

Cloud Computing Course

What is Cloud Computing?

Cloud computing is Internet based computing where virtual shared servers provide software, infrastructure, platform, devices and other resources and hosting to customers on a pay-as-you-use basis.

Duration: **4 days** (32 hours)

Module 1 - Cloud Computing Technologies Introduction

- What is cloud computing?
- Motivation for Cloud Computing
 - Variable expense
 - Benefit economies of scale
 - Capacity utilization
 - Speed & Agility
 - No data centers management
 - Global
- Cloud Computing models:
 - SaaS
 - PaaS
 - IaaS
- Cloud implementation models:
 - Public
 - Private
 - Hybrid
- Major cloud vendors overview: Amazon, Microsoft, Google and others

Module 2 - Amazon Web Services (AWS)

- What's AWS?
- Main services overview
 - Compute
 - Storage
 - DB
 - Network (VPC)
- Security & Identity (iam, waf, kms)
- Management (monitoring, configuration management)
- Analytics (emr, ml, kinesis)
- Diving into Compute & Storage
 - Regions, Availability Zones, ELB (load balancer), EBS (storage), AMI (images)
 - VPC, subnets, security groups, auto-scaling
 - S3
 - Containers
- Serverless (AWS Lambda)
- Monitoring
- Automation
- Mobile Hub
- Development Tools
- Console
- CLI
- SDKs
- Summary

Module 3 - Microsoft Azure

- What's Azure?
- Main services overview
 - Compute
 - Storage
 - DB
 - Network
 - Security
 - Management
 - Analytics
- Diving into Compute & Storage
- Virtual machines, Load balancers
 - Virtual network
 - Storage
 - Container service
- Azure Functions
- Monitoring
- Automation
- App services
 - Development Model
- SDK
- IDE tools (Visual Studio)
- Summary

Module 4 - Google Cloud

- What's Google Cloud?
- Main services overview
 - Compute
 - Storage
 - DB
 - Network
 - Security
 - Management
 - Analytics
- Diving into Compute & Storage
 - Virtual machines, Load balancers
 - Networks
 - App Engine
 - Storage
 - Containers
- Cloud Functions
- Monitoring
- Automation
- Development Model
- SDK
- IDE tools
- CLI
- Summary