



COMPLETION REPORT

Faculty Development Programme (FDP) – AIML-05: Agentic AI

18–29 May 2026 | Online Live Streaming | 2:00 PM–6:00 PM

Jaypee University of Engineering and Technology (JUET), Guna successfully hosted the Faculty Development Programme (FDP) on “AIML-05: Agentic AI” from 18 May to 29 May 2026 through online live streaming. The programme was jointly organized by IIITDM Jabalpur and MNIT Jaipur, with JUET, Guna as the host institution, in association with the Electronics and ICT Academy. The FDP was convened by Prof. Vipin Tyagi, JUET, Guna, and witnessed active participation from 36 faculty members of JUET. The programme focused on the rapidly emerging field of Agentic Artificial Intelligence and provided comprehensive exposure to the architecture, technologies, frameworks, applications, evaluation, and security of autonomous AI systems.

Programme	AIML-05: Agentic AI
Duration	18–29 May 2026
Mode & Timing	Online Live Streaming, 2:00 PM–6:00 PM
Host Institution	Jaypee University of Engineering and Technology (JUET), Guna
Organizers	IIITDM Jabalpur and MNIT Jaipur
Association	Electronics and ICT Academy
Convener	Prof. Vipin Tyagi, JUET, Guna
JUET Participation	36 Faculty Members

Objectives

- Introduce Agentic AI and its evolution beyond conventional Generative AI.
- Understand the Sense-Think-Act loop, reasoning, planning, ReAct and Tree-of-Thought approaches.
- Explore autonomous task decomposition, reflection, self-correction, and tool-using agents.
- Understand Model Context Protocol (MCP) and Human-in-the-Loop (HITL) mechanisms.
- Study multi-agent orchestration, communication, memory, and collaborative workflows.
- Gain exposure to LangGraph, CrewAI, Microsoft AutoGen, AgentOps, evaluation, observability, security, and Agentic RAG.

Technical Coverage

Agentic Reasoning and Planning: The sessions covered the transition from one-shot Generative AI to autonomous agents capable of iterative reasoning and action. ReAct, Tree-of-Thought, autonomous planning, task decomposition, dependency management, reflection, and self-correction were discussed.

Tool Use and Environment Interaction: Participants learned how AI agents can interact with search engines, databases, Python interpreters, APIs, and external environments. Model Context Protocol (MCP), dynamic tool discovery, and Human-in-the-Loop mechanisms were also covered.

Multi-Agent Orchestration and Collaboration: The programme introduced specialized agents, agent roles, orchestration, Agent-to-Agent communication, shared state, memory management, and collaborative

m tyagi

de

workflows. LangGraph, CrewAI, and Microsoft AutoGen were introduced as practical development frameworks.

Evaluation, Operations and Security: The FDP addressed AgentOps, task success, cost, latency, reliability, observability, execution tracing, sandboxing, security, and responsible deployment. Agentic Retrieval-Augmented Generation (RAG) was also discussed.

Outcomes and Impact

The FDP enhanced the technical understanding of participating faculty members regarding the design and deployment of modern AI agents. The knowledge gained can support AI-based teaching and laboratory exercises, student projects, research in LLMs and Multi-Agent Systems, Agentic RAG, intelligent automation, AI-enabled Software Engineering, interdisciplinary research proposals, and integration of emerging AI technologies into academic courses. The programme also emphasized responsible AI, human oversight, security, evaluation, and observability while developing autonomous systems.

Participation and Successful Completion

A total of 36 faculty members from JUET participated in the FDP. Their active participation reflects the growing academic interest in emerging Artificial Intelligence technologies and the University's commitment to continuous faculty development and technology-enabled education. The programme was successfully coordinated with support from the organizing institutions and resource persons from academia and industry.

Conclusion

The AIML-05: Agentic AI Faculty Development Programme was successfully completed at JUET, Guna from 18–29 May 2026. It provided a valuable platform for faculty members to understand the complete ecosystem of Agentic AI - from reasoning and planning to tool use, multi-agent collaboration, memory, evaluation, security, and Agentic RAG. The participation of 36 JUET faculty members and the comprehensive technical coverage made the FDP a valuable academic and professional development initiative. The knowledge acquired is expected to contribute to teaching, research, innovation, student mentoring, and development of AI-driven applications at JUET.


Prof. Vipin Tyagi 02/6/26

Jaypee University of Engineering and Technology, Guna

Convener


02/6/26
Registrar




VC