



AZ-204T00: Developing Solutions for Microsoft® Azure®

Duration: 5 Days

Method: Instructor-Led Training (ILT) | Live Online Training

Certification: Microsoft Certified: Azure Developer Associate —
Exam: AZ-204: Developing Solutions for Microsoft Azure

Course Description

This course teaches participants how to create end-to-end solutions in Microsoft Azure. They will learn how to implement Azure compute solutions, create Azure Functions, implement, and manage web apps, develop solutions utilizing Azure storage, implement authentication and authorization, and secure their solutions by using Key Vault and Managed Identities. Participants will also learn how to connect to and consume Azure services and third-party services and include event- and message-based models in their solutions. The course also covers monitoring, troubleshooting, and optimizing Azure solutions.

Target Audience

This course is intended for persons who are:

- Interested in Azure development.
- Passing the Microsoft Azure Developer Associate certification exam.

Prerequisites

To attend this course, candidates must have:

- **One to two years** of professional development experience and experience with Azure.
- Programming skills in an Azure Supported Language.

Course Objectives

Upon successful completion of this course, attendees will be able to:

- Develop Azure compute solutions.
- Develop for Azure storage.
- Implement Azure security.
- Monitor, troubleshoot, and optimize Azure solutions.
- Connect to and consume Azure services and third-party services.



Course Topics

Module 1: Creating Azure App Service Web Apps

- Azure App Service Core Concepts
- Creating an Azure App Service Web App
- Configuring and Monitoring App Service Apps
- Scaling App Service Apps
- Azure App Service Staging Environments

Module 2: Implement Azure Functions

- Azure Functions Overview
- Developing Azure Functions
- Implement Durable Functions

Module 3: Develop Solutions That Use Blob Storage

- Azure Blob Storage Core Concepts
- Managing the Azure Blob Storage Lifecycle
- Working with Azure Blob Storage

Module 4: Develop Solutions That Use Cosmos DB Storage

- Azure Cosmos DB Overview
- Azure Cosmos DB Data Structure
- Working with Azure Cosmos DB Resources and Data

Module 5: Implement IaaS solutions

- Provisioning VMs in Azure
- Create and Deploy ARM Templates
- Create Container Images for Solutions
- Publish a Container Image to Azure Container Registry
- Create and Run Container Images in Azure Container Instances

Module 6: Implement User Authentication and Authorization

- Microsoft Identity Platform v2.0
- Authentication Using the Microsoft Authentication Library
- Using Microsoft Graph
- Authorizing Data Operations in Azure Storage

Module 7: Implement Secure Cloud Solutions

- Manage Keys, Secrets, and Certificates by Using the Key Vault API
- Implement Managed Identities for Azure Resources
- Secure App Configuration Data by Using Azure App Configuration



Course Topics *Continued*

Module 8: Implement API Management

- API Management Overview
- Defining Policies for APIs
- Securing Your APIs

Module 9: Develop App Service Logic Apps

- Azure Logic Apps Overview
- Creating Custom Connectors for Logic Apps

Module 10: Develop Event-Based Solutions

- Implement Solutions That Use Azure Event Grid
- Implement Solutions That Use Azure Event Hubs
- Implement Solutions That Use Azure Notification Hubs

Module 11: Develop Message-Based Solutions

- Implement Solutions That Use Azure Service Bus
- Implement Solutions That Use Azure Queue Storage Queues

Module 12: Monitor and Optimize Azure Solutions

- Overview of Monitoring in Azure
- Instrument an App for Monitoring
- Analysing and Troubleshooting Apps
- Implement Code That Handles Transient Faults

Module 13: Integrate Caching and Content Delivery Within Solutions

- Develop for Azure Cache for Redis
- Develop for Storage on CDNs

LABS INCLUDED

