

AZ-203: Developing Solutions for Microsoft Azure (5 Days)

In this course students will gain the knowledge and skills needed to implement Azure IaaS services and features in their development solution. Students will gain the knowledge and skills needed to implement Azure Platform as a Service feature and services in their development solutions, leverage Azure storage services and features in their development solutions, Azure authentication and authorization services in their development solutions, ensure applications hosted in Azure are operating efficiently and as intended and this course is about communication between apps and services.

Skills Gained

- Provisioning virtual machines
- Using Batch Service to deploy/maintain resources
- Learn how to create containerized solutions by using Azure Kubernetes Service.
- Create and manage Azure App Service resources
- Integrate push and offline sync in their mobile apps
- Learn how to document an API.
- Learn how to create and test Azure Functions.
- Azure Table storage
- Azure Cosmos DB
- Azure Blob
- Developing against relational databases in Azure.
- Learn how identity is managed and utilized in Azure solutions by using the Microsoft identity platform
- Learn about access control (claims-based authorization and role-based access control) and how to implement secure data solutions.
- Learn how to create and integrate these resources by using the Azure CLI, REST, and application code.
- Learn how Azure Monitor operates
- Learn how to use tools like Log Analytics and Application Insights to better understand what is happening in their application.
- Learn how to implement autoscale, instrument their solutions to support monitoring and logging, and use Azure Cache and CDN options to enhance the end-user experience.
- Learn how to create and manage their own APIs by using API Management.
- Learn how to use the different event- and message-based services in Azure within their development solutions.

Who Can Benefit

- Students in this course are interested in Azure development or in passing the Microsoft Azure Developer Associate certification exam.
- Students should have 1-2 years' experience as a developer. This course assumes students know how to code and have a fundamental knowledge of Azure.
- It is recommended that students have some experience with PowerShell or Azure CLI, working in the Azure portal, and with at least one Azure-supported programming language. Most of the examples in this course are presented in C\# .NET.

Prerequisites

- Students should have 1-2 years experience as a developer. This course assumes students know how to code and have a fundamental knowledge of Azure.
- It is recommended that students have some experience with PowerShell or Azure CLI, working in the Azure portal, and with at least one Azure-supported programming language. Most of the examples in this course are presented in C\# .NET.

Course Outline

Develop Azure Infrastructure as a Service compute solutions

- Module 1: Implement solutions that use virtual machines
- Module 2: Implement batch jobs by using Azure Batch Services
- Module 3: Create containerized solutions

Develop Azure Platform as a Service compute solution

- Module 1: Create App Service web apps
- Module 2: Creating Azure App Service mobile apps
- Module 3: Create Azure App Service API apps

Develop for Azure Storage

- Module 1: Develop solutions that use Azure Table storage
- Module 2: Develop solutions that use Azure Cosmos DB storage
- Module 3: Develop solutions that use a relational database
- Module 4: Develop solutions that use Microsoft Azure Blob storage

Implement Azure security

- Module 1: Implement authentication
- Module 2: Implement access control
- Module 3: Implement secure data solutions

Monitor, troubleshoot, and optimize Azure solutions

- Module 1: Introduction to Azure Monitor
- Module 2: Develop code to support scalability of apps and services
- Module 3: Instrument solutions to support monitoring and logging
- Module 4: Integrate caching and content delivery within solutions

Connect to and consume Azure, and third-party, services

- Module 1: Develop an App Service Logic App
- Module 2: Integrate Azure Search within solutions
- Module 3: API Management
- Module 4: Develop event-based solutions
- Module 5: Develop message-based solutions