The background features a stylized human brain composed of glowing orange and blue lines, set against a dark blue background with circuit-like patterns and a network of light points. A white rectangular box is positioned at the top center.

AI FACTORY PRACTITIONER PROGRAM

**Master Industrial AI
& Agentic Systems**

From Concept to Production

PROGRAM OVERVIEW & KEY STATISTICS

An immersive, project-based learning journey designed to equip professionals with practical skills in artificial intelligence, software development, and data engineering. Our comprehensive curriculum integrates cutting-edge technologies with hands-on application.




150+
Hours of Learning




15+
Tools & Frameworks



12+
AI Agent Projects



15+
Practice Assignments



Enroll Now and Accelerate Your Career | [\[website address.com\]](#) | [\[Contact Information\]](#)





AI CURRICULUM MODULES: FUTURE-PROOF YOUR SKILLS



Generative AI Universe

- **Description:** Dive into large language models (LLMs), image synthesis, and creative applications.
- **Modules:** Intro to Transformers, Prompt Engineering, GANs & Diffusion Models, Ethical AI Considerations, Hands-on Projects.



Build AI Agents

- **Description:** Learn to design autonomous systems that perceive, reason, and act.
- **Modules:** Reinforcement Learning, Multi-Agent Systems, Decision Processes, Robotics Integration, Building Smart Assistants.



Coding Essentials

- **Description:** Master the foundational programming and tools for AI development.
- **Modules:** Python for Data Science, Machine Learning Libraries (PyTorch, TensorFlow), Data Structures & Algorithm Control (Git), APIs & Deployment.



ADVANCED AI TECHNIQUES



LangChain Framework

Orchestrate and connect AI models and data sources.

Build context-aware applications with chains, agents, and memory.



Prompt Engineering

Craft precise instructions for optimal model performance.

Techniques: Few-shot, Chain-of-Thought, iterative refinement for desired outputs.



RAG Systems

Retrieval-Augmented Generation.

Combine large language models with external knowledge bases for accurate, grounded responses.



Real-World Industry Applications



INSURANCE

Automate claims processing and policy administration, enhance fraud detection, and accelerate risk assessment with AI-powered document analysis and data extraction.



BANKING

Streamline transactions, improve customer service with intelligent chatbots, ensure regulatory compliance, and combat financial crime using advanced predictive analytics and real-time monitoring.



HR ADMINISTRATION

Transform talent acquisition, enhance employee engagement, automate payroll and benefits, and provide data-driven workforce planning using AI HR solutions.



TELECOM/ORANGE

Optimize network performance, predict maintenance needs, personalize customer offerings, and manage vast data streams efficiently with AI-driven network.



SUPPLY CHAIN/LOGISTICS

Optimize routes, predict demand, manage inventory levels in real-time, and improve overall operational efficiency with intelligent supply chain management and predictive modeling.



PUBLIC TENDERS

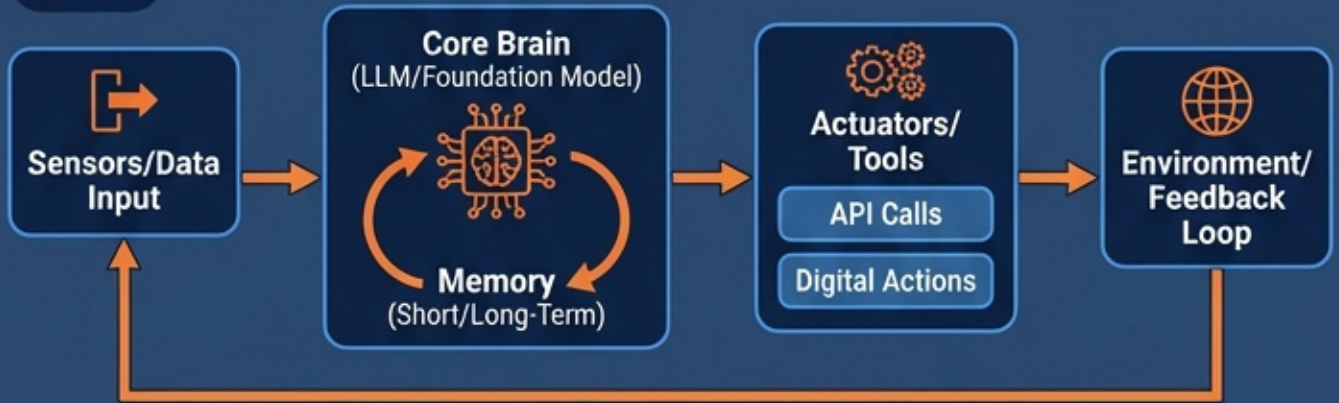
Simplify the tender process, ensure transparency, automate document evaluation, and identify best-value opportunities with AI-enabled procurement platforms and analysis tools.

