training code: AI-901 / ENG DL 1d / EN

Introduction to AI in Azure

This course introduces fundamental concepts related to artificial intelligence (AI), and the services in Microsoft Azure that can be used to create AI solutions.

Training recipients

The training is intended for:

- AI Engineers
- Data Analytics
- Data Engineers

Benefits

- Gain a general understanding of AI solutions and the Azure services for implementing and operating them.
- Foundation skills acquired include:
  - Characteristics of AI solutions
  - Understanding the fundamental principles of machine learning on Azure
  - Describe computer vision capabilities on Azure
  - Describe natural language processing (NLP) capabilities on Azure
  - Understand the features of conversational AI mechanisms on Azure

Training program

1.Introduction to AI concepts

- Generative AI and agents
- Text and natural language
- Speech
- Computer vision
- Information extraction
- Responsible AI

2.Introduction to generative AI and agents

- Large language models (LLMs)
- Prompts
- AI agents

3.Introduction to natural language processing concepts

- Tokenization
- Statistical text analysis.
- Semantic language models

4.Introduction to AI speech concepts

- Speech-enabled solutions
- Speech recognition
- Speech synthesis

5.Introduction to computer vision concepts

- Computer vision tasks and techniques
- Images and image processing
- Convolutional neural networks
- Vision transformers and multimodal models
- Image generation

6.Introduction to AI-powered information extraction concepts

- Overview of information extraction
- Optical character recognition (OCR)
- Field extraction and mapping

7.Get started with AI in Azure

- Understand Azure
- Developing AI apps on Azure
- Microsoft Foundry for AI
- Using Microsoft Foundry endpoints

8.Get started with generative AI and agents in Azure

- Generative AI models
- Using a generative AI model
- Creating an agent

9.Get started with text analysis in Azure

- Understand text analysis in Foundry
- Create a client application that analyzes text
- Use Azure Language with an agent

10.1Get started with speech in Azure
- Speech recognition
- Speech synthesis
- Creating a speech-capable agent

11.Get started with computer vision in Azure
- Multimodal models for image analysis
- Image generation models
- Video generation models

12.Get started with AI-powered information extraction in Azure
- Extract information from documents
- Extract information from audio and video

Expected preparation of the participant

This course is for aspiring technology professionals at the beginning of their career in AI solution development. Some knowledge of Python coding syntax and programming techniques is useful. Additionally, knowledge of core cloud concepts, including cloud storage, cloud compute, and cloud-based authentication and authorization is recommended.
To increase the comfort of work and training’s effectiveness we suggest using an additional monitor. The lack of additional monitor does not exclude participation in the training, however, it significantly influences the comfort of work during classes.
You can find information and requirements of participation in Distance Learning trainings at: https://www.altkomakademia.pl/en/how-it-works/about-courses/

Training Includes

- manual in electronic form available on the platform: https://learn.microsoft.com/pl-pl/training/
- access to Altkom Akademia's student portal

Training method:
- Lecture and product presentation (70%)
- Exercise (30%)

Major teaching tools include PowerPoint presentations, test-environment demonstrations, hands-on lab environments, and Microsoft Learn AI-901 resources

Duration

> 1 days / 7 hours

Language

- Training: English
- Materials: English