

# Develop Natural Language Processing Solutions with Azure AI Services – Intensive Training («AI3X3»)

Natural language processing (NLP) solutions use language models to interpret the semantic meaning of written or spoken language.

**Duration:** 1 day

**Price:** 900.–

**Course documents:** Official Microsoft Courseware on Microsoft Learn

## Content

### 1 Analyze text with Azure AI Language

The Azure AI Language service enables you to create intelligent apps and services that extract semantic information from text.

### 2 Create question answering solutions with Azure AI Language

The question answering capability of the Azure AI Language service makes it easy to build applications in which users ask questions using natural language and receive appropriate answers.

### 3 Build a conversational language understanding model

The Azure AI Language conversational language understanding service (CLU) enables you to train a model that apps can use to extract meaning from natural language.

### 4 Create a custom text classification solution

The Azure AI Language service enables processing of natural language to use in your own app. Learn how to build a custom text classification project.

### 5 Custom named entity recognition

Build a custom entity recognition solution to extract entities from unstructured documents.

### 6 Translate text with Azure AI Translator service

The Translator service enables you to create intelligent apps and services that can translate text between languages.

### 7 Create speech-enabled apps with Azure AI services

The Azure AI Speech service enables you to build speech-enabled applications. This module focuses on using the speech-to-text and text to speech APIs, which enable you to create apps that are capable of speech recognition and speech synthesis.

### 8 Translate speech with Azure AI Speech service

Translation of speech builds on speech recognition by recognizing and transcribing spoken input in a specified language, and returning translations of the transcription in one or more other languages.

## Key Learnings

- Implementing multi-turn conversation and active learning
- Creating a question answering bot to interact with using natural language
- Provisioning Azure resources for Azure AI Language resource
- Defining intents, utterances, and entities
- Using patterns to differentiate similar utterances and pre-built entity components
- Training, testing, publishing, and reviewing an Azure AI Language model
- Understanding types of classification projects
- Building a custom text classification project
- Tagging data, training, and deploying a model
- Submitting classification tasks from your own app
- Provisioning a Translator resource
- Understanding language detection, translation, and transliteration
- Specifying translation options
- Defining custom translations
- Provisioning an Azure resource for the Azure AI Speech service
- Using the Azure AI Speech to text API to implement speech recognition
- Using the Text to speech API to implement speech synthesis
- Configuring audio format and voices
- Using Speech Synthesis Markup Language (SSML)
- Provisioning Azure resources for speech translation
- Generating text translation from speech
- Synthesizing spoken translations

## Target audience

The audience for this course includes AI engineers and developers.

## Additional information

This workshop is integrated into the course [AI-102: Designing and Implementing a Microsoft Azure AI Solution](#).

## Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-microsoft-technology/microsoft-azure/microsoft-certified-azure-ai-engineer-associate/course-develop-natural-language-processing-solutions-with-azure-ai-services-intensive-training](http://www.digicomp.ch/courses-microsoft-technology/microsoft-azure/microsoft-certified-azure-ai-engineer-associate/course-develop-natural-language-processing-solutions-with-azure-ai-services-intensive-training)