SONDA. TRAINING

AZ-201: Microsoft Azure Developer Advanced Solutions

Silver
Microsoft Partner
Cloud Platform
■■ Microsoft

32 HORAS

AUDIENCE

These courses are for experienced programmers who want to develop and host solutions in Azure. Learners should have some experience with Azure and must be able to program in at least one Azure-supported language. These course focus on C#, Node.js, Azure CLI, Azure PowerShell, and JavaScript.

AZ-201T01-A: Develop for an Azure Cloud Model

INTRODUCTION

This course is part of a series of four courses to help you prepare for Microsoft's Azure Developer certification exam AZ-201: Develop Advanced Microsoft Azure Cloud Solutions. These courses are designed for developers who already know how to code in at least one of the Azure-supported languages.

The coursework covers how to ensure you solution meets performance expectations in Azure. It covers asynchronous processing, autoscaling, long-running tasks, and distributed transactions. Additionally, you'll learn how to leverage Azure Search for textual content, and how to implement instrumentation and logging in your development solution.

AT COURSE COMPLETION

After completing this course, students will be able to:

- Learn to develop for asynchronous processing and how to implement the appropriate asynchronous compute model.
- Implement autoscaling in your solution and implement code that addresses transient state.
- Discover how to implement large-scale, parallel and high-performance apps by using batches.
- Learn to implement, and manage, distributed transactions.
- Configure instrumentation in an app or service by using Application Insights and other tools.

COURSE OUTLINE

Module 1: Develop for asynchronous processing

- Implement parallelism multithreading and processing
- Implement Azure Functions and Azure Logic Apps
- Implement interfaces for storage or data access
- Implement appropriate asynchronous computing models

Module 2: Develop for autoscaling

- Implement autoscaling rules and patterns
- Implement code that addresses singleton application instances
- Implement code that addresses a transient state

Module 3: Develop long-running tasks

- Implement large scale parallel and high-performance apps by using batches
- Implement resilient apps by using queues
- Implement code to address aplication events by using webhooks
- Address continuous processing tasks by using Azure WebJobs

Module 4: Implement distributed transactions

- Identify tools to implement distributed transactions
- Manage the transaction scope
- Manage transactions across multiple databases and servers

Module 5: Enable the search of textual content

- Create an Azure Search index
- Import searchable data
- Query the Azure Search index by using code

Module 6: Instrument an app or service and implement logging

- Configure instrumentation in an app or service
- Configure the logging service

AZ-201T02-A: Implement Azure Development Integration Solutions

INTRODUCTION

This course is part of a series of four courses to help you prepare for Microsoft's Azure Developer certification exam AZ-201: Develop Advanced Microsoft Azure Cloud Solutions. These courses are designed for developers who already know how to code in at least one of the Azure-supported languages.

The coursework covers how to integrate and manage APIs by using the API Management service, configure a message-based integration architecture, and develop an application message model.

AT COURSE COMPLETION

After completing this course, students will be able to:

- Manage APIs by using API Management (APIM)
- Create an APIM instance, configure authentication for APIs, create an API gateway, and define policies for APIs
- Configure a message-based integration architecture by using the services included in Azure.
- Configure an app or service to send email
- Develop an application message model including message schema and message exchange.
- Create an event model, topics, and subscriptions

COURSE OUTLINE

Module 1: Manage APIs by using API Management

- Analyze recommendations in Security Center
- Create an API Management instance
- Configure authentication for APIs
- Create an API gateway
- Define policies for APIs

Module 2: Configure a message-based integration architecture

- Configure an app or service to send emails
- Configure an event publish and subscribe model
- Configure the Azure Relay service
- Create and configure a notification hub
- Create and configure an evnt hub
- Create and configure a service bus
- Configure an app or service with Microsoft Graph

Module 3: Develop an application message model

- Create an event model
- Create topics and subscriptions

AZ-201T03-A: Develop Azure Cognitive Services, Bot, and IoT Solutions

INTRODUCTION

This course is part of a series of four courses to help you prepare for Microsoft's Azure Developer certification exam AZ-201: Develop Advanced Microsoft Azure Cloud Solutions. These courses are designed for developers who already know how to code in at least one of the Azure-supported languages.

The coursework covers how to integrate Azure Cognitive Services, like Computer Vision, QnA Maker, and natural language processing in your solution. You'll also learn how to create and manage bots using the Bot Framework and Azure portal. The course also covers leveraging Azure Time Series Insights, Stream Analytics and the IoT Hub for your IoT solution.

AT COURSE COMPLETION

After completing this course, students will be able to:

- Learn to develop solutions using Computer Vision.
- Use speech services and natural language processing in your app.
- Create and manage dictionaries for FAQ generation by using QnA maker.
- Leverage Bing Search in your application.
- Create and register simple bot using the Bot Framework, and manage a bot using the Azure Portal.
- Configure Azure Time Series Insights for your IoT solution.
- Configure the Stream Analytics Service for inputs and outputs for your IoT device.
- Register your device with the IoT Hub Device Provisioning Service.

COURSE OUTLINE

Module 1: Develop Azure Cognitive Services solutions

- Cognitive Services overview
- Develop solutions using Computer Vision
- Develop solutins using Bing Web Search
- Develop solutions using Custom Speech Service
- Develop solutions using QnA Maker

Module 2: Create and intergrate bots

- Azure Bot Service overview
- Create a bot using the Bot Builder SDK for .NET
- Using Language Understanding in your bot
- Register a bot with Bot Service
- Managing a bot using the Azure Portal

Module 3: Create and implement IoT solutions

- Working with the Azure IoT Hub
- Working with Azure Time Series Insights
- Working with Azure Stream Analytics