

---














# Agentic AI Master Program

---



# Course Curriculum

# TABLE OF CONTENTS

01	<b>MEET THE FOUNDER</b>	
02	<b>ABOUT OMNILEARN</b>	
03	<b>ABOUT THE COURSE</b>	
04	<b>WHY CHOOSE US</b>	
05	<b>ABOUT PLACEMENTS</b>	
06	<b>WHY AGENTIC AI COURSE AT OMNILEARN</b>	
07	<b>CERTIFICATION PROCESS</b>	
08	<b>COURSE CONTENT</b>	
09	<b>OUR ACHIEVEMENTS</b>	
10	<b>ON-SITE TRAININGS</b>	
11	<b>CANDIDATES PLACEMENTS</b>	
12	<b>REVIEWS</b>	
13	<b>CONTACT US</b>	

# Meet The Founder

AMOL S. PANDIT



Amol S. Pandit is the founder and CEO of Omnilearn Professionals Private Limited, a global professional training and corporate learning organization focused on developing future-ready talent. He holds a master's degree in mechanical engineering from BITS Pilani and brings strong expertise in engineering, quality systems, and organizational excellence.

With a decade of experience as an engineer in the Ministry of Civil Aviation, he gained deep exposure to quality management, regulatory compliance, and operational governance. He later transitioned into professional training and consulting, specializing in Lean Six Sigma, project management, business analytics, and leadership development, delivering programs for Fortune 500 companies and leading institutions.

A certified Lean Six Sigma Master Black Belt, Agile Scrum Master, and Business Analyst Professional, Amol is also a recipient of the Indian Achievers Award for his contribution to education and skill development. Under his leadership, Omnilearn has become a trusted global learning partner across multiple high-impact domains.

# ABOUT OMNILEARN

**Omnilearn Professionals Private Limited is a global professional training and corporate learning organization focused on building future-ready skills for individuals and enterprises. With a presence in India, the UAE, and Canada, Omnilearn delivers industry-relevant classroom and corporate training across domains such as SQL database management, project management, data science, AI & ML, SAP, IT, cybersecurity, quality management, and leadership development. Their hands-on, outcome-driven approach combines instructor-led sessions, real-world projects, and career support, including resume building, interview preparation, and job assistance. Omnilearn's mission is to empower professionals with globally relevant skills that drive measurable business impact and long-term career growth.**

# ABOUT THE COURSE

## AGENTIC AI

Agentic AI represents the next frontier of artificial intelligence, where autonomous AI agents reason, plan, use tools, and collaborate to complete complex, multi-step tasks with minimal human intervention. This intensive 60-hour, hands-on program takes you from agent fundamentals and the ReAct paradigm to building sophisticated multi-agent systems using leading frameworks such as LangChain, LangGraph, CrewAI, and AutoGen, along with the Model Context Protocol (MCP). Through live instructor-led sessions and real-world projects, you will master tool use, memory, planning, orchestration, guardrails, evaluation, and security for autonomous systems. By the end, you will be able to design, build, and deploy production-grade AI agents that automate workflows and deliver real business value.

# WHY CHOOSE US?



**Expert & Personalized  
Mentorship**



**Lifelong Learning  
Resources**



**Free Lab  
Access**



**End to end  
placement support**



**Globally Recognized  
Certification Guarantee**



**Complementary Resume  
Building from Experts**



**Guaranteed Internship**

# ABOUT PLACEMENTS

01.

We offer 100% Placement Assistance, backed by a strong network of 300+ Placement and Internship Partners to support your career growth.



02.

We have successfully placed more than 5000 candidates throughout our journey



03.

Students who complete the mandatory training program qualify for our placement assistance program



04.

