

AI+ Agent™

Duration: 1 Day

Course Overview

The AI+ Agent certification is designed to validate professionals' expertise in utilizing artificial intelligence tools and technologies to solve business problems. The certification covers key areas such as AI-driven decision-making, natural language processing, machine learning fundamentals, and AI application in various industries. Aimed at professionals seeking to advance their careers in AI, this certification equips individuals with the practical skills necessary for implementing AI strategies, optimizing workflows, and driving innovation. Achieving the AI+ Agent certification demonstrates proficiency in AI technologies, boosting credibility and enhancing job prospects in the rapidly evolving tech landscape.

Course Prerequisites

- **Basic Understanding of AI Concepts** – Familiarity with core AI principles.
- **Programming Knowledge** – Proficiency in Python or similar languages.
- **Data Analysis Skills** – Ability to interpret and manipulate datasets.
- **Problem-Solving Mindset** – Analytical thinking to address AI challenges.
- **Familiarity with Machine Learning** – Understanding basic ML algorithms and techniques.

Course Agenda

Module 1: Introduction to AI Agents

- Understanding AI Agents
- Anatomy and Ecosystem of AI Agents
- Applications, Misconceptions, and Mini Case Studies
- Case Study: Transforming Customer Support at Acme Retail with AI Agents
- Hands-On Exercise 1: Build a Q&A ChatBot Using Gemini + Prompt + LLM Chain in Flowise Cloud

Module 2: Core Concepts & Types of AI Agents

- Anatomy of an AI Agent
- Classification of AI Agents
- Matching Agents to Use Cases

Module 3: Tools for Non-Coders

- No-code and Visual Agent Platforms
- Tools Overview and Setup
- Start building: "Your First Flow" with n8n
- Case Study: Empowering HR with AI – Building an Onboarding Assistant Without Coding
- Hands-on Exercise

Module 4: Building Simple Agents

- Agent 1: AI-Powered HR Policy Assistant
- Troubleshooting and Validation of AI Agents
- Share Your AI Agent
- Hands-on Exercise 1: Design and Implementation of an AI-Powered Research Assistant using Flowise

Module 5: Multi-Tool Agents and Workflow Automation

- Multi-Tool Agent
- Agent Chaining and Workflow Basics
- Managing Agent State: State, Context, and User Journey
- Prompt Engineering for Agents
- Multi-Agent System
- Case Study: Chaining Tools for Smarter Marketing Campaigns
- Hands-on Exercise 1: Automating Order Tracking and Real-Time Notifications using Make.com

Module 6: Integration, Application Mapping & Deployment

- Deploying Agents
- Channel Selection
- Hosting Environment
- Data Integration
- Security Setup
- Monitoring & Updates

- Application Mapping

Module 7: Monitoring, Guardrails & Responsible AI

- Observability Basics
- Performance Evaluation: Key Metrics
- Guardrails: Preventing Misuse & Ensuring Safe Outputs
- Responsible AI
- Mini-Case: Failure and Recovery in Agent Deployments
- Real-world Failures
- Peer Sharing: How to Present and Discuss Agent Logs/Results

Module 8: Capstone Project – Design Your Own Intelligent Agent

- Capstone Project 1: Smart Personal AI Assistant
- Capstone Project 2: Smart Lead Engagement - From Email to Personalized Outreach
- Capstone Project 3: Education Tutor Agent
- HR Knowledge Bot
- Customer Service Agent
- Healthcare Triage Bot