of cloud services.

#### **Prerequisites**

There are no specific prerequisites, however the CCAK assumes a working knowledge of cloud security best practices. We strongly recommend having a solid understanding of cloud services.

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https://www.isaca.org/credentialing/certificate-of-cloud-auditing-knowledge