



# MFE-IT

Reference: YAS-AI3003

## Azure AI-3003 Training Course

Developing Natural Language Processing (NLP) Solutions

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*Duration: 1 Day | Hours: 6 h*

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*Remote · Sessions guaranteed from 1 registrant · 60% hands-on practice*

## DESCRIPTION

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This Azure AI training enables you to design applications capable of understanding and exploiting human language. You will learn to analyse texts, detect entities, classify content and automate the processing of textual data using Azure AI services.

The programme also covers the development of conversational experiences and integration via API and SDK. Practical workshops will allow you to build a complete NLP solution tailored to business needs and deploy intelligent applications based on natural language analysis.

## LEARNING OBJECTIVES

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By the end of this training course, participants will be able to:

- Understand the fundamentals of natural language processing (NLP) and its use cases
- Design and deploy solutions based on Azure AI Language to analyse textual data
- Implement features such as sentiment analysis, entity detection and text classification
- Create conversational models capable of interacting with users
- Integrate NLP services into cloud applications via REST API and SDK
- Apply best practices in responsible AI, security and data governance

## PREREQUISITES

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- Programming experience (Python or C# recommended)
- Understanding of fundamental cloud concepts and the Azure portal
- General knowledge of artificial intelligence or machine learning is a plus

*Because each participant is unique, a personalised interview is systematically organised in advance with our expert to design a training programme perfectly aligned with their objectives, level and professional challenges.*

## TARGET AUDIENCE

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- Developers, AI engineers and data engineers wishing to integrate NLP into their applications
- Cloud architects and technical consultants working on AI solutions
- IT professionals automating the processing of textual or conversational data

## DETAILED PROGRAMME

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The training alternates between theoretical input and hands-on practice (approximately 60% of the time). Modules are built around practical exercises based on real-world business use cases.

### Module 1 – Introduction to NLP with Azure AI

- Overview of NLP capabilities in Azure AI services
- NLP use cases in enterprise applications
- Key concepts: tokenisation, lemmatisation, semantic analysis
- Setting up the Azure environment for NLP

### Module 2 – Text Analysis with Azure AI Language

- Sentiment analysis, language detection and key phrase extraction
- Named Entity Recognition (NER) and PII detection
- Automatic summarisation and abstractive vs extractive approaches

### Module 3 – Custom Text Classification

- Creating classification projects in Language Studio
- Training and evaluating custom models
- Deploying classification solutions and optimising performance

### Module 4 – Advanced Information Extraction

- Extracting custom entities (Custom NER)
- Structuring unstructured data
- Advanced labelling and annotation techniques

### Module 5 – Developing Conversational Applications

- Introduction to Azure conversational solutions
- Designing question-and-answer systems with Custom QnA / CLU
- Implementing multi-turn dialogue management

### Module 6 – Integration via API and SDK

- Using Azure AI REST APIs
- Development with the SDK
- Managing authentication, quotas, monitoring and logging

## Module 7 – Responsible AI, Governance and Practical Workshops

- Transparency, bias and content moderation in NLP models
- Data protection and compliance
- Hands-on workshop: implementing a complete NLP solution end to end

## TEACHING METHODS

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### Format and Delivery

The training is delivered remotely via an interactive virtual classroom. It can also be delivered on-site, with content customised to match the needs of your professional project. The theory/practice split is approximately 40%/60%.

### MFE-IT Ultra-Personalised Format

Each session accommodates between 1 and 3 participants, ensuring highly individualised support. A preliminary interview allows us to tailor the content to each participant's profile. Inter-company sessions are guaranteed from just 1 registrant (except in cases of force majeure).

### Skills Assessment

Throughout the training, the trainer assesses participant progress through multiple-choice questions, role-playing exercises and hands-on work. At the end, a certificate of achievement is issued to each participant.

### Post-Training Support

For one month following the training, each participant can contact MFE-IT trainers with questions about implementing acquired knowledge. A response is provided by email or telephone within 48 working hours.

### Accessibility

MFE-IT is committed to welcoming people with disabilities. Contact: [contact@mfe-it.com](mailto:contact@mfe-it.com).

## PRACTICAL INFORMATION

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### Trainer Resources

- Structured demonstrations aligned with the detailed programme
- Exercise briefs and solutions throughout the training
- A ready-to-use technical environment for practical workshops
- Trainer validation of acquired knowledge at the end of each workshop
- Digital reference documents

## **Certification and Validation**

At the end of the training, a certificate is sent by email specifying the objectives, nature, duration and assessment results. A completion certificate can also be provided on request.

## **Benefits for Participants**

- Train from your workplace or home, with no travel required
- Benefit from an expert trainer-consultant on the subject
- Enjoy an ultra-personalised format (1 to 3 participants)
- Continue training even in the event of unforeseen circumstances

## **Benefits for the Organisation**

- Optimise the training budget by reducing travel and accommodation costs
- Offer quality training to all employees, regardless of location
- Reduce absence time linked to travel
- Support team upskilling in all contexts