



Course Title: AI-200: Develop AI cloud solutions on Azure	Course Duration: 5.0 Days
Exam: Not Included	Exam Type: No Exam
Qualification: Certificate of Completion: AI-200 Develop AI Cloud Solutions on Azure	

Course Syllabus

1 - Explore Azure App Service

- Examine Azure App Service
- Examine Azure App Service plans
- Deploy to App Service
- Explore authentication and authorization in App Service
- Discover App Service networking features

2 - Configure web app settings

- Configure application settings
- Configure general settings
- Configure path mappings
- Enable diagnostic logging
- Configure security certificates

3 - Scale apps in Azure App Service

- Examine autoscale factors
- Identify autoscale factors
- Enable autoscale in App Service
- Explore autoscale best practices

4 - Explore Azure App Service deployment slots

- Explore staging environments
- Examine slot swapping
- Swap deployment slots
- Route traffic in App Service

5 - Explore Azure Functions

- Discover Azure Functions
- Compare Azure Functions hosting options
- Scale Azure Functions

6 - Develop Azure Functions

- Explore Azure Functions development



- Create triggers and bindings
- Connect functions to Azure services

7 - Explore Azure Blob storage

- Explore Azure Blob storage
- Discover Azure Blob storage resource types
- Explore Azure Storage security features
- Discover static website hosting in Azure Storage

8 - Manage the Azure Blob storage lifecycle

- Explore the Azure Blob storage lifecycle
- Discover Blob storage lifecycle policies
- Implement Blob storage lifecycle policies
- Rehydrate blob data from the archive tier

9 - Work with Azure Blob storage

- Explore Azure Blob storage client library
- Create a client object
- Manage container properties and metadata by using .NET
- Set and retrieve properties and metadata for blob resources by using REST

10 - Explore Azure Cosmos DB

- Identify key benefits of Azure Cosmos DB
- Explore the resource hierarchy
- Explore consistency levels
- Choose the right consistency level
- Explore supported APIs
- Discover request units

11 - Work with Azure Cosmos DB

- Explore Microsoft .NET SDK v3 for Azure Cosmos DB
- Create stored procedures
- Create triggers and user-defined functions
- Explore change feed in Azure Cosmos DB

12 - Manage container images in Azure Container Registry

- Discover the Azure Container Registry
- Explore storage capabilities
- Build and manage containers with tasks
- Explore elements of a Dockerfile

13 - Run container images in Azure Container Instances

- Explore Azure Container Instances
- Run containerized tasks with restart policies
- Set environment variables in container instances
- Mount an Azure file share in Azure Container Instances

14 - Implement Azure Container Apps

- Explore Azure Container Apps
- Explore containers in Azure Container Apps
- Implement authentication and authorization in Azure Container Apps
- Manage revisions and secrets in Azure Container Apps
- Explore Dapr integration with Azure Container Apps

15 - Explore the Microsoft identity platform

- Explore the Microsoft identity platform
- Explore service principals
- Discover permissions and consent
- Discover conditional access

16 - Implement authentication by using the Microsoft Authentication Library

- Explore the Microsoft Authentication Library
- Initialize client applications

17 - Implement shared access signatures

- Discover shared access signatures
- Choose when to use shared access signatures
- Explore stored access policies

18 - Explore Microsoft Graph

- Discover Microsoft Graph
- Query Microsoft Graph by using REST
- Query Microsoft Graph by using SDKs
- Apply best practices to Microsoft Graph

19 - Implement Azure Key Vault

- Explore Azure Key Vault
- Discover Azure Key Vault best practices
- Authenticate to Azure Key Vault

20 - Implement managed identities

- Explore managed identities
- Discover the managed identities authentication flow
- Configure managed identities
- Acquire an access token

21 - Implement Azure App Configuration

- Explore the Azure App Configuration service
- Create paired keys and values
- Manage application features
- Secure app configuration data

