

AZ-203: Developing Solutions for Microsoft Azure

AZ-203T01: Develop Azure Infrastructure as a Service compute solutions

Module 1: Implement solutions that use virtual machines

Lessons

- Provision VMs
- Create ARM templates
- Configure Azure Disk Encryption for VMs

Module 2: Implement batch jobs by using Azure Batch

Lessons

- Azure Batch overview
- Run a batch job by using the Azure CLI and Azure Portal
- Run batch jobs by using code
- Manage batch jobs by using the Batch Service API

Module 3: Create containerized

Lessons

- Create an Azure Managed Kubernetes Service (AKS) cluster
- Create container images for solutions
- Publish an image to the Azure Container Registry
- Run containers by using Azure Container Instance or AKS

AZ-203T02: Develop Azure Platform as a Service compute solutions

Module 1: Create App Service web

Lessons

- Azure App Service core concepts
- Creating an Azure App Service web app
- Creating background tasks by using WebJobs in Azure App Service

Module 2: Creating Azure App Service mobile

Lessons

- Getting started with mobile apps in App Service
- Enable push notifications for your app
- Enable offline sync for your app

Module 3: Create Azure App Service API Lessons

- Creating APIs
- Using Swagger to document an API

Module 4: Implement Azure Lessons

- Azure Functions overview
- Develop Azure Functions using Visual Studio
- Implement durable functions

AZ-203T03: Develop for Azure storage

Module 1: Develop solutions that use Azure Table Lessons

- Azure Table storage overview
- Authorization in Table storage
- Table service REST API

Module 2: Develop solutions that use Azure Cosmos DB storage This module covers Azure Cosmos DB storage. It instructs students on how it works, how to manage containers and items, and create and update documents by using code. **Lessons**

- Azure Cosmos DB overview
- Managing containers and items
- Create and update documents by using code

Module 3: Develop solutions that use a relational Lessons

- Azure SQL overview
- Create, read, update, and delete database tables by using code

Module 4: Develop solutions that use Microsoft Azure Blob Lessons

- Azure Blob storage overview
- Working with Azure Blob storage

AZ-203T04: Implement Azure security

Module 1: Implement Lessons

- Microsoft identity platform
- Implement OAuth2 authentication
- Implement managed identities for Azure resources
- Implement authentication by using certificates, forms-based authentication, or tokens
- Implement multi-factor authentication

Module 2: Implement access control

Lessons

- Claims-based authorization
- Role-based access control (RBAC) authorization

Module 3: Implement secure data

Lessons

- Encryption options
- End-to-end encryption
- Implement Azure confidential computing
- Manage cryptographic keys in Azure Key Vault

AZ-203T05: Monitor, troubleshoot, and optimize Azure solutions

Module 1: Introduction to Azure Monitor

Lessons

- Overview of Azure Monitor

Module 2: Develop code to support scalability of apps and services

Lessons

- Implement autoscale
- Implement code that addresses singleton application instances
- Implement code that handles transient faults

Module 3: Instrument solutions to support monitoring and logging

Lessons

- Configure instrumentation in an app or server by using Application Insights
- Analyze and troubleshoot solutions by using Azure Monitor

Module 4: Integrate caching and content delivery within solutions

Lessons

- Azure Cache for Redis
- Develop for storage on CDNs

AZ-203 T06: Connect to and consume Azure, and third-party, services

Module 1: Develop an App Service Logic

Lessons

- Azure Logic Apps overview
- Create Logic Apps by using Visual Studio
- Create custom connectors for Logic Apps
- Create custom templates for Logic Apps

Module 2: Integrate Azure Search within solutions

Lessons

- Create and query an Azure Search Index
- Full text search in Azure Search

Module 3: API Management

Lessons

- Introduction to the API Management service
- Securing your APIs
- Defining API policies

Module 4: Develop event-based solutions

Lessons

- Implement solutions that use Azure Event Grid
- Implement solutions that use Azure Event Hubs
- Implement solutions that use Azure Notification Hubs

Module 5: Develop message-based solutions

Lessons

- Implement solutions that use Azure Service Bus
- Implement solutions that use Azure Queue Storage queues