



# GTech Learn

*"Our focus is your Success"*



## Self-Paced Course

# AZ-204-SP: Developing solutions for Microsoft Azure

<b>Duration:</b> 21 Hours	<b>Level:</b> Intermediate	<b>Role:</b> Developer
<b>Certification:</b> Available	<b>Register:</b> <a href="#">Click Here</a>	<b>Instructor-Led:</b> <a href="#">Click Here</a>

### What's included?

- ✓ Learn from Microsoft Certified Trainer (MCT's)
- ✓ Lifetime Access over Videos
- ✓ Exam Preps / Practice Tests
- ✓ Achievement Badges from Microsoft
- ✓ Completion Certificate
- ✓ Discounted Exam Vouchers

### What do you get?

- ✓ Full HD Recorded Videos
- ✓ Lab Guides
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- ✓ Official Courseware from MS Learn
- ✓ Access From Anywhere
- ✓ Completion Certificate



Digital & App Innovation  
Azure

Training Services

Email: [info@gtechlearn.com](mailto:info@gtechlearn.com)

## 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.

## Audience Profile

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

## Contents

### Module 1: Creating Azure App Service Web Apps

Students will learn how to build a web application on the Azure App Service platform. They will learn how the platform functions and how to create, configure, scale, secure, and deploy to the App Service platform.

Lessons

- Azure App Service core concepts
- Creating an Azure App Service Web App
- Configuring and Monitoring App Service apps
- Scaling App Service apps
- Azure App Service staging environments

### Module 2: Implement Azure functions

This module covers creating Functions apps, and how to integrate triggers and inputs/outputs in to the app.

Lessons

- Azure Functions overview
- Developing Azure Functions
- Implement Durable Functions

### Module 3: Develop solutions that use blob storage

Students will learn how Azure Blob storage works, how to manage data through the hot/cold/archive blob storage lifecycle, and how to use the Azure Blob storage client library to manage data and metadata.

Lessons

- Azure Blob storage core concepts
- Managing the Azure Blob storage lifecycle

- Working with Azure Blob storage

## Module 4: Develop solutions that use Cosmos DB storage

Students will 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.

Lessons

- Azure Cosmos DB overview
- Azure Cosmos DB data structure
- Working with Azure Cosmos DB resources and data

## Module 5: Implement IaaS solutions

This module instructs students on how to use create VMs and container images to use in their solutions. It covers creating VMs, using ARM templates to automate resource deployment, create and manage Docker images, publishing an image to the Azure Container Registry, and running a container in Azure Container Instances.

Lessons

- Provisioning VMs in Azure
- Create and deploy ARM templates
- Create container images for solutions
- Publish a container image to Azure Container Registry
- Create and run container images in Azure Container Instances

## Module 6: Implement user authentication and authorization

Students will learn how to leverage the Microsoft Identity Platform v2.0 to manage authentication and access to resources. Students will also learn how to use the Microsoft Authentication Library and Microsoft Graph to authenticate a user and retrieve information stored in Azure, and how and when to use Shared Access Signatures.

Lessons

- Microsoft Identity Platform v2.0
- Authentication using the Microsoft Authentication Library
- Using Microsoft Graph
- Authorizing data operations in Azure Storage

## Module 7: Implement secure cloud solutions

This module covers how to secure the information (keys, secrets, certificates) an application uses to access resources. It also covers securing application configuration information.

Lessons

- Manage keys, secrets, and certificates by using the KeyVault API
- Implement Managed Identities for Azure resources
- Secure app configuration data by using Azure App Configuration

## Module 8: Implement API Management

Students will learn how to publish APIs, create policies to manage information shared through the API, and to manage access to their APIs by using the Azure API Management service.

Lessons

- API Management overview
- Defining policies for APIs
- Securing your APIs

## **Module 9: Develop App Service Logic Apps**

This module teaches students how to use Azure Logic Apps to schedule, automate, and orchestrate tasks, business processes, workflows, and services across enterprises or organizations.

Lessons

- Azure Logic Apps overview
- Creating custom connectors for Logic Apps

## **Module 10: Develop event-based solutions**

Students will learn how to build applications with event-based architectures.

Lessons

- Implement solutions that use Azure Event Grid
- Implement solutions that use Azure Event Hubs
- Implement solutions that use Azure Notification Hubs

## **Module 11: Develop message-based solutions**

Students will learn how to build applications with message-based architectures.

Lessons

- Implement solutions that use Azure Service Bus
- Implement solutions that use Azure Queue Storage queues

## **Module 12: Monitor and optimize Azure solutions**

This module teaches students how to instrument their code for telemetry and how to analyze and troubleshoot their apps.

Lessons

- Overview of monitoring in Azure
- Instrument an app for monitoring
- Analyzing and troubleshooting apps
- Implement code that handles transient faults

## **Module 13: Integrate caching and content delivery within solutions**

Students will learn how to use different caching services to improve the performance of their apps.

Lessons

- Develop for Azure Cache for Redis

- Develop for storage on CDNs

## About GTech Learn

Established in 2011 in the USA, GTech Learn is one of the leading IT training organizations in North America & South East Asia. Driven by its unique USPs, GTech Learn is spurring competition, meeting the unmet needs of customers, assisting in skills upgrade, and supplementing talent pools with its presence in the USA, Canada, Singapore and India. This is consistent with our vision to help our Learners with skills upgrade for enhanced career opportunities.







As a Microsoft Learning Partner, we offer a broad range of learning solutions across the full Microsoft technology stack that can be customized.

Since 2011, GTech Learn has been developing custom-fit learning solutions that involve creating and delivering maximum results.

We have successfully helped all types of businesses, government entities, and individuals. For this reason, GTech has chosen by Microsoft to deliver comprehensive learning programs around the globe.

With flexible learning options, state-of-the-art delivery methods, numerous language preferences, experienced instructors, and complete dedication to our students, GTech Learn has the capabilities to help students develop their Microsoft skill sets and achieve increasingly high standards of productivity while organizations of all sizes realize the full potential of their technology investments.

## Our Accreditations with Microsoft

 Security Training Services	 Modern Work Training Services	 Business Applications Training Services
 Infrastructure Azure Training Services	 Digital & App Innovation Azure Training Services	 Data & AI Azure Training Services