

## ABOUT AZ-104 AZURE ADMINISTRATOR ASSOCIATE:

The **AZ-104** course, also referred to as **Azure Administrator Associate**, is a thorough curriculum that focuses on essential skills required to expertly manage Azure resources. This role covers various **administrative activities**, including **virtual machines, networking, storage, identity, security, and governance**.

## COURSE OBJECTIVES:

- Understanding Azure IaaS, PaaS and SaaS services at a very high level.
- Create and manage Virtual Network resources and provide connectivity between them.
- Manage distribution of Load using various Load Balancing Solutions.
- Create and Manage Virtual Machines using Azure Portal, PowerShell and Azure CLI.
- Creating and Updating Infrastructure (IaC) using ARM Templates and Bicep.
- Choosing between SQL Database and Storage Account and understanding various options.
- Deploying Web Applications in PaaS Services.
- Briefly understanding Server-less compute.
- Implementing Authentication and Authorization using Microsoft Entra ID
- Creating and providing access to Azure Subscription
- Create Policies and Budgets for Azure Subscription.
- Managing Azure Backup.
- Ability to collect and analyze metrics and logs. Also respond to alerts and take proactive action in resolving them.

## WHO CAN DO THIS COURSE / PRE-REQUISITE

- Any IT professional with a dedicated interest in Azure or someone who is an enthusiastic cloud user.
- Anybody with network or system or any kind of administration experience.
- Applicable careers include:
  - Database Administrators / Security Administrators / Storage Administrators
  - Network Engineers / DevOps Engineers / Server Engineers / Virtualization Engineers
- Honestly, everyone should be doing AZ-104 as it has now become foundation for doing everything including developing applications. Even software developers who are targeting AZ-204 should also do this course.

## TRAINING AT DECCANSOFT:

- This course is delivered by Mr. Sandeep Soni who has 27+ years of experience.
- We teach every topic conceptually and then demonstrate the same practically with real-time use-cases so that you can directly implement the gained knowledge in your on-job role.
- You will get the courseware which is of very high standard and will be very helpful in preparation for interviews.
- You can practice all exercises with the Azure Subscription we provide.
- You can access videos and live sessions under the same subscription. Videos can be used for learning the subject and practicing. Live sessions can be used for directly interacting with trainer and clarifying doubts then and there.
- Every week we schedule a Q&A session for clarifying any questions you may have.
- If you follow the journey laid out by Mr. Sandeep Soni, we assure you 100% guaranteed Azure Certification. We regularly conduct a 21 days certification challenge in which we ensure that you get quality content for cracking the certification in 21 days, which you can join without any additional fees.

## OUR TRAINING METHODOLOGY:

In this course, we will start with the basics about Cloud Computing and covering many Azure PaaS and IaaS services while understanding, how to build, manage and deploy various services step by step in the Azure cloud. The teaching methodology of Mr. Sandeep Soni is very simple yet comprehensive. He **creates a journey** for the student who starts with basics and builds the subject step-by-step before moving towards an advanced topic. Every topic is dealt with **conceptually** and is followed by a **practical demonstration** of the same with some use-cases. This will give you the experience of working with a live project in real-time scenarios. The same is reflected in our syllabus for your detailed reference.

## WHAT WILL YOU GET FROM DECCANSOFT IN THIS TRAINING:

- You will get 6 months of pre-recorded video access.
- One year of live training access (For revision, you can attend all the live batches for your course multiple times in one year)
- Detailed and Complete Azure Tutorial/ Azure Course Syllabus prepared by Mr. Sandeep Soni himself and the same can be used for practice and reference.

- You will get 2-month portal access for practice (shared subscription with Deccansoft) – This is supposed to be used while practising when live sessions are going on. You can extend this by paying additional nominal fees on need basis.

## AZ-104: AZURE ADMINISTRATOR ASSOCIATE CERTIFICATION:

Getting started with a Certification in Microsoft Azure is now a career choice, especially now when it is one of the fastest-growing cloud-based services. This Microsoft Azure Certification opens a wide space of leading opportunities for professionals and experts in a challenging business industry.

