

**Developing Solutions for Microsoft Azure (AZ-204)**

**Course Number:** MOC-AZ-204
**Duration:** 5 days

**Overview**

This official MS course, Developing Solutions for Microsoft Azure (AZ-204), teaches attendees how to create end-to-end solutions in Microsoft Azure. Students learn to monitor, troubleshoot, and optimize Azure solutions, and connect to and consume Azure and third-party services. This course prepares students for the [AZ-204 exam](https://docs.microsoft.com/en-us/learn/certifications/exams/AZ-204) for which every attendee receives a voucher.

**Prerequisites**

* All attendees must have:
	+ Hands-on experience with Azure IaaS and PaaS solutions, and the Azure Portal
	+ Experience writing in an Azure supported language at the intermediate level. (C#, JavaScript, Python, or Java)
	+ Ability to write code to connect and perform operations on, a SQL or NoSQL database product. (SQL Server, Oracle, MongoDB, Cassandra or similar)
	+ Experience writing code to handle authentication, authorization, and other security principles at the intermediate level
	+ A general understanding of HTML, the HTTP protocol, and REST API interfaces
	+ Taken [AZ-900: Azure Fundamentals](file:////training/microsoft-azure-fundamentals) or have the equivalent experience

**Materials**

All Microsoft training students receive Microsoft official courseware.

For all Microsoft Official Courses taught in their entirety that have a corresponding certification exam, an exam voucher is included for each participant.

**Software Needed on Each Student PC**

Attendees will not need to install any software on their computers for this class. The class will be conducted in a remote environment that Accelebrate will provide; students will only need a local computer with a web browser and a stable Internet connection. Any recent version of Microsoft Edge, Mozilla Firefox, or Google Chrome will work well.

**Objectives**

* Create end-to-end solutions in Microsoft Azure
* Implement Azure compute solutions
* Create Azure Functions
* Implement and manage web apps
* Develop solutions utilizing Azure storage
* Implement authentication and authorization
* Secure solutions by using KeyVault and Managed Identities
* Connect to and consume Azure services and third-party services
* Include event- and message-based models in their solutions
* Monitor, troubleshoot, and optimize Azure solutions

**Outline**

* Introduction
* Explore Azure App Service
* Configure web app settings
* Scale apps in Azure App Service
* Explore Azure App Service deployment slots
* Explore Azure Functions
* Develop Azure Functions
* Explore Azure Blob storage
* Manage the Azure Blob storage lifecycle
* Work with Azure Blob storage
* Explore Azure Cosmos DB
* Work with Azure Cosmos DB
* Manage container images in Azure Container Registry
* Run container images in Azure Container Instances
* Implement Azure Container Apps
* Explore the Microsoft identity platform
* Implement authentication by using the Microsoft Authentication Library
* Implement shared access signatures
* Implement Azure Key Vault
* Implement managed identities
* Implement Azure App Configuration
* Explore API Management
* Explore Azure Event Grid
* Explore Azure Event Hubs
* Discover Azure message queues
* Monitor app performance
* Develop for Azure Cache for Redis
* Develop for storage on CDNs
* Conclusion