Real-time training and excellence make Omnilearn the recruiters' top choice



## WHY AGENTIC AI AT OMNILEARN?



**Comprehensive training on the latest AI technologies and tools**



**Access to expert instructors and a supportive community of fellow learners**



**ISO and Global Quality Control Board Accredited Certification**



**100% Job Support end-to-end**



**LMS Subscription for Lifetime**



**Free Server access**



**Capstone Project and Internship Opportunity**



**Flexible learning options to fit your schedule**

# CERTIFICATION PROCESS

1

### Counseling:

Register for the course and follow the enrollment process

2

### Engage in the Learning Process:

Attend all lectures, webinars, and tutorials. Participate actively in discussions and complete all the projects assigned by the instructor

3

### Course Completion Certificate:

Complete the course as per the schedule and receive the globally accredited certificate from Omnilearn.

4

### Global Certification Exam:

Get complete support with globally recognized certification and guidance to update your resume and LinkedIn profile with your new certification.



## CERTIFICATE OF ACHIEVEMENT

THIS CERTIFICATE IS PROUDLY PRESENTED TO

**Full Name**

Who Has Successfully Completed Our Training Program On  
**Course Name**

CERTIFICATE NO: OMNL-XXXXXXXX

DATE OF ISSUE: XX-XX-XXXX



AUTHORIZED SIGNATORY



# COURSE CONTENT

## Foundations of Agentic AI

- What Are AI Agents vs LLMs vs Workflows
- Anatomy of an Agent: Perceive, Reason, Act
- Autonomy Levels & Agentic Design Principles
- Real-World Agentic Use Cases

## LLMs as Reasoning Engines

- Recap: Transformers, Tokens & Context
- In-Context Learning & Instruction Following
- Strengths & Limits of LLM Reasoning
- Choosing Models for Agentic Tasks

## Prompting for Agents

- System Prompts & Agent Personas
- Chain-of-Thought & Structured Reasoning
- Output Schemas & Function Signatures
- Prompt Patterns for Reliability

## Tool Use & Function Calling

- Function & Tool Calling Fundamentals
- Defining Tools, Schemas & Parameters
- Parsing & Validating Tool Outputs

## The ReAct Paradigm

- The Reasoning + Acting Loop
- Thought-Action-Observation Cycles
- Error Recovery & Retries
- Implementing a ReAct Agent

## Planning & Task Decomposition

- Goal Setting & Sub-Task Planning
- Prompt Chaining & Routing
- Plan-and-Execute Patterns
- Hierarchical & Recursive Planning
- Reflection & Self-Correction

## Memory & Context Management

- Short-Term vs Long-Term Memory
- Vector-Based Memory Stores
- Conversation State & Summarization
- Context Window Management

# COURSE CONTENT

## LangChain & LangGraph

- LangChain Core Concepts
- Chains, Agents & Toolkits
- Stateful Graphs with LangGraph
- Building Cyclic Agent Workflows

## CrewAI & Role-Based Agents

- Agents, Tasks & Crews
- Role, Goal & Backstory Design
- Sequential vs Hierarchical Processes
- Collaboration & Delegation

## AutoGen & Conversable Agents

- Multi-Agent Conversations
- Assistant & User-Proxy Agents
- Group Chat Orchestration
- Human-in-the-Loop Patterns

# COURSE CONTENT

## Multi-Agent Systems

- Orchestrator-Worker Architectures
- Agent-to-Agent Communication
- Coordination, Consensus & Conflict
- Designing Scalable Agent Teams

## Retrieval-Augmented Agents (RAG)

- Grounding Agents with Knowledge
- Vector Databases & Retrievers
- Agentic RAG Patterns
- Tool-Augmented Retrieval

## Model Context Protocol (MCP)

- What MCP Solves: Tools & Context
- MCP Servers & Clients
- Connecting Agents to External Systems
- Building & Configuring MCP Tools

# COURSE CONTENT

## Building Production Agents

- From Prototype to Production
- API Integration & Orchestration
- Asynchronous & Long-Running Tasks
- Cost & Latency Optimization

## Evaluation & Observability

- Evaluating Agent Performance
- Tracing & Debugging Agent Runs
- Benchmarks & Test Harnesses
- LLMOps for Agents (LangSmith)

