

# AZ-103T00-A: Microsoft Azure Administrator

## OBJECTIVE

This course teaches IT Professionals how to manage their Azure subscriptions, create and scale virtual machines, implement storage solutions, configure virtual networking, back up and share data, connect Azure and on-premises sites, manage network traffic, implement Azure Active Directory, secure identities, and monitor your solution.

## COURSE TOPICS

### Module 1: Azure Administration

In this module, you'll learn about the tools Azure Administrators use to manage their infrastructure. This includes the Azure Portal, Cloud Shell, Azure PowerShell, CLI, Resource Manager, and Resource Manager Templates. The demonstrations in this module will ensure you are successful in the course labs.

#### Lessons

- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- Resource Manager
- ARM Templates

### Module 2: Azure Virtual Machines

In this module, you'll learn about Azure virtual machines, including planning, creating, availability, and extensions.

#### Lessons

- Virtual Machine Planning
- Creating Virtual Machines
- Virtual Machine Availability
- Virtual Machine Extensions

### Module 3: Azure Storage

In this module, you'll learn about basic storage features, including storage accounts, blob storage, Azure files, and storage security.

#### Lessons

- Storage Accounts
- Azure Blobs
- Azure Files
- Storage Security

#### **Module 4: Virtual Networking**

In this module, you'll learn about basic virtual networking concepts like virtual networks, IP addressing, Azure DNS, and network security groups.

##### **Lessons**

- Virtual Networks
- IP Addressing and Endpoints
- Azure DNS
- Network Security Groups

#### **Module 5: Intersite Connectivity**

In this module, you'll learn about intersite connectivity features, including VNet Peering, VNet-to-VNet connections, Site-to-Site Connections, and ExpressRoute.

##### **Lessons**

- VNet Peering
- VNet-to-VNet Connections
- ExpressRoute Connections

#### **Module 6: Monitoring**

In this module, you'll learn about monitoring your Azure infrastructure, including Azure Monitor, alerting, log analytics, and Network Watcher.

##### **Lessons**

- Azure Monitor
- Azure Alerts
- Log Analytics
- Network Watcher

#### **Module 7: Data Protection**

In this module, you'll learn about data replication strategies, backing up files and folders, and virtual machine backups.

##### **Lessons**

- Data Replication
- File and Folder Backups
- Virtual Machine Backups

## Module 8: Network Traffic Management

In this module, you'll learn about network traffic strategies, including service endpoints, network routing, Azure Load Balancer, and Azure Traffic Manager.

### Lessons

- Network Routing
- Azure Load Balancer
- Azure Traffic Manager

## Module 9: Azure Active Directory

In this module, you'll learn about Azure Active Directory (AD), including Azure AD Connect and Azure AD Join.

### Lessons

- Azure Active Directory
- Azure AD Connect
- Azure AD Join

## Module 10: Securing Identities

In this module, you'll learn how to secure identities, including Multi-Factor Authentication, Azure AD Identity Protection, and Self-Service Password Reset.

### Lessons

- Multi-Factor Authentication
- Azure AD Identity Protection
- Self-Service Password Reset

## Module 11: Governance and Compliance

In this module, you'll learn about managing your subscriptions and accounts, including role-based access control, users and groups, and Azure policy.

### Lessons

- Subscriptions and Accounts
- Role-Based Access Control (RBAC)
- Users and Groups
- Azure Policy

## Module 12: Data Services

In this module, you'll learn how to effectively share data using Import and Export service, Data Box, Content Delivery Network, and File Sync.

### Lessons

- Content Delivery Network
- File Sync
- Import and Export Service
- Data Box

### PREREQUISITES

- Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.
- Understanding of network configuration, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding of Active Directory concepts, including domains, forests, domain controllers, replication, Kerberos protocol, and Lightweight Directory Access Protocol (LDAP).
- Understanding of resilience and disaster recovery, including backup and restore operations.

### TRAINING APPROACH

This course includes lectures, course notes, exercises and hands-on practice.

### COURSE DURATION

16 Hours (in 2 days)

Time: 9:00am to 6:00pm

Lunch Time: 1:00pm to 2:00pm

### CERTIFICATION COMPLETION

A certificate of completion is provided for all trainees attending the course.