

KOENIG SOLUTIONS · COURSE OUTLINE

AZ-204T00: Developing Solutions for Microsoft Azure

Learn to build, secure and deploy cloud solutions on Azure, from web apps and functions to storage, containers and messaging.

5 Days

40 HOURS

12

MODULES

28

TOPICS

12

HANDS-ON LABS

COURSE OVERVIEW

The AZ-204T00: Developing Solutions for Microsoft Azure course is designed for developers who want to learn how to build cloud solutions on Azure. It covers a wide range of topics, including Creating and deploying web apps, Implementing Azure functions, Developing solutions with Blob storage, Cosmos DB, and Implementing IaaS solutions such as Provisioning VMs and Using container services. Learners will gain practical experience with Azure services that can help them develop scalable, reliable, and secure cloud applications. The course also delves into key aspects of cloud development such as User authentication and authorization, Implementing secure cloud solutions, API management, developing event-based and message-based solutions, and Monitoring and optimizing Azure services. By integrating labs and exercises, the course ensures that participants can apply the concepts in real-world scenarios. The course prepares developers for the Microsoft Azure Developer Associate certification and equips them with the knowledge and skills necessary to build and maintain Azure cloud solutions effectively.

WHO THIS COURSE IS FOR

The AZ-204T00 course focuses on developing solutions for Microsoft Azure, tailored for experienced developers who are familiar with Azure services and SDKs. Target Audience for AZ-204T00: Developing Solutions for Microsoft Azure:

Software Developers

Cloud Solution Architects

Azure Developers

DevOps Engineers

Technical Team Leads

Application Engineers

IT Professionals aiming to build, manage, and deploy Azure applications

Professionals seeking Azure Developer Associate certification

Experienced programmers transitioning to Azure cloud development

LEARNING OBJECTIVES

What You Will Learn

- Configure and scale Azure App Service web apps and deployment slots
- Develop Azure Functions for task processing logic
- Implement solutions using Azure Blob storage lifecycle management
- Develop solutions with Azure Cosmos DB
- Implement containerized solutions using Azure Container Registry
- Implement authentication using the Microsoft identity platform and MSAL
- Implement secure cloud solutions with Key Vault and managed identities
- Develop event-based and message-based solutions using Azure services

COURSE SYLLABUS

12 Modules, 28 Topics

01

Lab

Implement Azure App Service Web Apps

TOPICS

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

02

Lab

Implement Azure Functions

TOPICS

Explore Azure Functions · Develop Azure Functions

03

Lab

Develop Solutions That Use Blob Storage

TOPICS

Explore Azure Blob storage · Manage the Azure Blob storage lifecycle · Work with Azure Blob storage

04

Lab

Develop Solutions That Use Azure Cosmos DB

TOPICS

Explore Azure Cosmos DB · Work with Azure Cosmos DB

05

Lab

Implement Containerized Solutions

TOPICS

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

06

Lab

Implement User Authentication and Authorization

TOPICS

- Explore the Microsoft identity platform
- Implement authentication by using the Microsoft Authentication Library
- Implement shared access signatures
- Explore Microsoft Graph

07

Lab

Implement Secure Cloud Solutions

TOPICS

Implement Azure Key Vault · Implement managed identities · Implement Azure App Configuration

08

Lab

Implement API Management

TOPICS

Explore API Management

09

Lab

Develop Event Based Solutions

TOPICS

Explore Azure Event Grid · Explore Azure Event Hubs

10

Lab

Develop Message Based Solutions

TOPICS

Discover Azure message queues

11

Lab

Troubleshoot Solutions by Using Application Insights

TOPICS

Monitor app performance

12

Lab

Implement Caching for Solutions

TOPICS

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

HANDS-ON LABS

Practise What You Learn

#	MODULE	ACTIVITY
01	Implement Azure App Service Web Apps	Lab 01: Build a web application on Azure platform as a service offerings
02	Implement Azure Functions	Lab 02: Implement task processing logic by using Azure Functions
03	Develop Solutions That Use Blob Storage	Lab 03: Retrieve Azure Storage resources and metadata by using the Azure Storage SDK for .NET

#	MODULE	ACTIVITY
04	Develop Solutions That Use Azure Cosmos DB	Lab 04: Construct a polyglot data solution
05	Implement Containerized Solutions	Lab 05: Deploy compute workloads by using images and containers
06	Implement User Authentication and Authorization	Lab 06: Authenticate by using OpenID Connect, MSAL, and .NET SDKs
07	Implement Secure Cloud Solutions	Lab 07: Access resource secrets more securely across services
08	Implement API Management	Lab 09: Exercise: Route custom events to web endpoint by using Azure CLI
09	Develop Event Based Solutions	Lab 09: Publish and subscribe to Event Grid events
10	Develop Message Based Solutions	Lab 10: Asynchronously process messages by using Azure Service Bus Queues
11	Troubleshoot Solutions by Using Application Insights	Lab 11: Monitor services that are deployed to Azure
12	Implement Caching for Solutions	Lab 12: Enhance a web application by using the Azure Content Delivery Network

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

Visit koenig-solutions.com

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