



**MFE-IT**

Reference: YAS-AI3026

# Azure AI Agents AI-3026 Training Course

Design, Develop and Orchestrate Intelligent Agents

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*Duration: 2 Days | Hours: 12 h*

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

## DESCRIPTION

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This Azure AI Agents training teaches you to design, deploy and orchestrate agents capable of automating processes and enriching your applications. You will discover how to use Azure AI Foundry and Semantic Kernel to create scalable and interactive agents.

The programme covers the integration of custom tools, multi-agent architectures and intelligent workflow management. Practical workshops will allow you to build concrete solutions based on generative AI and develop modern applications based on high-performance AI agents.

## LEARNING OBJECTIVES

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

- Create, deploy and manage intelligent AI agents using Azure AI Foundry
- Integrate advanced AI capabilities via agents into scalable, customisable solutions
- Understand when to use AI agents and how to build them with Azure AI Agent Service and Semantic Kernel
- Design solutions automating complex workflows through contextual agents
- Extend agent capabilities by integrating custom tools and intelligent workflows

## PREREQUISITES

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- Familiarity with fundamental AI concepts and Azure services
- Understanding of programming concepts (APIs, data structures) and cloud computing
- Prior experience with Azure services or AI workloads is an asset

*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, data scientists and IT professionals wishing to create intelligent solutions on Azure
- Profiles with a basic understanding of programming and cloud, looking to develop interactive and scalable agents

## 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 AI Agents

- Understanding the role of AI agents as the next generation of intelligent applications
- Identifying use cases and automation scenarios
- Comparing agents with classic LLM applications and chatbots

### Module 2 – Getting Started with Agent Development

- Architecture overview of Azure AI Agent Service
- Choosing models and provisioning the development environment
- Designing the first agent prototype

### Module 3 – Developing an Agent with Azure AI Foundry

- Building your first agent on the Azure AI Foundry platform
- Implementing deployment and management models
- Integrating the agent with Azure AI Search for grounding

### Module 4 – Integrating Custom Tools

- Extending agent capabilities by adding specific tools (functions, code interpreter, file search)
- Designing solutions tailored to business needs
- Tool calling patterns and reliability

### Module 5 – Multi-Agent Solutions

- Decomposing complex tasks through collaborative agents
- Designing connected, intelligent architectures
- Coordination patterns: planner, executor, critic

### Module 6 – Semantic Kernel and Agent Frameworks

- Understanding the Semantic Kernel framework and its role
- Adding plugins and running agents via the SDK
- Comparison with other open-source agent frameworks

## Module 7 – Orchestration and Intelligent Workflows

- Orchestrating multi-agent solutions to execute coordinated tasks
- Building agent-driven workflows for intelligent applications
- Logging, evaluation and continuous improvement

## Module 8 – Security, Performance, Governance and Workshops

- Managing the deployment, performance and compliance of AI agents
- Authentication, content filters and audit
- Hands-on workshop: building a conversational agent, integrating tools and deploying a multi-agent solution

## 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