

## **AZ104: Microsoft Azure Administrator**

Course ID #: 7000-379-ZZ-Z

Hours: 28

## **Course Content**

### **Course Description:**

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

### **Prerequisites:**

Successful Azure Administrators start this role with experience in virtualization, networking, identity, and storage.

- Understanding on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.
- Understanding network configurations, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding Active Directory concepts, including users, groups, and role-based access control.
- Understanding resilience and disaster recovery, including backup and restore operations.

### **Target Student:**

This course is for Azure Administrators. The Azure Administrator implements, manages, and monitors identity, governance, storage, compute, and virtual networks in a cloud environment. The Azure Administrator will provision, size, monitor, and adjust resources as appropriate.

## **Topics:**

### **Module 1: Identity**

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

#### **Module 2: Governance and Compliance**

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

**Module 3: Azure Administration** 

**Azure Resource Manager** 

**Azure Portal and Cloud Shell** 

**Azure PowerShell and CLI** 

**ARM Templates** 

Lab: Manage Azure resources by Using the

**Azure Portal** 

Lab: Manage Azure resources by Using ARM

**Templates** 

Lab: Manage Azure resources by Using Azure

PowerShell (optional)

Lab: Manage Azure resources by Using Azure

**CLI** (optional)



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

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

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

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

#### **Module 6: Network Traffic Management**

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

#### **Module 7: Azure Storage**

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

#### **Module 8: Azure Virtual Machines**

- Virtual Machine Planning
- Creating Virtual Machines
- Virtual Machine Availability
- Virtual Machine Extensions
- Lab: Manage virtual machines

#### **Module 9: Serverless Computing**

- Azure App Service Plans
- Azure App Service
- Container Services
- Azure Kubernetes Service
- Lab : Implement Web Apps
- Lab: Implement Azure Container Instances
- Lab: Implement Azure Kubernetes Service

#### **Module 10: Data Protection**

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

#### **Module 11: Monitoring**

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