



Azure

AZ-204: Developing Solutions for Microsoft Azure

\$2,995.00

- 5 Days
- Prep for Exam AZ-204
- Official Microsoft Course
- New Role-Based Certification Training

Upcoming Dates

Jul 14 - Jul 18

Nov 03 - Nov 07

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 Key Vault 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.

Course Outline

Learning Path 1: Implement Azure App Service web apps

Learn how Azure App Service functions and how to create and update an app. Explore App Service authentication and authorization, configuring app settings, scale apps, and how to use deployment slots.

Modules:

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

Lab:

- Build a web application on Azure platform as a service offering

Learning Path 2: Implement Azure Functions

Learn how to create and deploy Azure Functions. Explore hosting options, bindings, and triggers.

Modules:

- Azure Functions overview
- Developing Azure Functions

Lab:

- Implement task processing logic by using Azure Functions□

Learning Path 3: Develop solutions that use blob storage

Learn how to create Azure Blob storage resources, manage data through the blob storage lifecycle, and work with containers and items by using the Azure Blob storage client library V12 for .NET.

Modules:

- Explore Azure Blob storage
- Managing the Azure Blob storage lifecycle
- Working with Azure Blob storage

Lab:

- Retrieve Azure Storage resources and metadata by using the Azure Storage SDK for .NET

Learning Path 4: Develop solutions that use Cosmos DB

Learn how Cosmos DB is structured and how data consistency is managed. Students will also learn how to create Cosmos DB accounts and create databases, containers, and items by using a mix of the Azure Portal and the .NET SDK.

Modules:

- Explore Azure Cosmos DB
- Working with Azure Cosmos DB

Lab:

- Construct a polyglot data solution

Learning Path 5: Implement Containerized Solutions

Learn how to create and deploy containerized solutions to Azure by using the Azure Container Registry, Azure Container Instances, and Azure Container Apps.

- Modules:
- Manage container images in Azure Container Registry
- Run container images in Azure Container Instances
- Implement Azure Container Apps

Lab:

- Deploy compute workloads by using images and containers□

Learning Path 6: Implement user authentication and authorization

Learn how to implement authentication and authorization to resources by using the Microsoft identity platform, Microsoft Authentication Library, shared access signatures, and use Microsoft Graph..

Modules:

- Explore the Microsoft Identity Platform
- Implement Authentication using the Microsoft Authentication Library
- Implement shared access signatures
- Using Microsoft Graph

Lab:

- Authenticate by using OpenID Connect, MSAL, and .NET SDKs

Learning Path 7: Implement secure cloud solutions

Learn how to more securely deploy apps in Azure by using Azure Key Vault, managed identities, and Azure App Configuration.

Modules:

- Implement Azure Key Vault
- Implement Managed Identities
- Implement Azure App Configuration

Lab:

- Access resource secrets more securely across services

Learning Path 8: Implement API Management

Learn how the API Management service functions, how to transform and secure APIs, and how to create a backend API.

Module:

- Explore API Management

Lab:

- Create a multi-tier solution by using Azure services

Learning Path 9: Develop event-based solutions

Learn how to build applications with event-based architectures by integrating Azure Event Grid and Azure Event Hubs into your solution.

Modules:

- Explore Azure Event Grid
- Explore Azure Event Hubs

Lab:

- Publish and subscribe to Event Grid events

Learning Path 10: Develop message-based solutions

Learn how to build applications with message-based architectures by integrating Azure Service Bus and Azure Queue Storage into your solution.

Module:

- Discover Azure Message queues

Lab:

- Asynchronously process messages by using Azure Service Bus Queues

Learning Path 11: Troubleshoot solutions by using Application Insights

Learn how to instrument apps to enable Application Insights to monitor performance and help troubleshoot issues.

Module:

- Monitor App performance

Lab:

- Monitor services that are deployed to Azure

Learning Path 12: Implement caching for solutions

Learn how to improve the performance and scalability of your applications by integrating Azure Cache for Redis and Azure Content Delivery Network in to your solution..

Modules:

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

Lab:

Enhance a web application by using the Azure Content Delivery Network

Audience

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

Prerequisites

Successful students in this course have at least 1-2 years professional development experience and some experience with Microsoft Azure. In addition, the student should have experience programming in a language supported by Azure. Note: Most of the code and examples in the course are presented in C#

What You Will Learn