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## Microsoft Azure Administrator

**Duration: 4 Days    Course Code: M-AZ104    Delivery Method: Company Event**

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### Overview:

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.

### Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

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### Target Audience:

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.

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### Objectives:

- After completing this course you should be able to:**
- Secure and manage identities with Azure Active Directory.
  - Implement and manage users and groups.
  - Implement and manage Azure subscriptions and accounts.
  - Implement Azure Policy, including custom policies.
  - Use RBAC to assign permissions.
  - Leverage Azure Resource Manager to organize resources.
  - Use the Azure Portal and Cloud Shell.
  - Use Azure PowerShell and CLI.
  - Use ARM Templates to deploy resources.
  - Implement virtual networks and subnets.
  - Configure public and private IP addressing.
  - Configure network security groups.
  - Configure Azure Firewall.
  - Configure private and public DNS zones
  - Configure VNet Peering.
  - Configure VPN gateways.
  - Choose the appropriate intersite connectivity solution.
  - Configure network routing including custom routes and service
  - Choose the appropriate network traffic solution.
  - Create Azure storage accounts.
  - Configure blob containers.
  - Secure Azure storage.
  - Configure Azure files shares and file sync.
  - Manage storage with tools such as Storage Explorer
  - Plan for virtual machine implementations.
  - Create virtual machines.
  - Configure virtual machine availability, including scale sets.
  - Use virtual machine extensions.
  - Create an app service plan.
  - Create a web app.
  - Implement Azure Container Instances.
  - Implement Azure Kubernetes Service.
  - Backup and restore file and folders.
  - Backup and restore virtual machines.
  - Use Azure Monitor.
  - Create Azure alerts.
  - Query using Log Analytics.

endpoints.

■ Use Network Watcher.

■ Configure an Azure Load Balancer.

■ Configure and Azure Application Gateway.

## Prerequisites:

### Attendees should meet the following prerequisites:

- Experience on operating systems, virtualization, cloud infrastructure, storage structures, and networking.
- 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.

## Testing and Certification

### Recommended as preparation for the following exams:

- **AZ-104** - Microsoft Certified: Azure Administrator Associate

## Content:

### 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
- Lab : Manage Azure resources by Using Azure CLI

### 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
- Traffic Manager
- 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

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### Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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