

Designing and Implementing an Azure AI Solution

Duration: 4 Days **Course Code: M-AI102** **Delivery Method: Virtual Learning**

Overview:

Exclusive - Learn to build AI infused applications that leverage Azure AI Services, Azure AI Search, and Azure OpenAI. AI-102 Designing and Implementing an Azure AI Solution is intended for software developers wanting to build AI infused applications that leverage Azure AI Services, Azure AI Search, and Azure OpenAI. The course will use C# or Python as the programming language.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

Software engineers concerned with building, managing and deploying AI solutions that leverage Azure AI Services, Azure AI Search, and Azure OpenAI. 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 generative AI solutions on Azure.

Objectives:

- Students will learn to:
- Get started with Azure AI Services
- Create computer vision solutions with Azure AI Vision
- Develop natural language processing solutions with Azure AI Services
- Implement knowledge mining with Azure AI Search
- Develop solutions with Azure AI Document Intelligence
- Develop Generative AI solutions with Azure OpenAI Service

Prerequisites:

Before starting this learning path, you should already have:

- Familiarity with Azure and the Azure portal.
- Experience programming with C# or Python. If you have no previous programming experience, we recommend you complete the Take your first steps with C# or Take your first steps with Python learning path before starting this one.
- M-AI900 - Microsoft Azure AI Fundamentals
- M-AZ900 - Microsoft Azure Fundamentals

Testing and Certification

Microsoft Certified: Azure AI Engineer Associate

Content:

Module 1: Get started with Azure AI Services

- Prepare to develop AI solutions on Azure
- Create and consume Azure AI services
- Secure Azure AI services
- Monitor Azure AI services
- Deploy Azure AI services in containers

Module 2: Create computer vision solutions with Azure AI Vision

- Analyze images
- Image classification with custom Azure AI Vision models
- Detect, analyze, and recognize faces
- Read Text in images and documents with the Azure AI Vision Service
- Analyze video

Module 3: Develop natural language processing solutions with Azure AI Services

- Analyze text with Azure AI Language
- Create question answering solutions with Azure AI Language
- Build a conversational language understanding model
- Create a custom text classification solution
- Custom named entity recognition
- Translate text with Azure AI Translator service
- Create speech-enabled apps with Azure AI services
- Translate speech with the Azure AI Speech service

Module 4 : Implement knowledge mining with Azure AI Search

- Create an Azure AI Search solution
- Create a custom skill for Azure AI Search
- Create a knowledge store with Azure AI Search
- Enrich your data with Azure AI Language
- Implement advanced search features in Azure AI Search
- Build an Azure Machine Learning custom skill for Azure AI Search
- Search data outside the Azure platform in Azure AI Search using Azure Data Factory
- Maintain an Azure AI Search solution
- Perform search re-ranking with semantic ranking in Azure AI Search
- Perform vector search and retrieval in Azure AI Search

Module 5: Develop solutions with Azure AI Document Intelligence

- Plan an Azure AI Document Intelligence solution
- Use prebuilt Document intelligence models
- Extract data from forms with Azure Document intelligence
- Create a composed Document intelligence model
- Build a Document intelligence custom skill for Azure AI search

Module 6: Develop Generative AI solutions with Azure OpenAI Service

- Get started with Azure OpenAI Service
- Build natural language solutions with Azure OpenAI Service
- Apply prompt engineering with Azure OpenAI Service
- Generate code with Azure OpenAI Service
- Generate images with Azure OpenAI Service
- Implement Retrieval Augmented Generation (RAG) with Azure OpenAI Service
- Fundamentals of Responsible Generative AI

Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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