22 - Explore API Management



- Discover the API Management service
- Explore API gateways
- Explore API Management policies
- Create advanced policies
- Secure APIs by using subscriptions
- Secure APIs by using certificates

23 - Explore Azure Event Grid

- Explore Azure Event Grid
- Discover event schemas
- Explore event delivery durability
- Control access to events
- Receive events by using webhooks
- Filter events

24 - Explore Azure Event Hubs

- Discover Azure Event Hubs
- Explore Event Hubs Capture
- Scale your processing application
- Control access to events
- Perform common operations with the Event Hubs client library

25 - Discover Azure message queues

- Choose a message queue solution
- Explore Azure Service Bus
- Discover Service Bus queues, topics, and subscriptions
- Explore Service Bus message payloads and serialization
- Explore Azure Queue Storage
- Create and manage Azure Queue Storage and messages by using .NET

26 - Monitor app performance

- Explore Application Insights
- Discover log-based metrics
- Instrument an app for monitoring
- Select an availability test
- Troubleshoot app performance by using Application Map

27 - Develop for Azure Cache for Redis

- Explore Azure Cache for Redis
- Configure Azure Cache for Redis
- Interact with Azure Cache for Redis by using .NET

28 - Develop for storage on CDNs

- Explore Azure Content Delivery Networks
- Control cache behavior on Azure Content Delivery Networks
- Interact with Azure Content Delivery Networks by using .NET



Course Overview

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.

Course Learning Outcomes

By the end of this course, learners will be able to understand how to design and deploy web applications using Azure App Service and configure application settings, security, and networking features. They will be able to implement scaling strategies, deployment slots, and monitoring solutions to ensure application reliability.

Learners will also be able to develop and deploy serverless applications using Azure Functions and integrate them with other Azure services. They will gain practical skills in working with Azure Storage, including Blob storage lifecycle management and client library usage.

Participants will be able to work with Azure Cosmos DB, implement containerised solutions using Azure Container Registry, Container Instances, and Container Apps, and manage authentication and identity using Microsoft identity platform, managed identities, and Microsoft Graph.

They will also learn how to secure applications using Key Vault, App Configuration, and API Management, as well as implement messaging solutions using Event Grid, Event Hubs, and Service Bus.

Finally, learners will be able to monitor application performance using Application Insights, implement caching with Azure Redis Cache, and optimise content delivery using Azure CDN.

Audience

This course is ideal for developers, software engineers, and IT professionals who want to build cloud-native applications on Microsoft Azure. It is also suitable for those working in software development or cloud environments who want to expand their skills in application deployment, scalability, security, and cloud architecture.

Entry-Level Requirements

Learners should have basic programming knowledge, preferably in C# or Python, and a general understanding of web development concepts. Familiarity with cloud computing or Azure fundamentals is helpful but not required.

Recommended Reading

Learners are encouraged to explore Microsoft Learn resources covering Azure App Service, Azure Functions, Azure Storage, Cosmos DB, and cloud application architecture. Reading about cloud design patterns, messaging systems, identity management, and DevOps practices will also support understanding of the course content.

What's Included

Hands-on Azure AI training, guided exercises, real-world scenarios, and Certificate of Completion.

Exam Information

This course does not include a formal written exam. Learners are assessed through practical understanding and participation in hands-on activities. A Certificate of Completion is awarded upon completion.

What's Next

This course includes hands-on training in building and deploying cloud applications using Microsoft Azure. Learners will work through practical labs covering App Service, Functions, storage, containers, APIs, identity, messaging, monitoring, and performance optimisation.

The course also includes real-world scenarios, guided demonstrations, and step-by-step exercises designed to build practical cloud development skills. A Certificate of Completion is included.

Additional Information

This is a practical, hands-on cloud development course focused on real-world Azure application design and deployment. Learners will gain experience across a wide range of Azure services used in modern cloud-native applications. Basic programming knowledge is recommended.