Azure Administrator is among the most viewed certifications by professionals globally. AZ-104 Certification brings you the ability to perform all technical tasks which include Managing Azure governance, monitoring and maintaining Azure resources, and many more.

### **Certification Skills Measured:**

- Manage Azure identities and governance (20–25%)
- Implement and manage storage (15–20%)
- Deploy and manage Azure compute resources (20–25%)
- Implement and manage virtual networking (15–20%)
- Monitor and maintain Azure resources (10–15%)

## AZURE SUITE PACKAGE

This program comes as part of the Microsoft Azure Suite package. We recommend subscribing to this bundle as it offers a comprehensive understanding of all significant Azure Services, covering both Infrastructure as a Service (IaaS) and Platform as a Service (PaaS). It also enhances your comprehension of how those deploying applications manage the underlying infrastructure. Additionally, this package includes the opportunity to pursue a career path as an Azure Solution Architect.

You can find more information and benefits of this package from

<https://www.bestdotnettraining.com/packages/complete-microsoft-azure-training>

## COURSE OUTLINE

### **Cloud Computing Introduction**

- What is Cloud Computing
- Cloud Characteristics
- Cloud Computing Service Models

- Deployment Models in Cloud Computing
- Advantages and Disadvantages of Cloud Computing
- Cloud Computing Job Roles.
- Cloud Computing Platforms and Certifications.

### **Getting Started with Azure**

- Introduction to Azure
- Why, What and Benefits of Azure
- Azure Hosting Models
- Azure Services
- Subscribing to Microsoft Azure
- Azure Portals
- Azure Key Concepts
- Azure Resource Group

### **Configure and Manage Azure Virtual Networks**

- Overview of Azure Networking
- Virtual Network Benefits
- Understanding Network Resources
- Implement and manage virtual networking.
  - Create a VNet using Azure Portal
  - Create a Subnet
  - Configure private and public IP addresses.
  - Create Network Interface Card with public, and private IP addresses.
  - Create a Virtual Machine
- Setup Network Security Group
  - Create security rules.
  - Associate NSG to a subnet or network interface
  - Identify required ports.
  - Evaluate effective security rules.
- Azure Firewall
- Understanding Azure DNS
  - Configure Azure DNS
  - Public and Private DNS Zones
- Create connectivity between virtual networks.
  - Create and configure VNET peering.
- Monitoring and Troubleshooting Network Connectivity
- Monitor and Manage Networking
  - Verify, Manage and Monitor on-premises connectivity.

- Use network resource monitoring and Network Watcher
- Manage external networking and virtual network connectivity.

### **Load Balancing Solutions**

- Understanding and Creating Availability Set
- Understanding Availability Zones
- Load Balancing
  - Configure external and internal Azure Load balancer.
  - Load Balancing Rules
  - Implement front end IP configuration.
- Azure Traffic Manager
- Azure Front Door

### **Azure Storage Service**

- About Storage Service and Account
- Creating a Storage Account
- Working with Blob Storage
  - Types of Blobs (Block, Append, Page)
  - Container and Metadata
  - Soft Copy
  - Azure Storage Explorer
  - Transfer Data using AZ Copy
  - Programming Blob Storage
  - Async Blob Copy
  - Import and Export Service
  - Implement and Configure CDN
  - Configure Custom Domain
  - Scale Blob Storage
  - Storage Service Encryption
- Manage Access / Securing Storage
  - Create and Manage Shared Access Signature
  - Account SAS vs Service SAS
  - Using Stored Access Policies
  - Regenerating Keys
  - Encrypt Keys using Azure Key Vault integration.
- Working with Table Storage
  - Understanding NoSQL Database
  - Creating Table and Entities using Storage Explorer
  - Entities and Properties
  - Table storage vs COSMOS DB Table API

