



CERTIFIED CLOUD PRACTITIONER

(Creating Best of Minds)

Professional Certificate in CERTIFIED CLOUD PRACTITIONER

Course Code: IT_CT_I_0006/25

Duration: 40 Hours

Target Audience:

- **Aspiring Cloud Professionals**
Ideal for beginners and individuals looking to start a career in cloud computing. No prior cloud experience required.
- **IT Support & System Administrators**
For those seeking to expand their knowledge of cloud fundamentals and how cloud services integrate with existing IT environments.
- **Non-Technical Professionals in Tech-Driven Organizations**
Suited for sales, marketing, finance, and operations professionals who need to understand cloud concepts to support business goals and communicate effectively with technical teams.
- **Business Leaders & Managers**
For decision-makers who oversee cloud initiatives, budget planning, and vendor selection, and need a foundational understanding of cloud services and benefits.

Program Objectives:

- Understand the fundamental concepts of cloud computing, including key services and deployment models.

- Gain hands-on experience with core AWS and GCP services such as EC2, S3, Cloud Storage, and Compute Engine.
- Navigate AWS and GCP platforms with confidence, managing virtual machines, storage, networking, and monitoring tools.
- Understand basic cloud security concepts, ensuring compliance and secure operations in the cloud.
- Leverage cloud-based compute and storage solutions to optimize applications and services.

Detailed Syllabus

Module 1-Basics of Cloud Computing

- **What is Cloud Computing?**
- Key characteristics and benefits of cloud computing
- Different types of cloud services (IaaS, PaaS, SaaS)
- Cloud deployment models (Public, Private, Hybrid)

Module 2- Introduction to AWS (Amazon Web Services)

- Overview of AWS and its significance in cloud computing
- Understanding AWS global infrastructure (Regions, Availability Zones, and Edge Locations)
- Key AWS services for beginners

Module 3-Introduction to Google Cloud Platform (GCP)

- Overview of GCP and its role in the cloud ecosystem
- Key GCP services and their real-world applications
- Comparing AWS and GCP for a beginner-friendly perspective

Module 4- Compute Services in the Cloud

- Introduction to cloud-based computing (virtual machines, containers, serverless)

- AWS EC2: Basics of creating and managing virtual servers
- GCP Compute Engine: Running virtual machines

Module 5- Storage Services in the Cloud

- Overview of cloud storage and its benefits
- AWS S3: Object storage basics and practical use cases
- GCP Cloud Storage: Storing and managing data in GCP

Module 6-Networking Basics in the Cloud

- Introduction to networking concepts in cloud computing
- How cloud platforms handle networking (VPCs, subnets, and IP addressing)
- Examples from AWS and GCP

Module 7-Security and Compliance for Freshers

- Importance of security in the cloud
- Basic security concepts: Authentication, Authorization, and Encryption
- How AWS and GCP ensure compliance and security

Module 8-Monitoring and Management Tools

- Why monitoring is essential in the cloud
- Introduction to AWS CloudWatch and GCP Operations Suite
- Basics of resource management in AWS and GCP

Passing Criteria: Minimum 50% overall to pass the program.

Assignments: One assignment per module, designed to reinforce key concepts and practical skills.

Project: One **Capstone Project** to demonstrate applied knowledge and integrate learning from all modules.