

Certified Agentic AI Developer™ Interactive Live Training

OEM: Blockchain Council • Code: ILT-CAAD

COURSE DESCRIPTION

Master autonomous AI systems with the Certified Agentic AI Developer Interactive Live Training (ILT) program. This Agentic AI Developer Live Course is designed for professionals who want hands-on expertise in building, fine-tuning, and deploying intelligent, context-aware AI agents. Through instructor-led, real-time sessions, you will explore advanced agentic AI architectures, adaptive algorithms, multi-agent orchestration, and modern development frameworks. This Agentic AI Certification Live program emphasises experiential learning, collaborative exercises, and real-world case studies to help you design AI systems capable of autonomous decision-making and dynamic user interaction. The Autonomous AI Agent Training equips you with practical skills to automate workflows, optimise customer experiences, and architect scalable AI-driven applications. Enroll in the Certified Agentic AI Developer ILT today and position yourself at the forefront of intelligent automation and next-generation AI innovation.

AUDIENCE PROFILE

- Working Professionals — Who prefer structured, instructor-led learning with real-time Q&A.
- Career Changers — Looking for guided, hands-on training with expert mentorship.
- Team Leads & Managers — Who need deep understanding to lead technology initiatives.
- Entrepreneurs & Founders — Planning to build products or services and want expert guidance.
- Students & Fresh Graduates — Seeking a competitive edge with a globally recognized certification.
- Consultants & Advisors — Who need to quickly build expertise with structured training.

PREREQUISITES

- Basic understanding of technology concepts
- A computer with stable internet connection for live sessions
- Webcam and microphone recommended for interactive participation
- No prior specialized experience necessary — the program starts from foundations

COURSE OBJECTIVES

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

- AI Agents - Introduction
- Agentic AI Paradigm
- Agent Capabilities

- Automation and Workflow Optimization
- Frameworks
- Post Deployment
- AI Agents Security
- Ethical Design of AI Agents
- Technology Stack
- Use Cases

COURSE OUTLINE

Module 1: AI Agents - Introduction

- Definition of AI Agents
- Importance of AI Agents in Modern AI
- Real-World Applications
- How AI Agents Work
- Types of Environments for AI Agents
- Evolution of AI Agents

Module 2: Agentic AI Paradigm

- Introduction to the Agentic AI Paradigm
- Key Characteristics of Agentic AI
- Core Components of Agentic AI Systems
- Comparison with Other AI Paradigms
- Architectures and Frameworks in Agentic AI
- Challenges in Developing Agentic AI Systems
- Economic Impact

Module 3: Agent Capabilities

- Perception and Recognition Capability
- Decision-Making and Problem Solving Capability
- Learning and Adaptation Capability
- Action and Interaction Capability
- Multimodal Functionality in AI Agents
- Tools and Frameworks for AI Agents
- Data Processing Capabilities
- Retrieval-Augmented Generation (RAGs)
- Database Integration for AI Agents (Examples: Supabase, Firebase, MongoDB, and PostgreSQL)
- Advanced Agent Capabilities (Adaptive and Self-Learning Agents, Collaboration in Multi-Agent Systems (MAS), Long-Term Memory and Context Awareness)

Module 4: Automation and Workflow Optimization

- Introduction to AI Automation and Workflow Optimization
- Core Components of AI-Driven Workflow Optimization
- Types of Workflows Optimized by AI Agents and use case applications
- Automation Techniques Leveraged by AI Agents
- Tools and Platforms for AI Workflow Automation (e.g., Zapier, UiPath, Blue Prism, n8n, Langgraph, pydantic)
- Advanced Capabilities in AI Automation (Dynamic Task Scheduling and Context-Aware Automation, Proactive Agents, Adaptive Workflows)

Module 5: Frameworks

- Introduction
- HuggingFace
- Ollama+DeepSeekV3
- AutoGen
- LangChain
- CrewAI
- LangGraph
- Pydantic AI
- AutoGPT
- Comparison of frameworks

Module 6: Post Deployment

- Monitoring, Evaluation, and Debugging
- AgentBench
- AgentOps
- LangSmith
- Langfuse
- Logfire in Pydantic AI
- Metrics
- Monitoring Demo

Module 7: AI Agents Security

- Introduction to AI Agents Security
- Vulnerabilities & Mitigation
- Guardrails
- Tools

Module 8: Ethical Design of AI Agents

- Ethical Design of AI Agents
- Addressing Challenges

Module 9: Technology Stack

- Technology Stack for Building Agentic AI Systems & Architecture

Module 10: Use Cases

- Siemens AG
- Mayo Clinic
- JPMorgan Chase
- Amazon
- BP (British Petroleum)
- Pearson
- Netflix

Module 11: Step-by-Step Building AI Agents

- Introduction
- Step 1: Plan the Agent
- Step 2: Prototype the Agent
- Step 3: Set Up the Database
- Step 4: Move to Python
- Step 5: Create an Agent UI
- Step 6: Test Your Agent
- Step 7: Monitoring
- Step 8: Deploy the Agent
- Step 9: Agent Evaluation
- Step 10: Advanced Activities

Module 12: Capstone Project

- Smart Supply Chain Management System

Module 13: Recommended Learning Methodology

- Recommend allocating 1 hour daily to complete the course in 15 Days.
- Though you can attempt the online exam anytime as per your convenience, we highly recommend attempting the exam within 10Days of course completion, as the subject will be fresh in your mind, and you get sufficient time to prepare/revise as well