



# CCC Cloud Technology Associate Certification

2-Day Intensive Certification Course

GuruTeam course code: GTC23

## Course Overview

**This instructor-led Cloud Technology Associate Certification training course defines cloud computing and virtualization, and explains the benefits and applications.**

The course provides a basic introduction to cloud technologies. Participants are also introduced to the risks of cloud computing and methods for managing these risks.

The final part of the course enables participants to analytically form a decision making process for the adoption of cloud, breaking down cloud service management in detail.

This certification course enables IT professionals to operate effectively in a cloud environment, demonstrating an understanding of the key concepts and relevant terminology. Furthermore, it provides the foundation needed in order to successfully complete subsequent technical training/certification programs.

The CTA also acts as a baseline for the subsequent CCC Professional level certifications, though it is not a requirement.

## Learning Objectives:

- Identify the fundamental concepts of cloud computing and virtualization including business benefits of cloud computing and technical aspects (high-level) of virtualization.

- Identify the technical challenges and the mitigation measures involved in cloud computing and virtualization.
- Identify the characteristics of cloud applications.
- List the steps to successfully adopt cloud services.
- Define cloud security and identify the risks involved in cloud computing as well as the risk mitigation measures.
- List factors involved for implementation of different cloud models.



## Upcoming course dates:

See **SCHEDULE** at [GuruTeamIRL.com](http://GuruTeamIRL.com) or call Neasa on +353 (0)1 402 9423.



## Course Outline

### Module 1: Introduction

- Fundamental Concepts of Cloud Computing and Virtualization. Business Benefits of Cloud Computing and (high-level) Technical Aspects of Virtualization
- Technical Challenges and Mitigation Measures in Cloud Computing and Virtualization
- Characteristics of Cloud Applications
- Steps to Successfully Adopt Cloud Services
- Cloud Security, Risks and Mitigation Measures
- Factors in Implementation of Cloud Models

### Module 2: Introduction to Cloud Service Models

- Challenges and Concerns of Traditional Computing Methodologies
- NIST, Gartner and ISO Definitions of Cloud Computing
- Evolution of Cloud Computing and Early Examples
- Cloud Characteristics, Service Models and Deployment Models
- NIST's Cloud Taxonomy (Service Providers, Consumers, Auditors, Carriers, Brokers), Service Provider vs Consumer Responsibility Model
- Business Value, Challenges and Limitations of Traditional and Cloud Computing
- Cloud Computing Benefits and Challenges
- Application Profile Types and Compatibility with Cloud Computing
- Common Cloud Terminologies and Examples

### Module 3: Introduction to Virtualization: The Backbone Technology of Cloud Computing

- Definition, History, and Fundamental Concepts of Virtualization and the Relationship with Cloud Computing
- Benefits, Challenges, Risks, and Suitability of Virtualization to Organizations
- Hypervisors Role in Virtualization and Types
- Leading Hypervisor Manufacturers and Service Providers Who Use Them
- Virtualization Terminologies
- Types of Virtualization (Server, Storage, Network, Desktop)

### Module 4: Overview of Cloud Technologies and Applications

- Concepts, Benefits, Challenges and Strategies of Bring Your Own Device (BYOD), Mobile Device Management (MDM) and Enterprise Mobility Management (EMM) at the Workplace
- Concepts, Components, Benefits, Challenges and Growth of Software Defined Networking (SDN)
- Concepts, Approach and Architecture of Network Functions Virtualization (NFV) and its relation to Software Defined Networking (SDN)
- Big Data, Big Data Analytics and Non-relational Databases (NoSQL, NewSQL) Concepts, Characteristics and Types
- Internet of Things (IoT) and Types

### Module 5: Cloud Security, Risk, Compliance and Governance

- IT Security, Risk and Risk Management
- Role of IT Compliance and Audits
- Impact of Cloud Characteristics on Business Value and Risk
- Impact of Cloud Service Models on Business Value and Risk
- Impact of Cloud Deployment Models on Business Value and Risk
- Common Cloud Attack Vectors and Remediating Controls

### Module 6: Preparing for Cloud Adoption

- Steps to Successful Adoption of Cloud Computing Services
- Solution Architectures for Service and Deployment Models
- Organizational Capabilities for Realizing Cloud Benefits
- Roles, Capabilities and Dependencies on Cloud Computing Providers and Vendors
- Approaches for Migrating Applications

### Module 7: Cloud Service Management (CSM)

- CSM Fundamentals
- CSM Reference Architecture, Lifecycle and Actors
- CSM Business Support
- CSM Provisioning and Configuration
- CSM Portability and Interoperability
- CSM Products

## Target Audience

- IT Specialists (Analysts, Developers, Architects, Testers, etc.)
- IT Administrators (Network, System, Database, etc.)
- IT Provisioning and Maintenance (Hardware, Network, Storage, etc.)
- IT Managers and IT Project Managers
- Other functions affected by cloud (Sales, Purchase, Audit, Legal, etc.)

## Prerequisites

The CCC Associate level certifications do not have required prerequisites. It is recommended participants possess intermediate knowledge (6+ months of experience) in internet/web technologies. Basic knowledge of storage and network technologies is a plus.

## Accreditation

Successfully passing (65%) the 60-minute exam, consisting of 40 multiple-choice questions, leads to the Cloud Technology Associate Certificate by Cloud Credential Council (CCC).

## About the CCC

The Cloud Credential Council (CCC) is a global community driven organization that empowers companies in their digital transformation journey. We do this by offering vendor-neutral certification for IT Professionals including Cloud, Big Data, and IoT.

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*GuruTeam are specialists in delivering learning, mentoring and consultancy services in Cloud, Linux, Big Data, DevOps, Kubernetes, Blockchain, IoT, Security, GDPR, Architecture, Software and Web Development Technologies.*

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