



## AZURE ADMINISTRATOR

**Duration: 45 hours**

**Additional: 5 hours Bonus (from Mentor)**

### Introduction

- Creating an Azure Free Account
- Concepts in Azure
- Tour of the Azure Portal
- Quick note on Security Defaults

### Deploy and Manage Azure Compute Resources

- Virtual Machine
- Azure Virtual Machines - Data Disks
- Adding data disks
- Server-side encryption - Azure Disk Storage
- Encryption with customer managed keys • Azure Disk Encryption
- Creating a VM with Premium Disks
- Disks - Understanding IOPS and Throughput
- Data Disks Snapshot
- Azure Shared Disks
- Un-managed disks
- Custom Script Extensions
- Custom Script Extensions for Linux Virtual Machines
- Linux Virtual Machines - Cloud init
- Virtual Machine - Boot Diagnostics
- Virtual Machine - Serial Console



- Virtual Machine - Run command
- Virtual Machine - Run command – Resources
- Confidential Computing and Azure Dedicated Host • Azure Bastion Service
- Redeploying a virtual machine
- Availability Sets
- Availability Zones
- Azure virtual machine scale sets
- Creating a specialized imahineologies
- Understanding virtual machine images
- Generalized VM Image
- Resizing a virtual machine
- Note on service limits
- Proximity Placement Groups
- Azure Web App

#### **Introduction to Docker**

- Azure Container Registry
- Azure Kubernetes Service

#### **Virtual Networking**

- Introduction to Virtual Networks in Azure
- Concept behind subnets
- Deploying a machine to the virtual network
- Network Security Groups
- The Azure Load Balancer Service
- Azure Application Gateway
- Virtual Network Peering
- Virtual private network
- NEW - Point-to-Site VPN Connections
- Site to Site VPN Connection



- Azure Virtual WAN
- Azure Express Route
- Network Watcher
- User Defined Routes
- Azure Firewall
- Azure DNS

#### Storage

- Storage accounts
- Different types of storage accounts
- Azure Storage Explorer
- Azure Blob service
- Different authorization
- Using Access keys
- Shared Access Signatures - Blob Level
- Azure Storage Accounts - Active Directory Authentication
- Data Redundancy
- Access Tiers
- Azure File shares



#### Azure Identities and governance

- Azure Subscriptions
- Azure Active Directory
- Role Based Access Control
- Custom Roles
- Conditional Access Policies
  - Administrative Units
  - Resource tags
- Locking Resources
  - Azure Policies
  - Management Group
- Costing

#### Monitor and Backup

- Azure Monitor Service
- What is a Log Analytics Workspace
- What is Application Insights
- Azure Backup feature

#### Recovery services vault

- Azure Backup retention
- MARS agent - Backup
- Azure Site Recovery

#### Azure PowerShell and CLI

#### Azure Resource manager template

#### Project, Interview questions and resumes buildup,

#### Production use cases