

Faculty Development Programme

AIML-05: Agentic AI

May 18th – 29th, 2026 (Online Live Streaming)



Ministry of Electronics and
Information Technology
Government of India

Jointly organized by Electronics and ICT Academies

Established by the Ministry of Electronics and Information Technology, Govt. of India

Electronics & ICT Academy-Phase II

Objective:

1. To conduct specialized FDPs for faculty/mentor training in line with the vision of MeitY by promoting emerging areas of technology and other high-priority areas that are pillars of both the "Make in India" and the "Digital India" programs.
2. To promote synergy and collaboration with industry, academia, universities and other institutions of learning, especially in emerging technology areas.
3. To support the National Policy on Electronics 2019 (NPE 2019) which envisions positioning India as a global hub for ESDM sector, including MeitY Schemes/policies such as Programme for Semiconductors and Display Fab Ecosystem; India AI; National Programme on AI, Production Linked Incentive Scheme for IT Hardware & Large-Scale Electronics Manufacturing; EMC; SPECS; Chips to System (C2S); etc.
4. To promote standardization of FDPs through Joint Faculty Development Programmes.
5. To support the vision of the National Education Policy (NEP 2020), which mandates that Indian educators go through at least 50 hours in professional development programmes per year.
6. To design, develop & deliver specialized FDPs on emerging technologies/ niche areas / specialized modules for specific research areas for Faculty in Higher Education Institutions (HEI), besides FDPs on multi-disciplinary areas connected with ICT tools and technologies and other digital hybrid domains, covering a wide spectrum of Engineering and non-engineering colleges, polytechnics, ITIs, and PGT educators.

Joint -Principal Coordinator

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IIITDM Jabalpur



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An intensive 40 Hour Training Programme in online mode is being organized for faculty and doctoral students of engineering and technological institutions. It is also open to working professionals from industry/organizations. The main theme of training program will be oriented around exploring the state-of-the-art methods for AIML-05: Agentic AI

Experts/Speakers- Programme

Experts from IITs, NITs, Industrial and Academia Experts

Programme Modules:

Module 1: The Agentic Loop (Reasoning & Planning) Beyond One-Shot Generation: Understanding the "Sense → Think → Act" cycle. Reasoning Frameworks: Implementing ReAct (Reasoning + Acting), Chain-of-Thought (CoT), and Tree-of-Thought patterns for complex logic. Autonomous Planning: Breaking down high-level user goals into executable sub-tasks and dependency graphs. Reflection & Self-Correction

Module 2: Tool Use & Environment Interaction Function Calling & API Orchestration: Teaching agents to use external tools (Search, SQL, Python Interpreters, CRM APIs). Model Context Protocol (MCP): Implementing the 2026 industry standard for secure, plug-and-play tool integration. Human-in-the-Loop (HITL): Designing "Interrupt" patterns, Dynamic Tool Discovery

Module 3: Multi-Agent Orchestration & Collaboration Specialized Agent Roles: Designing "Swarm" architectures where a manager agent coordinates specialized Worker agents (e.g., a "Researcher" + "Writer" + "Fact-Checker"). Communication Protocols: Implementing A2A (Agent-to-Agent) messaging and shared state management. Framework Mastery: Hands-on development with LangGraph, CrewAI, and Microsoft

Module 4: AgentOps & Secure Deployment Observability & Tracing: Using tools like LangSmith or Arize Phoenix to debug long-running autonomous traces. Evaluation (Evals): Building "Agent Benchmarks" to measure goal success rate, cost-per-task, and latency. Sandboxing & Safety: Running agent-generated code in isolated environments (gVisor/Wasm) to prevent system exploits. Agentic RAG: Retrieval-Augmented Generation

Registration Link: <https://forms.gle/H3DmSCGzk2wBTPbF7>

Beneficiary Name - PDPM IIITDM Jabalpur

Bank Name - INDIAN BANK

A/C No. - 50018692852

IFSC Code - IDIB000M694

Last Date of Registration - 16 May 2026

Certification Fee: Academic (Faculty/PhD Scholars): ₹ 500

Professionals / Industry / Others: ₹ 1000/-

Participants from rest of the world: US \$ 60/-



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