- Azure Queues Storage
  - Understanding Async Communication using Queues
  - Comparing Azure Queues and Service Bus Queues
- Azure SMB File Storage
  - Common usage of File Storage
  - Shares, Directory and File
  - Managing Using Azure Portal
- Azure File Sync

#### **Managing Azure with PowerShell and Azure CLI.**

- Installing the required modules
- Login to Azure Portal
- Managing Resource Group
- Managing App Service Plans and App Service Web Apps
- Create and Configure a Storage Account
- Managing Storage Accounts using PowerShell
- Azure CLI Introduction and Setup
- Creating Resources
- Listing and Formatting output
- Connect a Web App to SQL Database
- Deleting Resources
- Interactive Mode

#### **Managing ARM Templates and Bicep**

- Understanding Azure Resource Manager (ARM)
- Exporting and Importing ARM and Bicep templates
- ARM Resource Providers
- Deploy ARM and Bicep Templates
  - Using PowerShell
  - Azure CLI
  - Azure Portal
- Incremental and Complete Deployments

#### **Azure Virtual Machine**

- Introduction
- About Virtual Machine Workloads
- Create a Windows Virtual Machine using Portal / PowerShell / ARM Templates
- Deploy popular application frameworks by using Azure Resource Manager templates.
- Virtual Machine Disk

- Convert Unmanaged Disk to Managed Disk
- Generalizing VM and Capture VM Images
- Upload an on-premises VHD to Storage Account and attach to VM as Data Disk
- Working with Disk Snapshot
- VM Disk Types
- VM Sizes in Azure
- Configuring VM Disk Encryption
- Perform configuration management.
  - VM Extensions & VM Agents
  - Custom Script Extensions
  - Desired State Configuration (DSC)
  - Access Extension
- Virtual Machine Scale Sets

### **Implement and Manage App Services – Web App**

- Introduction
- App Service - Application Types
- Deploy Web Apps
- App Service plans.
  - Create App Service Plan
  - Migrate Web Apps between App Service plans.
  - Create a Web App within an App Service plan.
- Configuring Web Apps
  - Application Settings Configuration
  - Database Connection Strings
  - Configuring Handlers and Virtual Directories
- Configure a custom domain name Enable SSL/TLS for your custom domains.
- Understanding Deployment Slots
- Horizontal and Vertical Scaling of a Web App
- VNet Integration

### **Implement Azure Backup**

- Overview of Azure Backup
- Configure VM backup.
- Create Recovery Services Vault
- Define and Implement backup policies.
- Perform VM restore!
- Perform backup operation.
- Configure and review backup reports.

**Manage Azure Subscriptions**

- Understanding Azure Subscriptions
- Configuring Role Based Access Control
- RBAC using Portal.
- RBAC using PowerShell and CLI
- Custom Roles for RBAC
- Managing Subscription Policies
- Locking Resources
- Checking Resources Limits
- Resource Tags

**Managing and Securing Identities using Microsoft Entra ID**

- Microsoft Entra ID Introduction
- Microsoft Entra ID Editions
- Adding a custom domain name to Microsoft Entra ID
- Managing Microsoft Entra ID Users, Groups and Devices
- Adding Partner Users from other organization
- Configure Windows 10/11 with Microsoft Entra ID domain join.
- Self-Service Password Reset
- Administrative Units
- Microsoft Entra ID Connect
- Microsoft Entra ID User Sign-In Options
  - Password Synchronization
  - Passthrough Authentication
  - Federated SSO

**Azure Monitoring and Log Analytics Workspace**

- Azure Monitor Overview
- Monitoring Metrics
- Monitoring Logs
- Azure Activity Logs
- Azure Diagnostics Logs
- Log Analytic Workspace
- Collect data from an Azure VM / Windows computer.
- Application Insight

**Azure Container Registry**

- Build Docker Image



- Publish Image to Azure Container Registry
- Use image in Azure Container Instance
- Use Image in Azure App Service

**Check out our Upcoming batches here.**

Link: <https://www.bestdotnettraining.com/courses-and-webinars>

Enrol now for the live batch and get an interactive and immersive learning experience today.

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