

# CCC Cloud Technology Associate («CCCTA»)

Cloud technology has become a matter of course. IT staff should therefore have a basic set of cloud and virtualization skills. In this course you will get to know and understand cloud key concepts and basic terminologies.

**Duration:** 2 days

**Price:** 2'500.–

**Course documents:** Accredited learner manual (in english language and digital)

## Content

### 1. Course Introduction

- Understand the overview and objectives of the course
- Know the 2-day course agenda of the course
- Know about the course structure and various items included in the course
- Understand the requirements of the CCC certification exam for this course

### 2. Introduction to Cloud Service Model

- Overcome the challenges and concerns associated with traditional computing by moving to the Cloud environment
- Describe the evolution of Cloud computing
- Explain the NIST definition of Cloud computing, including its essential characteristics, service models, and deployment models
- Define NIST's Cloud taxonomy and the reference architecture
- List various benefits and challenges associated with Cloud computing
- Define common terminologies used in Cloud computing

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

- Define virtualization and explain the fundamental concepts
- Understand the relationship between virtualization and cloud computing
- Discuss the benefits, challenges, risks, and suitability of virtualization to organizations
- Explain the need for hypervisors and containers and their different types
- Describe the role of hypervisors and containers in virtualization
- Identify the leading manufacturers of hypervisors, containers as well as container orchestration systems
- Explain the terminologies and different types of virtualization

### 4. Cloud Computing – A Key Pillar of Digital Transformation

- Relate cloud computing with emerging and enabling digital transformation technologies, such as:
  - Big Data Analytics
  - DevOps (including serverless computing)
  - Artificial Intelligence (AI), Machine Learning (ML), Robotics, Drones, and Cognitive Computing
  - Internet of Things (IoT), Edge and Fog Computing
  - Blockchain
  - Immersive Technologies – Augmented Reality (AR) / Virtual Reality (VR)
  - 5G
  - Digital Twin
  - Robotic Process Automation (RPA)
  - Quantum Computing
  - Additive Manufacturing (3D Printing)

### 5. Cloud Security

- Define IT Security, Governance, Risk, and Compliance (GRC)
- Understand risk terminologies, top cloud risks, and the NIST Cyber Security Framework

- Identify the impact of cloud essential characteristics, cloud service models, cloud deployment models on business value, and the associated risks
  - Discuss the role of IT compliance and audits
  - Identify important cloud security domains and general cloud security recommendations
6. Preparing for Cloud Adoption
- Explain typical steps for the successful adoption of cloud computing services
  - Describe appropriate solution architectures for various service and deployment models
  - Understand organizational capabilities relevant to realizing cloud benefits
  - Understand the roles and capabilities of cloud computing providers, vendors, and dependencies on vendors
  - Describe multiple approaches for migrating applications

## Key Learnings

- Identifying the fundamental concepts of cloud computing including business benefits and cloud terminologies
- Identifying the technical aspects (high-level) of virtualization including the role and benefits of hypervisors and containers and the different types of virtualization
- Identifying how emerging technologies (AI, IoT, 5G, RPA, Digital Twin, and others) enhance the capabilities of cloud computing, such as performance, security, and faster deployment
- Defining cloud security, governance, risk, and compliance and identify the risks/threats involved in cloud computing and the corresponding mitigation measures and best practices
- Listening the strategies involved in the roadmap for cloud adoption and their implementation and migration for different cloud service and deployment models

## Target audience

This course is aimed at both, IT Managers and Solution Consultants, IT Specialists (Architects, Business Analysts, Developers etc.), IT Administrators (System, Database, etc.), IT infrastructure specialists (Hardware, Network, Storage, etc.). as well as sales, vendor, purchaser or experts on audit and law.

## Certification

The exam is available in English only.

**Exam format:** Web based, closed book, Questions: 40 multiple choice questions (1 mark per question), Passing score: 65%, Exam duration: 60 minutes (15 minutes extra for non-native English speakers)

You will receive a voucher for an online exam via email. You can book the exam directly in the online portal of the exam provider.

## Additional information

Digicomp is a CCC Training Partner.

## Further courses

- [CCC Professional Cloud Service Manager \(«PCSM»\)](#)

## Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-service-project-management/itil/course-ccc-cloud-technology-associate](http://www.digicomp.ch/courses-service-project-management/itil/course-ccc-cloud-technology-associate)