

# Professional Cloud Solutions Architect Certification

Syllabus

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## Table of Contents:

[What is the CCC Professional Cloud Solutions Architect certification?](#)

[Who is this certification for?](#)

[Syllabus - Professional Cloud Solutions Architect](#)

[Module 1. History of Cloud Computing](#)

[Module 2. Impact of Cloud Computing](#)

[Module 3. Technology Engineering of Cloud Computing](#)

[Module 4. Cloud Computing Solution Architectures](#)

[Module 5. Cloud Service Lifecycle](#)

[Module 6. Service Transition and Service Transformation](#)

[Module 7. Consumer Perspective on Setting Up Cloud Environments](#)

[Module 8. Provider Perspective on Setting Up Cloud Environments](#)

[Module 9. Cloud Ecosystem](#)

[Module 10. Types of XaaS Solutions](#)

[Module 11. Targeting the Right Solution Architecture](#)

[Exam Details](#)

[Cloud Credential Council](#)

## What is the CCC Professional Cloud Solutions Architect certification?

This Professional Cloud Solutions Architect (PCSA) certification is designed to enable candidates to successfully navigate and support the adoption, development and performance optimization of cloud solutions and services in the enterprise and IT ecosystem. Solution Architects need to understand the impact that cloud is having on business and information architecture, application design, data management, and security. They must be equally familiar with the topology and ecosystems that are being created as a result of increasing adoption of cloud technologies and operating models.

The PCSA certification is designed for senior technology professionals who are designing the next generation of IT solutions and infrastructure. The training covers critical concepts and supplements this with hands-on, practical, exercises and case studies. The certification refers to leading technologies, platforms and cloud standards to provide a real-world context and cement these concepts.

## Who is this certification for?

- Technology Architects
- Application Architects
- System Architects
- Enterprise Architects
- Cloud Strategy Consultants
- Senior Developers

# Syllabus - Professional Cloud Solutions Architect

## Module 1. History of Cloud Computing

- Why Cloud - Shift from Computing to Cloud Computing
- Basics of Cloud Computing
- SOA and Cloud

## Module 2. Impact of Cloud Computing

- Impact on Business and IT Models
- Impact on Change – Business, IT Transition, and Transformational Drivers
- New Business Models – Custom Versus Product
- Comparison of Make, Buy, and Rent
- Value and Monetization Impact
- Security, Risk, and Compliance Impact

## Module 3. Technology Engineering of Cloud Computing

- Protocols, Interfaces, and Frameworks
- Web of Devices and Web of Services
- Internet, Internetworking, and Telecommunications
- Data Centers, Facilities, and Fabric
- Cloud Technology Components

## Module 4. Cloud Computing Solution Architectures

- The Architecture Layers
- Cloud Solution Architectures: XaaS
- Cloud Reference Architecture Principles
- Consumer and Provider Reference Architecture
- Cloud Security Reference Architectures
- Industry Reference Architecture Standards

## Module 5. Cloud Service Lifecycle

- Key Concepts of Cloud Service Lifecycle
- Key Cloud Computing Lifecycle

- Sourcing and Provisioning Lifecycle
- Product and Custom Service Lifecycle
- DevOps Lifecycle
- Service Management Lifecycle
- Cloud Governance Lifecycle

## Module 6. Service Transition and Service Transformation

- Benefits, Challenges, Opportunities, and Barriers
- Investors' and Stakeholders' Expectations
- TCO Models
- Impact of Cloud on Business Operating Models
- Impact of Cloud on Legacy IT
- Impact of Cloud on Migration and Transformation
- Cloud Transformation and Innovation

## Module 7. Consumer Perspective on Setting Up Cloud Environments

- Key Consumer Processes for Cloud
- Consumer Usage Models and Scenarios
- Key Consumer Solution Architecture Features

## Module 8. Provider Perspective on Setting Up Cloud Environments

- Cloud provider processes to set up a cloud environment
- Cloud provider usage models and scenarios
- Cloud provider solution architecture features

## Module 9. Cloud Ecosystem

- Cloud Ecosystem – Introduction
- Internet of Things
- Business and Technology Ecosystems and Drivers
- Entities and Ecosystems – Cloud Interactive Ecosystem Language

## Module 10. Types of XaaS Solutions

- XaaS Solutions and the Architecture Landscape
- XaaS Solution Definitions
- Make, Buy, Subscribe, and Reuse Options Analysis
- Cloud ROI and TCO Models

## Module 11. Targeting the Right Solution Architecture

- Cloud Solution Requirements
- Cloud Fit Selection
- Cloud Solution Architecture Specification
- Cloud Business Case
- Cloud Implementation Roadmap

## Exam Details

Professional Cloud Solutions Architect Certification Exam	
Exam Type	Scenario Based, Complex Multiple Choice
No. of Questions	25
Duration	75 minutes
Additional Time Provisions	15 minutes additional time for candidates who speak English as a second language.
Prerequisite	There is no prerequisite for this course. It is recommended that participants have passed the CCC Cloud Technology Associate or hold the equivalent certification/experience.
Proctored	Yes (Live/Web)
Open Book	No
Pass Score	65%
Delivery	Online

## Cloud Credential Council

The Cloud Credential Council (CCC) is an international member-based organization mandated to drive cloud readiness through effective competence development. The CCC has established critical cloud certifications for key IT roles in order to cultivate cloud-ready IT professionals. The certification scheme was developed after several years research investment in over 20 roles led by industry experts in conjunction with the leading technology vendors in the cloud computing arena.