multisoft
Systems

Agentic AI Foundations Training

COURSE CONTENT

GET IN TOUCH

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About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

The Agentic AI Foundations Training by Multisoft Systems is a comprehensive program designed to equip professionals with the knowledge and practical skills required to build intelligent, autonomous AI systems. As organizations increasingly move beyond traditional rule-based automation toward self-directed, decision-making AI agents, this course provides a strong foundation to understand how these systems operate, interact, and evolve in real-world environments.

Module 1: Introduction to Agentic AI

- ✓ Evolution of AI: From rule-based systems to autonomous agents
- ✓ What is Agentic AI? Concepts and key characteristics
- ✓ Differences between traditional AI and agentic AI
- ✓ Use cases and industry applications
- ✓ Overview of agent-based architectures

Module 2: Core Components of AI Agents

- ✓ Perception, environment, and state modeling
- ✓ Goals, rewards, and decision-making
- ✓ Action selection and execution
- ✓ Agent memory and knowledge representation
- ✓ Feedback and learning loops

Module 3: Reasoning, Planning, and Decision Making

- ✓ Task decomposition and goal planning
- ✓ Rule-based vs learning-based reasoning
- ✓ Chain-of-thought and planning strategies
- ✓ Handling uncertainty and dynamic environments
- ✓ Evaluating and optimizing agent decisions

Module 4: Agent Architectures and Frameworks

- ✓ Single-agent vs multi-agent systems
- ✓ Overview of modern agent frameworks
- ✓ Orchestration and control layers
- ✓ Tool calling and API integration
- ✓ Agent lifecycle management

Module 5: Multi-Agent Collaboration

- ✓ Communication between agents
- ✓ Role-based and task-based agents
- ✓ Coordination and conflict resolution
- ✓ Swarm and cooperative intelligence
- ✓ Real-world multi-agent use cases

Module 6: Memory, Context, and Knowledge Management

- ✓ Short-term vs long-term memory
- ✓ Vector databases and retrieval systems
- ✓ Context handling in AI agents
- ✓ Knowledge grounding and accuracy
- ✓ Preventing hallucinations and drift

Module 7: Building Practical Agentic AI Systems

- ✓ Designing agent workflows
- ✓ Automating business processes with agents
- ✓ Integrating external tools and data
- ✓ Testing and debugging AI agents
- ✓ Deployment best practices

Module 8: Ethics, Security, and Governance

- ✓ Responsible AI and safety considerations
- ✓ Data privacy and compliance
- ✓ Bias, transparency, and explainability
- ✓ Risk management in autonomous systems
- ✓ Governance models for AI agents

Module 9: Real-World Applications and Case Studies

- ✓ Customer service and support agents
- ✓ AI-powered operations and analytics
- ✓ Digital assistants and copilots
- ✓ Industry-specific use cases
- ✓ ROI and performance measurement

Module 10: Future of Agentic AI

- ✓ Emerging trends and technologies
- ✓ Scaling agentic AI in enterprises
- ✓ Integration with generative AI and robotics
- ✓ Career pathways in agentic AI
- ✓ Capstone project and next steps