



TECHNOCATION FREELANCING TRAINING INSTITUTE & SOFTWARE HOUSE

## **CLOUD COMPUTING CERTIFICATION COURSE OUTLINE**

### **Module 1: Introduction to Cloud Computing**

- First, understand cloud computing and its basic concept clearly.
- Next, learn how internet servers store and manage data.
- Then, explore examples like online storage and web apps.
- Finally, see why companies prefer cloud technology today.

### **Module 2: Cloud Service Models**

- First, learn three service models in cloud computing.
- Next, study IaaS for virtual machines and storage.
- Then, explore PaaS for building and running applications.
- Finally, understand SaaS for ready-to-use software services.

### **Module 3: Cloud Deployment Models**

- First, understand public cloud used by many organizations.
- Next, study private cloud used by single companies.
- Then, explore hybrid cloud combining private and public systems.
- Finally, review community cloud for shared environments.

### **Module 4: Major Cloud Platforms**

- First, explore **Amazon Web Services (AWS)** cloud platform.
- Next, study **Microsoft Azure** services for businesses.
- Then, learn about **Google Cloud Platform (GCP)** solutions.
- Finally, compare features and uses of each platform.

## **Module 5: Cloud Storage Systems**

- First, understand cloud storage and its importance today.
- Next, learn object storage, block storage, and file storage.
- Then, explore services like **AWS S3** and **Google Cloud Storage**.
- Finally, manage files securely in cloud environments.

## **Module 6: Virtual Machines & Computer**

- First, understand virtual machines and cloud computing power.
- Next, launch simple virtual machines on cloud platforms.
- Then, learn about containers and lightweight environments.
- Finally, manage computing resources efficiently in cloud.

## **Module 7: Networking in Cloud**

- First, learn how networks connect cloud services together.
- Next, understand concepts like VPC and IP addressing.
- Then, explore load balancers and traffic distribution.
- Finally, secure communication between cloud resources.

## **Module 8: Cloud Security Basics**

- First, understand security risks in cloud environments.
- Next, apply strong passwords and access control policies.
- Then, learn encryption and data protection techniques.
- Finally, monitor cloud systems for security threats.

## **Module 9: Cloud Databases**

- First, learn how databases work in cloud systems.
- Next, explore relational databases like **Amazon RDS**.
- Then, understand NoSQL databases like **MongoDB Atlas**.
- Finally, manage data efficiently for applications.

## **Module 10: Cloud Automation Tools**

- First, learn automation for managing cloud infrastructure.
- Next, explore tools like **Terraform** and **Ansible**.
- Then, create scripts to automate deployments quickly.
- Finally, reduce manual work using automation systems.

## **Module 11: Cloud Cost Management**

- First, understand pricing models in cloud services.
- Next, monitor resource usage to control expenses.
- Then, optimize workloads to reduce unnecessary costs.
- Finally, plan budgets for cloud-based projects.

## **Module 12: Certification & Course Completion**

- First, review all modules and key cloud concepts carefully.
- Next, complete final assessment and practical exercises.
- Then, submit assignments for evaluation and feedback.
- Finally, receive your **Cloud Computing Course Certificate**.

+92-308-5145-822

[www.technocation.pk](http://www.technocation.pk)

info@technocation.pk

