

## About this Course

This 4-day 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.

Azure Administrator Certification Badge Exam AZ-103 Microsoft Azure Role Based Certification Training  
Azure Administration Certification Training

## Audience profile

This course is for Azure Administrators. Azure Administrators manage the cloud services that span storage, networking, and compute cloud capabilities, with a deep understanding of each service across the full IT lifecycle. They take end-user requests for new cloud applications and make recommendations on services to use for optimal performance and scale, as well as provision, size, monitor and adjust as appropriate. This role requires communicating and coordinating with vendors. Azure Administrators use the Azure Portal and as they become more proficient they use PowerShell and the Command Line Interface.

## 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.

## Course Outline

### Module 1: Azure Administration

In this module, you'll learn about tooling Azure Administrator uses 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

Lab : Deploy and Manage Virtual Machines

Lab : Virtual Machines and Scale Sets

#### **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

Lab : Implement and Manage Storage

#### **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

Lab : Configure Azure DNS

#### **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

Lab : VNet Peering and Service Chaining

### **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

Lab : 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

Lab : Azure Site Recovery Between Regions

### **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

Lab : Load Balancer and 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

Lab : Implement Directory Synchronization

### **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

Lab : Azure AD Identity Protection

Lab : 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

Lab : Role-Based Access Control

Lab : Governance and Compliance

### **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