

# AZ-104, Microsoft Azure Administrator,

## Course Outline AZ-104

### Module 01 – Identity

In this module, you will learn how to secure identities with Azure Active Directory and implement users and groups. This module includes:

- Azure Active Directory
- Users and Groups
- Lab 01 - Manage Azure Active Directory Identities

### Module 02 – Governance and Compliance

In this module, you will learn about managing your subscriptions and accounts, implementing Azure policies, and role-based access control. This module includes:

- Subscriptions and Accounts
- Azure Policy
- Role-based Access Control (RBAC)
- Lab 02a - Manage Subscriptions and RBAC
- Lab 02b - Manage Governance via Azure Policy

### Module 03 – Azure Administration

In this module, you will learn about the tools an Azure Administrator uses to manage their infrastructure. This includes the Resource Manager, Azure Portal, Cloud Shell, Azure PowerShell, CLI, and Azure Resource Manager Templates. This module includes:

- Resource Manager
- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- ARM Templates
- Lab 03a - Manage Azure resources by Using the Azure Portal
- Lab 03b - Manage Azure resources by Using ARM Templates
- Lab 03c - Manage Azure resources by Using Azure PowerShell (optional)
- Lab 03d - Manage Azure resources by Using Azure CLI (optional)

## **Module 04 – Virtual Networking**

In this module, you will learn about basic virtual networking concepts like virtual networks and subnetting, IP addressing, network security groups, Azure Firewall, and Azure DNS. This module includes:

- Virtual Networks
- IP Addressing
- Network Security groups
- Azure Firewall
- Azure DNS
- Lab 04 - Implement Virtual Networking

## **Module 05 – Intersite Connectivity**

In this module, you will learn about intersite connectivity features including VNet Peering, VPN Gateway Connections, ExpressRoute, and Virtual WAN. This module includes:

- VNet Peering
- VPN Gateway Connections
- ExpressRoute and Virtual WAN
- Lab 05 - Implement Intersite Connectivity

## **Module 06 – Network Traffic Management**

In this module, you will learn about network traffic strategies including network routing, Azure Load Balancer, and Azure Application Gateway. This module includes:

- Network Routing and Endpoints
- Azure Load Balancer
- Azure Application Gateway
- Lab 06 - Implement Traffic Management

## **Module 07 – Azure Storage**

In this module, you will learn about basic storage features including storage accounts, blob storage, storage security, Azure files and File Sync, and managing storage (tooling). This module includes:

- Storage Accounts
- Blob Storage
- Storage Security
- Azure Files and File Sync
- Managing Storage
- Lab 07 - Manage Azure storage

## **Module 08 – Azure Virtual Machines**

In this module, you will learn about Azure virtual machines including planning, creating, availability and extensions. This module includes:

- Virtual Machine Planning

- Creating Virtual Machines
- Virtual Machine Availability
- Virtual Machine Extensions
- Lab 08 - Manage Virtual Machines

### **Module 09 - Serverless Computing**

In this module, you will learn how to administer serverless computing features like Azure App Service Plans, Azure App Service, Container Services, and Azure Kubernetes Service.

- Azure App Service Plans
- Azure App Service
- Azure Container Instances
- Azure Kubernetes Service
- Lab 09a - Implement Web Apps
- Lab 09b - Implement Azure Container Instances
- Lab 09c - Implement Azure Kubernetes Service

### **Module 10 – Data Protection**

In this module, you will learn about backing up files and folders, and virtual machine backups.

This module includes:

- File and Folder Backups
- Virtual Machine Backups
- Lab 10 - Implement Data Protection

### **Module 11 – Monitoring**

In this module, you will learn about monitoring your Azure infrastructure including Azure Monitor, alerting, and log analytics. This module includes:

- Azure Monitor
- Azure Alerts
- Log Analytics
- Network Watcher
- Lab 11 - Implement Monitoring