

KOENIG SOLUTIONS · COURSE OUTLINE

AI-102T00: Develop AI Solutions in Azure

Learn to build generative AI apps, AI agents, and vision, language and information extraction solutions using Azure AI Foundry.

5 Days

40 HOURS

5

MODULES

35

TOPICS

26

HANDS-ON LABS

COURSE OVERVIEW

AI-102: Develop AI solutions in Azure is intended for software developers wanting to build AI infused applications that leverage Azure AI Foundry and other Azure AI services. Topics in this course include developing generative AI apps, building AI agents, and solutions that implement computer vision and information extraction.

WHO THIS COURSE IS FOR

This course was designed for software engineers concerned with building, managing and deploying AI solutions that leverage Azure AI Foundry and other Azure AI services. They are familiar with C# or Python and have knowledge on using REST-based APIs and SDKs to build generative AI, computer vision, language analysis, and information extraction solutions on Azure.

LEARNING OBJECTIVES

- Develop generative AI apps with the Azure AI Foundry SDK
- Build RAG-based solutions using Azure AI Foundry with custom data
- Implement responsible generative AI safeguards in Azure AI Foundry
- Develop multi-agent solutions with Azure AI Foundry Agent Service
- Integrate custom tools and MCP tools into AI agents
- Build natural language solutions with Azure AI Language and Speech
- Develop computer vision solutions for images, faces and video
- Create knowledge mining solutions with Azure AI Search

5 Modules, 35 Topics

01

5 Labs

Develop Generative AI Apps in Azure

TOPICS

- Plan and prepare to develop AI solutions on Azure
- Choose and deploy models from the model catalog in Azure AI Foundry portal
- Develop an AI app with the Azure AI Foundry SDK
- Develop a RAG-based solution with your own data using Azure AI Foundry
- Fine-tune a language model with Azure AI Foundry
- Implement a responsible generative AI solution in Azure AI Foundry

02

5 Labs

Develop AI Agents on Azure

TOPICS

- Get started with AI agent development on Azure
- Develop an AI agent with Azure AI Foundry Agent Service
- Integrate custom tools into your agent
- Develop a multi-agent solution with Azure AI Foundry Agent Service
- Integrate MCP Tools with Azure AI Agents
- Develop an AI agent with Microsoft Agent Framework
- Orchestrate a multi-agent solution using the Microsoft Agent Framework

03

5 Labs

Develop Natural Language Solutions in Azure

TOPICS

- Analyze text with Azure AI Language
- Create question answering solutions with Azure AI Language
- Build a conversational language understanding model
- Create custom text classification solutions
- 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
- Develop an audio-enabled generative AI application
- Develop an Azure AI Voice Live agent

04

6 Labs

Develop Computer Vision Solutions in Azure

TOPICS

- Analyze images
- Read text in images
- Detect, analyze, and recognize faces
- Classify images
- Detect objects in images
- Analyze video
- Develop a vision-enabled generative AI application

05

5 Labs

Develop AI Information Extraction Solutions in Azure

TOPICS

- Create a multimodal analysis solution with Azure AI Content Understanding
- Create an Azure AI Content Understanding client application
- Use prebuilt Document intelligence models
- Extract data from forms with Azure Document intelligence
- Create a knowledge mining solution with Azure AI Search

HANDS-ON LABS

Practise What You Learn

#	MODULE	ACTIVITY
01	Develop Generative AI Apps in Azure	- Choose and deploy a language model - Create a generative AI chat app - Create a generative AI app that uses your own data - Apply content filters to prevent the output of harmful content - Evaluate generative AI model performance
02	Develop AI Agents on Azure	- Explore AI Agent development - Develop an AI agent - Develop a multi-agent solution with Azure AI Foundry - Connect AI Agents to a remote MCP server - Develop an Azure AI agent with the Semantic Kernel SDK
03	Develop Natural Language Solutions in Azure	- Analyze text - Create a question answering solution - Custom text classification - Recognize and synthesize speech - Develop an audio-enabled chat app

#	MODULE	ACTIVITY
04	Develop Computer Vision Solutions in Azure	- Analyze images - Read text in images - Detect and analyze faces - Classify images - Develop a vision-enabled chat app - Generate images with AI
05	Develop AI Information Extraction Solutions in Azure	- Extract information from multimodal content - Develop a Content Understanding client application - Analyze forms with prebuilt Azure AI Document Intelligence models - Analyze forms with custom Azure AI Document Intelligence models - Create a knowledge mining solution

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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