## Guardrails, Safety & Reliability

- Constraining Agent Behavior
- Validation, Approvals & Sandboxing
- Failure Modes & Fallbacks
- Preventing Loops & Runaway Costs

## Security for Agentic Systems

- Prompt Injection & Tool Abuse
- Permissions & Least Privilege
- Data Protection & PII Handling
- Red-Teaming Autonomous Agents

# COURSE CONTENT

## Agentic Workflow Automation

- Automating Multi-Step Business Tasks
- Human-in-the-Loop Checkpoints
- Event-Driven & Scheduled Agents
- Integrating with Enterprise Apps

## Emerging Frameworks & Trends

- OpenAI Agents SDK & Assistants
- The Future of Autonomous AI

## Industry Applications & Case Studies

- Customer Support & Sales Agents
- Research, Coding & Data Agents
- Operations & Workflow Copilots

## Capstone: Build an Autonomous Agent

- Define Goals, Tools & Architecture
- Implement a Multi-Agent Workflow
- Evaluate, Guardrail & Optimize
- Deploy & Demonstrate Your Agent

# OUR ACHIEVEMENTS



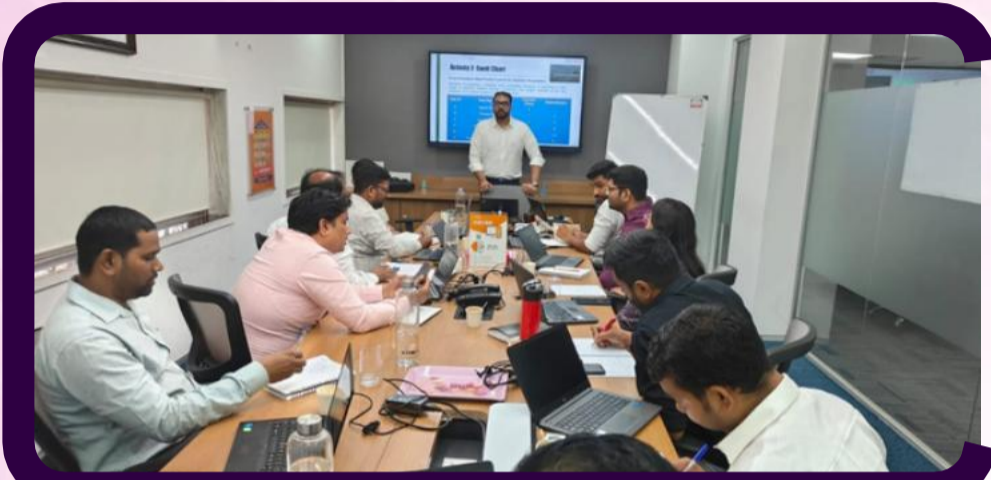
## INDIAN ACHIEVERS AWARD



# ON-SITE TRAININGS



# ON-SITE TRAININGS



# OUR CANDIDATES PLACED AT

5,000+ students trained at Omnilearn are now thriving in top companies across the globe. The next success story could be you.



# REVIEWS

Click on the link and check all our candidate's feedback:

<https://theomnilearn.com/courses/ai/agent-ai#give-review>

"Loved the hands-on approach. The sessions were interactive and easy to follow."

**Mohammed Bilal**  5/5



"A great course for anyone looking to stay ahead in AI. Highly recommended."

**S K Das**  5/5



"Very engaging trainer and relevant content for today's AI landscape."

**Noor Al Kaabi**  5/5



"Very practical course. The AI agent projects helped me understand real-world automation"

**Nishant Jha**  5/5



"A must-attend course for professionals interested in the future of AI."

**Manish Sharma**  5/5



# CONTACT US



## Registered Office Address

### **Omnilearn Professionals Private Limited**

NX-One, T-4, B-304, TechZone IV,  
Greater Noida West,  
Uttar Pradesh 201318



+91 9217374304



Operations@theomnilearn.com



theomnilearn.com