

Microsoft Azure is a highly embraced cloud offering a range of products and services. Azure has enabled businesses to scale up their presence, performance, and profitability with subscription based infrastructure, platform and services. With stringent security for data protection, Azure is a highly available, scalable, and robust platform for deploying and...



# Overview

Microsoft Azure is one of the leading cloud services and one of the most sought out skills for IT personnel. With subscription-based technology, platform, and services, Azure has enabled businesses to scale up their presence, results, and profitability. Azure is a highly accessible, scalable, and versatile platform for deploying and developing business solutions, with stringent data security. Azure has risen to the top of the cloud platform rankings thanks to its ability to host, monitor, and manage applications from anywhere at any time. To validate the efficacy of your skills, Microsoft launched AZ-204 Exam: Developing Solutions for Microsoft Azure. As per Microsoft, the exam is designed to test your knowledge on designing, building, testing, and maintaining cloud applications and services on Microsoft Azure. It is a very lucrative certification which can help a candidate trying for new jobs and promotions.

#### Developing Solutions for Microsoft Azure Highlights

- In-depth understanding of designing, building, testing, and maintaining cloud applications and services on Microsoft Azure
- Learning the implementation of laaS solutions, Azure functions, user authentication and authorization, secure cloud solutions, and API management
- Exposure to creation of web apps
- Understanding the development of solutions using Cosmos DB storage and blob storage
- Gaining knowledge of development of event-based solutions and message based solutions
- Experiencing to integrate caching and content delivery within solutions
- Learning to instrument solutions to support monitoring and logging



# Target Audience

The Developing Solutions for Microsoft Azure Certification is intended for people, who want to:

- Gain understanding of Azure Solutions like compute and storage
- Learn to monitor, troubleshoot, and optimize solutions
- Become Azure Developers
- Work with Cloud Solution Architects, Cloud DBAs, Cloud Administrators, and clients to implement solutions
- Participate in all the phases of cloud development
- IT professionals preparing for AZ-204 exam

# Pre-Requisite

This course will provide you an in-depth knowledge of AZ-204. It is mandatory that you have:

- Proficiency in programming using a high-level programming language supported by Azure
- 1-2 years of experience in cloud solution creation and Microsoft Azure
- Skills of designing, building, testing, and maintaining cloud applications
- Knowledge of designing, building, testing, and maintaining services on Microsoft Azure





### **Exam Information**

Certification Name	Developing Solutions for Microsoft Azure Exam AZ-204
Test Format	MCQ and Multi-Response
Number of Questions	40 to 60
Duration	150 Minutes
Passing Score	70%
Exam Languages	English, Japanese, Chinese (Simplified), and Korean

# Why Infosec Train?



Certified & Experienced Instructor



Flexible Schedule



Access to the recorded sessions



Post Training Support



Tailor Made Training



4 hrs/day in Weekend/ Weekday



## **Course Content**

### 1. Develop Azure compute solutions (25-30%)

#### 1.1 Implement IaaS solutions

- Provision virtual machines (VMs)
- Configure, validate, and deploy ARM templates
- Configure container images for solutions
- Publish an image to the Azure Container Registry
- Run containers by using Azure Container Instance

#### 1.2 Create Azure App Service Web Apps

- Create an Azure App Service Web App
- Enable diagnostics logging
- Deploy code to a web app
- Configure web app settings including SSL, API settings, and connection strings
- Implement autoscaling rules including scheduled autoscaling and aut scaling by operational or system metric

#### 1.3 Implement Azure functions

- Create and deploy Azure Functions apps
- Implement input and output bindings for a function
- Implement function triggers by using data operations, timers, and webhooks
- Implement Azure Durable Functions
- Implement custom handlers

## 2. Develop for Azure storage (15-20%)

- 2.1 Develop solutions that use Cosmos DB storage
  - Select the appropriate API and SDK for a solution
  - Implement partitioning schemes and partition keys
  - Perform operations on data and Cosmos DB containers
  - Set the appropriate consistency level for operations
  - · Manage change feed notifications
- 2.2 Develop solutions that use blob storage
  - Move items in Blob storage between storage accounts or containers
  - Set and retrieve properties and metadata
  - Perform operations on data by using the appropriate SDK
  - Implement storage policies, and data archiving and retention

## 3. Implement Azure security (20-25%)

- 3.1 Implement user authentication and authorization
  - Authenticate and authorize users by using the Microsoft Identity platform
  - Authenticate and authorize users and apps by using Azure Active Directory
  - Create and implement shared access signatures
- 3.2 Implement secure cloud solutions
  - Secure app configuration data by using App Configuration Azure Key Vault
  - Develop code that uses keys, secrets, and certificates stored in Azure Key
    Vault
  - Implement solutions that interact with Microsoft Graph

# Monitor, troubleshoot, and optimize Azure solutions (15-20%)

- 4.1 Integrate caching and content delivery within solutions
  - Configure cache and expiration policies
  - Configure cache and expiration policies for Azure Redis Cache
  - Implement secure and optimized application cache patterns including data sizing, connections, encryption, and expiration
- 4.2 Instrument solutions to support monitoring and logging
  - Configure an app or service to use Application Insights
  - Analyze and troubleshoot solutions by using Azure Monitor
  - Implement Application Insights web tests and alerts

# Connect to and consume Azure services and third-party services (15- 20%)

- 5.1 Implement API Management
  - Create an APIM instance
  - Configure authentication for APIs
  - Define policies for APIs
- 5.2 Develop event-based solutions
  - Implement solutions that use Azure Event Grid
  - Implement solutions that use Azure Notification Hubs
  - Implement solutions that use Azure Event Hub
  - Import OpenAPI definitions
- 5.3 Develop message-based solutions
  - Implement solutions that use Azure Service Bus
  - Implement solutions that use Azure Queue Storage queues



www.infosectrain.com | sales@infosectrain.com