

## **Arrow ECS Finland Oy - Education Services**

# **TRAINING OFFERING**

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## Microsoft AZ-104: Microsoft Azure Administrator

CODE: LENGTH: PRICE:

MCS AZ104T00 32 Hours (4 days) €1,890.00

## **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.

#### **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.

#### **Prerequisites**

Successful Azure Administrators start this role with 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.

## **Programme**

#### **Module 1: Identity**

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

Lessons Azure Active Directory After completing this module, students will be able to:

•Secure and manage identities with Azure Active Directory. Users and Groups Lab: Manage Azure Active Directory Identities •Implement and manage users and groups.

#### Module 2: Governance and Compliance

In this module, you will learn about managing your subscriptions and accounts, implementing Azure policies, and using Role-Based Access Control.

Lessons

- Subscriptions and Accounts
- Azure Policy
- •Role-based Access Control (RBAC) Lab: Manage Subscriptions and RBAC Lab: Manage Governance via Azure Policy After completing this module, students will be able to:
- •Implement and manage Azure subscriptions and accounts.
- •Implement Azure Policy, including custom policies.
- Use RBAC to assign permissions.

#### **Module 3: Azure Administration**

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

- Azure Resource Manager
- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- Lab: Manage Azure resources by Using the Azure Portal ARM Templates

Lab: Manage Azure resources by Using ARM Templates Lab: Manage Azure resources by Using Azure PowerShell

After completing this module, students will be able to:

- •Leverage Azure Resource Manager to organize resources.
- •Use the Azure Portal and Cloud Shell.
- •Use Azure PowerShell and CLI.

Lab: Manage Azure resources by Using Azure CLI •Use ARM Templates to deploy resources.

## **Module 4: 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.

Lessons

•Implement virtual networks and subnets.

After completing this module, students will be able to:

 Virtual Networks •IP Addressing

•Configure public and private IP addressing.

Network Security groups

•Configure network security groups.

Azure Firewall

·Configure Azure Firewall.

Azure DNS

Lab: Implement Virtual Networking •Configure private and public DNS zones.

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

In this module, you will learn about intersite connectivity features including VNet Peering, Virtual Network Gateways, and Site-to-Site Connections.

Lessons

After completing this module, students will be able to:

VNet Peering

•Configure VNet Peering.

VPN Gateway Connections

·Configure VPN gateways.

•ExpressRoute and Virtual WAN Lab: Implement Intersite Connectivity •Choose the appropriate intersite connectivity solution.

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

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

Lessons

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

After completing this module, students will be able to:

- •Configure network routing including custom routes and service endpoints.
- Configure an Azure Load Balancer.
- Configure and Azure Application Gateway.
- •Choose the appropriate network traffic solution.

#### Module 7: Azure Storage

In this module, you will learn about basic storage features including storage accounts, blob storage, Azure files and File Sync, storage security, and storage tools.

Lessons

After completing this module, students will be able to:

 Storage Accounts Create Azure storage accounts. Blob Storage •Configure blob containers. Storage Security Secure Azure storage.

Azure Files and File Sync

•Configure Azure files shares and file sync.

Lab: Manage Azure storage •Manage storage with tools such as Storage Explorer. Managing Storage

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

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

Virtual Machine Planning

After completing this module, students will be able to:

•Creating Virtual Machines

•Plan for virtual machine implementations. •Create virtual machines.

Virtual Machine Availability

- •Configure virtual machine availability, including scale sets.
- •Virtual Machine Extensions Lab: Manage virtual machines •Use virtual machine extensions.

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

In this module, you will learn administer serverless computing features like Azure App Service, Azure Container Instances, and Kubernetes.

Lessons

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

After completing this module, students will be able to:

- Create an app service plan.
- ·Create a web app.
- •Implement Azure Container Instances.

Lab: Implement Azure Kubernetes Service •Implement Azure Kubernetes Service.

Module 10: Data Protection

Lessons

•File and Folder Backups

In this module, you will learn about backing up files and folders, and virtual machine backups. •Virtual Machine Backups After completing this module, students will be able to:

·Backup and restore file and folders.

Lab: Implement Data Protection •Backup and restore virtual machines. **Module 11: Monitoring**  In this module, you will learn about monitoring your Azure infrastructure including Azure Monitor, alerting, and log analytics.

Lessons After completing this module, students will be able to:

Azure Monitor
Azure Alerts
Log Analytics
Network Watcher Lab: Implement Monitoring
Use Azure Monitor.
Create Azure alerts.
Query using Log Analytics.
Network Watcher.

### **Session Dates**

Aikataulutamme kiinnostuksen mukaan. Ota yhteyttä

## **Additional Information**

This training is also available as onsite training. Please contact us to find out more.