Course : Design advanced workflows and AI agents

Integrate AI models, automate workflows, and orchestrate AI agents with n8n

Practical course - 3d - 21h00 - Ref. N8B

Price : 2410 CHF E.T.

NEW

Participants will learn how to design n8n workflows that incorporate AI models, automate text and document processing, leverage multimodal capabilities, and orchestrate AI agents capable of using tools.

Teaching objectives

At the end of the training, the participant will be able to:

- Understanding the Principles of Integrating AI into n8n
- Configure and utilize different AI providers and models
- Building workflows that integrate language models and content processing
- Leverage capabilities for analyzing text, documents, and images
- Orchestrating Multiple Processing Steps in an AI Workflow
- Designing AI agents capable of using tools and data sources
- Test, secure, monitor, and optimize AI workflows

Intended audience

Developers, engineers, IT professionals, data engineers, architects, and technical professionals who want to use n8n to design advanced automations that incorporate AI.

Prerequisites

Be comfortable with programming concepts and data exchange between applications.line breakKnowledge of APIs, JSON, and JavaScript is recommended.

Course schedule

PARTICIPANTS

Developers, engineers, IT professionals, data engineers, architects, and technical professionals who want to use n8n to design advanced automations that incorporate AI.

PREREQUISITES

Be comfortable with programming concepts and data exchange between applications.line breakKnowledge of APIs, JSON, and JavaScript is recommended.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

1 Understanding the Basics of AI in n8n

- Understanding the Role of AI Models in Workflows
- Identify the main use cases for generative AI
- Explore the various suppliers and models available
- Evaluate models based on needs, performance, and costs
- Understanding the Challenges Related to Data and API Keys

Hands-on work

Set up your first AI service and integrate it into an n8n workflow

2 Integrating OpenAI and AI Models into n8n

- Set up a connection to OpenAI and other AI providers
- Understanding Model Parameters and Capabilities
- Creating Effective and Structured Prompts
- Analyzing and Organizing Model Responses
- Manage tokens and optimize costs
- Explore streaming for long-form content

Hands-on work

Build a workflow using an AI model to analyze and transform data.

3 Automating Intelligent Text Processing

- Analyze the content and identify important information
- Automatically summarize and extract information
- Classifying and Categorizing Content
- Generate and rephrase texts
- Adapt content to different formats and contexts

Hands-on work

Create a workflow that automates the analysis, extraction, and classification of content.

4 Leveraging Vision and Multimodal Data

- Understanding the Visual Capabilities of AI Models
- Analyze images and documents
- Extract text and information from documents
- Using OCR in an Automated Workflow
- Review and organize the results of a multimodal analysis

Hands-on work

Build a workflow for the automated analysis of a document or image.

5 Orchestrating Complex AI Workflows

- Chaining Multiple Templates and Processes in a Workflow
- Combining AI, Data, and Business Rules
- Using Conditions and Loops in Processes
- Manage dependencies and errors between steps
- Optimize performance and reduce latency
- Test and validate a workflow before it goes live

Hands-on work

Build a multi-step AI workflow that integrates multiple processing steps.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

6 Designing and Orchestrating AI Agents

- Understanding How an AI Agent Works
- Connect a model to tools and data sources
- Allow an agent to select and perform actions
- Organizing Instructions and Context
- Managing Interactions Between the Agent and Their Tools
- Guide the agent's actions through rules and validations

Hands-on work

Create an AI agent capable of using multiple tools in an n8n workflow.

7 Deploy, Secure, and Optimize AI Workflows

- Diagnose and fix runtime issues
- Protecting Sensitive Data and API Keys
- Manage Quotas and Rate Limits
- Optimize performance and reduce costs
- Document and maintain workflows

Hands-on work

Diagnose, secure, and optimize an AI workflow before deployment.

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