

AI-102T00-Designing and Implementing a Microsoft Azure AI Solution

Course Duration: 4 Days

Class times: 9am-4pm

Course Level: Intermediate

Language: English

Mode of Training: Virtually Instructor-Led

Prerequisites

Job Role: AI Engineer

Related Exam: AI-102

Audience Profile: Software engineers concerned with building, managing and deploying AI solutions that leverage Azure Cognitive Services, Azure Cognitive Search, and Microsoft Bot Framework. They are familiar with C# or Python and have knowledge on using REST-based APIs to build computer vision, language analysis, knowledge mining, intelligent search, and conversational AI solutions on Azure.

Course Outline

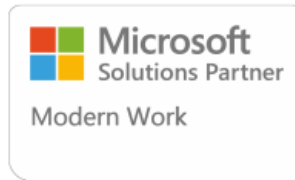
Module 1: Prepare to develop AI solutions on Azure

As an aspiring Azure AI Engineer, you should understand core concepts and principles of AI development, and the capabilities of Azure services used in AI solutions.

Learning objectives

After completing this module, you will be able to:

- Define artificial intelligence
- Understand AI-related terms
- Understand considerations for AI Engineers
- Understand considerations for responsible AI



- Understand capabilities of Azure Machine Learning
- Understand capabilities of Azure Cognitive Services
- Understand capabilities of the Azure Bot Service
- Understand capabilities of Azure Cognitive Search

Module 2: Create and consume Cognitive Services

Azure Cognitive Services enable developers to easily add AI capabilities into their applications. Learn how to create and consume these services.

Learning objectives

- After completing this module, you will be able to:
- Provision Cognitive Services resources in an Azure subscription.
- Identify endpoints, keys, and locations required to consume a Cognitive Services resource.
- Use a REST API to consume a cognitive service.
- Use an SDK to consume a cognitive service.

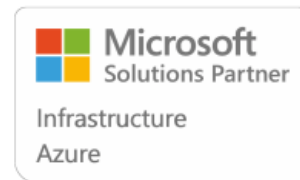
Module 3: Secure Cognitive Services

Securing Cognitive Services can help prevent data loss and privacy violations for user data that may be a part of the solution.

Learning objectives

After completing this module, you will know how to:

- Consider authentication for Cognitive Services
- Manage network security for Cognitive Services



Module 4: Monitor Cognitive Services

Azure Cognitive Services enable you to integrate artificial intelligence into your applications and services. It's important to be able to monitor Cognitive Services in order to track utilization, determine trends, and detect and troubleshoot issues.

Learning objectives

After completing this module, you will be able to:

- Monitor Cognitive Services costs
- Create alerts
- View metrics
- Manage diagnostic logging

Module 5: Deploy cognitive services in containers

Learn about Container support in Cognitive Services allowing the use of APIs available in Azure and enable flexibility in where to deploy and host the services with Docker containers.

Learning objectives

After completing this module, learners will be able to:

- Create Containers for Reuse
- Deploy to a Container
- Secure a Container
- Consume Cognitive Services from a Container