

Cloud Computing Course Syllabus

Total Duration: 180hrs

Module 1:

Chapter 1: Fundamentals of Cloud Computing

1. Introduction to Cloud Computing
2. Virtualization & Containers
3. Cloud Infrastructure & Networking
4. Cloud Identity & Access Management (IAM)

Chapter 2: Cloud Service Providers (AWS, Azure, GCP)

1. Introduction to AWS
2. Introduction to Microsoft Azure
3. Introduction to Google Cloud Platform (GCP)

Chapter 3: Cloud Storage & Databases

1. Cloud Storage Services
2. Cloud Databases (SQL & NoSQL)

Chapter 4: Cloud Application Deployment

1. Serverless Computing & Function as a Service (FaaS)
2. Cloud-Based Web Hosting
3. Container Orchestration with Kubernetes

Module 2:

Chapter 5: Cloud Security & Compliance

1. Cloud Security & Encryption
2. Monitoring & Logging in Cloud

Chapter 6: DevOps & Cloud Automation

1. Infrastructure as Code (IaC)
2. CI/CD Pipelines in Cloud

Chapter 7: Cloud-Based AI & Big Data

1. Cloud AI & Machine Learning Services
2. Big Data Processing in Cloud

Chapter 8: Final Project & Certification

1. Capstone Project
2. Cloud Certification Preparation