

Developing solutions for Microsoft Azure

AZ204 - Version: 1

 5 days Course

Description:

This course teaches developers how to create end-to-end solutions in Microsoft Azure. Students 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 KeyVault and Managed Identities. Students 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.

Intended audience:

Students in this course are interested in Azure development or in passing the Microsoft Azure Developer Associate certification exam.

Prerequisites:

Students should have 1-2 years professional development experience and experience with Microsoft Azure. They must be able to program in an Azure Supported Language.

Objectives:

Topics:

Module 1: Creating Azure App Service Web Apps

- Explore Azure App Service
- Configure web app settings
- Scale apps in Azure App Service
- Explore Azure App Service deployment slots

Module 2: Implement Azure functions

- Explore Azure Functions
- Develop Azure Functions
- Implement Durable Functions

Module 3: Develop solutions that use Blob storage

- Explore Azure Blob storage
- Manage the Azure Blob storage lifecycle
- Work with Azure Blob storage

Module 4: Develop solutions that use Azure Cosmos DB

- Explore Azure Cosmos DB
- Implement partitioning in Azure Cosmos DB
- Work with Azure Cosmos DB

Module 5: Implement IaaS solutions

- Provisioning VMs in Azure
- Create and deploy Azure Resource Manager templates
- Manage container images in Azure Container Registry
- Run container images in Azure Container Instances

Module 6: Implement user authentication and authorization

- Explore the Microsoft identity platform

- Implement authentication by using the Microsoft Authentication Library
- Implement shared access signatures
- Explore Microsoft Graph

Module 7: Implement secure cloud solutions

- Implement Azure Key Vault
- Implement managed identities
- Implement Azure App Configuration

Module 8: Implement API Management

- Explore API Management

Module 9: Develop event-based solutions

- Explore Azure Event Grid
- Explore Azure Event Hubs

Module 10: Develop message-based solutions

- Discover Azure message queues

Module 11: Instrument solutions to support monitoring and logging

- Monitor app performance

Module 12: Integrate caching and content delivery within solutions

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