

Microsoft Azure Developer Advanced Solutions (beta)

AZ201T - Version: 1

 3 days Course

Description:

This 3-days course is comprised of 3 separate 1- day courses. This course will help you prepare to the Microsoft AZ-201 exam. You can review the daily syllabuses in the links below

Day 1: Develop for an Azure Cloud Model

<http://scc.sela.co.il/Syl/Syllabus/Info?courseCode=AZ201T01&branchName=165>

Day 2: Implement Azure Development Integration Solutions

<http://scc.sela.co.il/Syl/Syllabus/Info?courseCode=AZ201T02&branchName=165>

Day 3: Develop Azure Cognitive Services, Bot, and IoT Solutions

<http://scc.sela.co.il/Syl/Syllabus/Info?courseCode=AZ201T03&branchName=165>

Intended 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.

Prerequisites:

Azure Developers who design and build cloud solutions such as applications and services. They participate in all phases of development, from solution design, to development and deployment, to testing and maintenance. They partner with cloud

solution architects, cloud DBAs, cloud administrators, and clients to implement the solution.

Objectives:

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.

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

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.

Topics:

Day 1

- 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 application 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

Day 2

- 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 event 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

Day 3

- Module 1: Develop Azure Cognitive Services solutions
 - Cognitive Services overview
 - Develop solutions using Computer Vision
 - Develop solutions using Bing Web Search
 - Develop solutions using Custom Speech Service
 - Develop solutions using QnA Maker
- Module 2: Create and integrate 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