TECHNICAL LEARNING AND ASSESSMENT DOSSIER

Artificial Intelligence and Machine Learning – Building AI Agents and ML Applications (MLOps & Governance)

Price / certificate issuance
99,00 €
VAT excluded

Course code	Minimum duration	Final pass score	Dossier issue
AI_ML_AGENTS_LA	60 min	70%	28/11/2026

1. Course identity, purpose and scope

The course "Artificial Intelligence and Machine Learning – Building AI Agents and ML Applications (MLOps & Governance)" provides comprehensive training for designing, developing and managing AI and machine learning solutions with an advanced focus on intelligent agents. Participants will gain technical skills in using cutting-edge frameworks and technologies for fine-tuning large language models (LLMs), integrating ML pipelines, and implementing complex agentic systems. The curriculum covers best MLOps practices including data preparation, validation, deployment, monitoring with drift management, and retraining. Critical topics such as security, explainability, fairness and compliance with international standards like ISO/IEC 42001, 23894, and the EU AI Act regulation are deeply explored. Practical exercises and case studies, such as supply chain optimization using LLMs and Python systems, enable hands-on application of techniques ensuring performance and responsible governance. The course prepares professionals to build AI systems ready for production environments, addressing challenges of scalability, reliability, and compliance with privacy and security regulations.

This extended technical dossier describes the pathway as published in CIWZ Academy on the issue date. It consolidates purpose, references, learning architecture, module contents, assessment system, passing criteria and certificate conditions. It does not replace the official texts of the standards, laws, guidelines or schemes referenced.

2. Normative, regulatory and technical references

ISO/IEC 42001:2023 (AI Management System) + ISO/IEC 23894:2023 (AI risk management) + ISO/IEC 22989 (AI concepts and terminology) + ISO/IEC 23053 (framework for AI/ML) + Regulation (EU) 2024/1689 (AI Act) + GDPR (EU Reg. 2016/679) + NIST AI RMF 1.0 + best practices: data preparation, training/validation, deployment, MLOps (monitoring, drift, retraining), security controls, explainability, bias/fairness, AI agents (tool-use, orchestration, RAG) and model lifecycle management

References are used as the learning and assessment framework within the limits of published content and available sources. For professional application, the official and current versions of the referenced documents always prevail.

3. Learning architecture and assessment system

- minimum tracked time: 60 min
- active final-exam bank: 200 questions
- final exam: 30 questions selected from the bank
- passing threshold: 70%
- Direct access to the final assessment under the published rules for the exam-only pathway.
- Exam assembly from the active course bank and scoring against the published pass threshold.
- Recording of the result and, where applicable, request for the final certificate.

4. Official catalogue technical information

Learning Objectives

- Design and develop AI agents and integrated ML applications
- Apply advanced MLOps practices for production model management
- Ensure compliance with AI governance regulations and best practices

Skills Acquired

- Fine-tuning and deploying LLMs
- Implementing ML pipelines and agent orchestration
- Model monitoring, drift handling, retraining
- Security management, explainability, and fairness
- Understanding ISO/IEC 42001, 23894, 22989, 23053, AI Act, GDPR

Target Audience

- Data Scientists, ML Engineers, AI Developers
- IT professionals interested in advanced AI systems
- Researchers and managers responsible for AI projects

Prerequisites

- Basic knowledge of machine learning and Python programming
- Familiarity with language models and ML pipelines concepts

Program

- Introduction to AI agents and advanced ML
- Architectures and technologies for ML agents
- Fine-tuning and evaluation of LLMs
- MLOps: deployment, monitoring, retraining

- Security, bias, explainability, compliance
- Case studies on supply chain, medical assistants, KPI reporting

Teaching Methodology

- Theoretical lessons and seminars
- Practical exercises and case study analysis
- Discussions on regulations and best practices

Evaluation Methods

- Theoretical tests and practical case studies
- Passing threshold at 70% with formative assessments

Duration

60 minutes

Certification

Completion certificate available for additional fee

Expected Outcomes

- Ability to develop and manage AI agents in production
- Skills in model lifecycle management and regulatory compliance
- Critical analysis and responsible technical decision-making

7. Assessment system, final exam and passing criteria

- The final assessment consists of 30 questions selected from the active course bank. The platform applies an anti-repetition logic for new attempts when the bank size allows it.
- Final question-bank size detected at generation time: 200 active questions.
- Published passing threshold for the course: 70%.
- Questions are intended to assess not only recall but also interpretation, application, evidence selection, scenario assessment and quality of decision-making, depending on the subject matter.

8. Tracking, learning continuity and session integrity

- Path status, completed modules and recorded time are managed server-side when the course uses the Academy learning mode.
- The platform allows the pathway to resume from the recorded point and retains the results of required checks.
- Assessment sessions may be subject to the integrity and proctoring controls enabled by the platform and described in the applicable usage rules.
- Technical and integrity events support assessment and do not replace professional judgement where human review is required.

9. Certificate, use and limitations

The CIWZ certificate, where provided by the pathway and requested after passing, records the result achieved in the stated CIWZ pathway or assessment. It does not automatically replace personnel certification, professional registration, statutory licence, legal qualification or credentials issued by third-party bodies where such requirements are imposed by the applicable scheme.

10. Commercial and tax conditions

- Price / certificate issuance: 99,00 € VAT excluded.
- UAE VAT is applied to UAE customers according to billing data and the applicable tax rules.
- Any specific commercial terms, agreements or corporate orders override the public price only when formally accepted by Certificato IWZ FZCO.

11. Dossier document control

- Document automatically generated by CIWZ Academy from the course data published at the time of the request.
- Course code: AI_ML_AGENTS_LA
- Document language: EN

- Generation date: 28/11/2026
- For normative and professional application, the current official sources and any applicable procedures/schemes prevail.