Agentic AI & Multi-Agent Systems

Architecting Autonomous, Goal-Driven Systems for Complex Tasks



Building AI Agents



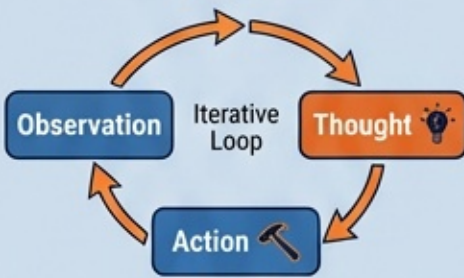
Define core loops, integrate tools, and establish memory for autonomous task execution. Frameworks enable state management & action capability.

LangGraph CrewAI
Common Frameworks for Orchestration



Design Patterns

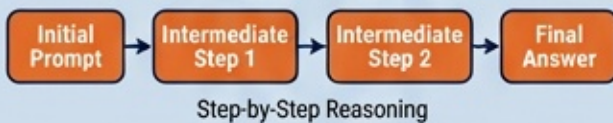
ReAct (Reason + Act)



Tool-Use



Chain-of-Thought



Leverage proven patterns for robust problem-solving, including reasoning loops, tool selection, and structured thought processes. These patterns guide agent behavior effectively.



Advanced Agents



Coordinate multiple specialized agents to tackle complex, multi-faceted challenges. Systems use delegation, consensus, and dynamic collaboration for superior outcomes.

LangGraph AutoGen CrewAI
Key Ecosystem Technologies for Scalable Multi-Agent Solutions.

12+ Hands-On AI Agent Projects



E-Commerce RAG Agent

Build a retrieval-augmented generation agent for personalized product recommendations and customer support.



Stock Market Analysis

Develop an AI agent to analyze financial data, track trends, and provide market insights.



Commerce Agent

Build a retrieval-augmented generation agent for personalized product recommendations.



Hotel Reservation System

Create an automated agent for booking confirmations, room inquiries, and guest services.



Social Media Agent

Design an agent to manage posts, engage with followers, and analyze engagement metrics.



Mock Interviewer

Implement an AI system to conduct practice interviews and provide feedback on performance.



Software Analysis

Implement an AI system to conduct practice interviews and provide feedback on performance tasks.



Software Engineering Assistant

Construct an assistant to help with code generation, debugging, and documentation tasks.



Why Choose **AI Factory** Practitioner Program

FOR PROFESSIONALS



- ✓ **Career Transition Benefits:** Acquire high-demand AI skills.
- ✓ **Future-Proof Your Career:** Unlock 70% of new AI-related roles.
- ✓ **Practical Experience:** Work on real-world projects.
- ✓ **Network Expansion:** Connect with industry leaders.

Statistic:
85% of graduates report career advancement within 6 months.



Statistic: 85% of graduates report career advancement within 6 months.

FOR COMPANIES



- ✓ **Business Value:** Drive innovation and efficiency.
- ✓ **Enhanced Automation:** Automate 60% of repetitive tasks.
- ✓ **ROI Generation:** Achieve rapid return on investment.
- ✓ **Talent Pipeline:** Build a dedicated AI team.

Statistic:
Companies report a 40% increase in operational efficiency.



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FOR RWANDA



- ✓ **National Impact:** Accelerate digital transformation.
- ✓ **Vision 2050 Alignment:** Contribute to the knowledge-based economy.
- ✓ **Economic Growth:** Create high-value job opportunities.
- ✓ **Sustainable Development:** Foster local innovation and solutions.

Statistic:
Aims to train 5,000+ AI Practitioners by 2025.



Statistic: Aims to train 5,000+ AI Practitioners by 2025.




AI FACTORY DYNAMICS

Transform Your Career
with Industrial AI

ENROLL NOW

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