



AI100T01A - Version: 1  
01 May 2021

# Designing and Implementing an Azure AI Solution



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 **3 days Course**

## Description:

Gain the necessary knowledge for designing Azure AI solution by building a customer support chat Bot using artificial intelligence from the Microsoft Azure platform including language understanding and pre-built AI functionality in the Azure Cognitive Services.

## Intended audience:

This course is aimed at Cloud Solution Architects, Azure artificial intelligence designers, and AI developers.

## Prerequisites:

Azure Fundamentals  
Understanding of Azure storage technologies  
C# Knowledge

## Objectives:

learn about the available Cognitive Services on Microsoft Azure and their role in architecting AI solutions.  
learn about the Microsoft Bot Framework and Bot Services.  
learn about the QnA Maker and how to integrate Bots and QnA Maker to build up a useful knowledge base for user interactions.  
learn about Language Understanding with Intents and Utterances (LUIS) and how to create intents and utterances to support a natural language processing solution.

learn about integrating LUIS with a Bot to better understand the users' intentions when interacting with the Bot.

learn about integrating Bots and Agents with Azure Cognitive Services for advanced features such as sentiment analysis, image and text analysis, and OCR and object detection.

## Topics:

### Module 1: Introducing Azure Cognitive Services

- Overview of Azure Cognitive Services
- Creating a Cognitive Service on the Azure Portal
- Access and Test a Cognitive Service

### Module 2: Creating Bots

- Introducing the Bot Service
- Creating a Basic Chat Bot
- Testing with the Bot Emulator

### Module 3: Enhancing Bots with QnA Maker

- Introducing QnA Maker
- Implement a Knowledge Base with QnA Maker
- Integrate QnA with a Bot

### Module 4: Learn How to Create Language Understanding Functionality with LUIS

- Introducing Language Understanding
- Create a new LUIS Service
- Build LUIS

### Module 5: Enhancing Your Bots with LUIS

- Overview of language understanding for AI applications
- Integrate LUIS and Bot to create an AI-based solution

## Module 6: Integrate Cognitive Services with Bots and Agents

- Understand Cognitive Services for Bot Interactions
- Perform Sentiment Analysis for your Bot with Text Analytics
- Detect Language in a Bot with the Language Cognitive Services
- Integrate Computer Vision with Bots