

CLOUD COMPUTING



Module 1

Azure overview

- Create Your Azure Free Account
- Login and understanding the resources
- Azure management
- Subscription, support and billing
- Hands-on Lab

Module 2

Introduction to Cloud Computing

Advantages of Microsoft Azure Cloud

- Introduction to Cloud Computing
- Advantages of Microsoft Azure Cloud
- Computing
- Economies of Scale.
- Understanding CapEx and OpEx
- Azure Global Infrastructure - Regions and AZs
- Azure Management Interfaces - Interacting with Azure
- Cloud Platform
- Serverless computing
- Hands-on Lab

Module 3

Microsoft azure management tools

- Azure PowerShell
- Azure SDK and CLI
- Hands-on Lab

Module 4

- Create a Billing Alarm for Azure Account
- Introduction to Azure Virtual Machines
- Azure VMs Networking and HA
- Fundamentals
- Launch Linux VM in Azure Cloud
- Connect to Linux VM from Mac or Linux
- Connect to Linux VM from Windows PC
- Configure Ubuntu VM as a Web Server
- Azure Configuration Disks
- Hands-on Lab

Module 5

- Web applications and cloud services
- Creating and configuring the web apps
- Deploying and monitoring web apps
- Creating and deploying PaaS cloud services
- Hands-on Lab

Module 6

- Azure Compute Options Introduction
- Azure Containers Fundamentals
- Azure App Service Fundamentals
- Azure Tags Fundamentals
- Azure Policy Fundamentals
- Azure Locks Fundamentals

Module 7

- Introduction to Azure Storage
- Azure Blob Storage Fundamentals
- Azure Managed Disks
- Azure Files Storage
- Azure Queues Storage
- Azure Tables Storage
- Hands-on Lab

Module 8

- Azure Database
- Azure SQL Database/Creating and connecting
database
- Azure Database for MySQL
- Azure Database Migration Service
- Introduction
- Hands-on Lab

Module 9

- Networking in Azure Cloud
- IoT in Azure Cloud
- Big Data and Analytics in Azure Cloud
- Artificial Intelligence and Machine Learning
- in Azure
- DevOps in Azure

Module 10

- Azure Resource Manager
- Resource Groups Fundamentals
- Azure Service Level Agreements (SLAs)

Module 11

- Azure Compliance, Regulations & Standards
- Azure Blueprints
- Azure Advisor
- Azure Monitor & Azure Service
- Hands-on Lab

Module 12

- Azure Cloud Shared Responsibility
- Model/Azure security
- Optimize your Security with Azure Security Center
- Azure Identity Services - Azure Active Directory
- Multi-factor Authentication Fundamentals
- Azure Security Services - Firewall and DDoS Protection
- Encryption Fundamentals and Azure Key Vault
- Azure AIP and ATP Fundamentals 101
- Hands-on Lab

Module 13

- Introduction to Azure Pricing
- Azure TCO Calculator
- Azure Advisor and Azure Cost Management
- Azure Cost Management Best Practices
- Azure Support Plans

Module 14

- Azure Load Balancer and Traffic Manager
- Fundamentals
- Create Azure Load Balancer
- Configure Two Webservers and Test LB

Module 15

- Azure AD
- Describing and practicing azure ADs
- Managing Azure AD authentication
- Hands-on Lab

Module 16

- Azure projects

