

Develop AI solutions in Azure

Develop AI Solutions in Azure is a training course that prepares participants to build advanced artificial intelligence solutions using the tools and services available on the Microsoft Azure platform. The course covers both the technical aspects and the practical approach to developing AI applications based on services such as Azure Cognitive Services, Azure Cognitive Search, Microsoft Bot Framework, and Azure AI Foundry.

Participants will learn how to implement solutions that leverage image, natural language, and speech processing, as well as AI agents. The training serves as an introduction for those planning to take the Microsoft Certified: Azure AI Engineer Associate (AI-102) exam and equips learners with the skills needed to work as AI engineers in modern, cloud-based projects.



Training recipients

The training is intended for IT professionals and developers who want to expand their skills in building intelligent solutions within the Azure cloud environment.

It is particularly recommended for:

- Developers and software engineers who want to design and deploy applications that leverage artificial intelligence in Azure.
- AI engineers and data developers responsible for creating services based on NLP, Computer Vision, generative AI, and knowledge search.
- Automation and chatbot specialists who want to build modern conversational solutions using Bot Framework and Azure AI Services.
- Companies and teams implementing AI solutions in cloud environments, aiming to take full advantage of the capabilities of the Microsoft Azure platform.
- Individuals preparing for the AI-102 certification exam, seeking to earn the Microsoft Certified: Azure AI Engineer Associate credential.



Benefits

- Designing AI applications in the Azure environment – learn how to build modern, intelligent solutions using Azure AI services and process automation tools.
- Implementing language and image processing services – discover how to develop solutions based on text, speech, and image analysis using tools such as Azure AI Language and Computer Vision.
- Building conversational agents and applications – gain hands-on experience creating advanced bots and AI agents with Microsoft Bot Framework and Azure AI Foundry.
- Developing generative AI applications – master techniques for working with language models, prompt flows, and generating both visual and textual content.
- Managing the AI solution lifecycle – acquire practical skills in training, fine-tuning, and evaluating model performance while ensuring compliance with Responsible AI principles.



Training program

1. Building Generative AI Applications with Azure AI Foundry (AI-3016)
 - Planning and preparing for building AI solutions on Azure
 - Exploring and deploying models from the model catalog in the Azure AI Foundry portal
 - Getting started with prompt flow for building language model applications in Azure AI Foundry
 - Building a RAG-based agent with your own data using Azure AI Foundry
 - Fine-tuning a language model with Azure AI Foundry
 - Evaluating the performance of a generative AI application with Azure AI Foundry
 - Responsible generative AI
2. Building Artificial Intelligence Agents on the Azure Platform (AI-3026)
 - Planning and preparing for building AI agent solutions on Azure
 - Deploying an AI agent using Azure AI Foundry Agent Service
 - Integrating custom tools into your agent
 - Developing multi-agent solutions with Azure AI Foundry Agent Service
 - Integrating MCP tools with Azure AI service agents
 - Developing an AI agent using Semantic Kernel
3. Developing Natural Language Solutions on the Azure Platform (AI-3003)
 - Analyzing text with Azure AI Language
 - Building question-answering solutions using Azure AI
 - Creating a conversational language understanding model
 - Developing a custom text classification solution
 - Custom named entity recognition
 - Translating text with Azure AI Translator
 - Building speech-enabled applications using Azure AI services

- Translating speech with the Azure AI Speech Recognition service
 - Developing generative AI applications with audio support
4. Developing Image Processing Solutions on the Azure Platform (AI-3004)
- Analyzing images
 - Reading text in images
 - Detecting, analyzing, and recognizing faces
 - Classifying images
 - Detecting objects in images
 - Video analysis
 - Generative AI applications with visual features
 - Generating images with AI
5. Developing AI Information Extraction Solutions on the Azure Platform (AI-3002)
- Building multimodal analysis solutions with Azure AI Content Understanding
 - Creating a client application for Azure AI Content Understanding
 - Using prebuilt document analysis models
 - Extracting data from forms with Azure Document Analysis
 - Building knowledge search solutions with Azure AI Search



Expected preparation of the participant

Knowledge Azure platform and an ability to navigate through Azure portal

Knowledge of C# or Python language.

An ability to use REST API and JSON

An ability to use English language materials.

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.



Training Includes

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



Language

- Training: English
- Materials: English

Examination method

Become Microsoft Certified: https://arch-center.azureedge.net/Credentials/Certification-Poster_en-us.pdf

Egzamin w formie **on-line**. Zapis na stronie <https://home.pearsonvue.com/Clients/Microsoft.aspx>

Duration

5 days / 35 hours

Examination description

Certification Name: Microsoft Certified: Azure AI Engineer Associate

Exam URL: <https://docs.microsoft.com/en-us/learn/certifications/exams/AI-102>

Become Microsoft Certified: https://arch-center.azureedge.net/Credentials/Certification-Poster_en-us.pdf