



**A Report on**  
**Five – Day Professional Development Programme on**  
**“ AI in Teaching and Learning”**  
**Organized by**  
**Internal Quality Assurance Cell (IQAC)**  
**In Collaboration with**  
**Industry Relations Cell and NITTTR, Chennai**  
**from 06.04.2026 to 10.04.2026**



**Report Submitted by :** Mrs. Prudhivi Anuradha, Assistant Professor, Dept. of CSE(Data Science) & IQAC Document Manager  
**Resource Persons Details:** Dr. P. Malliga, Professor & Head, Dept. of CSE, NITTTR Chennai; Dr. T. Subha, Associate Professor, Dept. of Educational Media & Technology, NITTTR Chennai.

**Venue:** Scale-up Classroom , Lakshmi Block, MITS

**Participants:** 40 Faculty Members

**Timings:** 9:30 AM to 5:00 PM

**Mode of Conduct:** Offline

**Report Received on** 17.04.2026.

A Five-Day Professional Development Programme (PDP) on “Artificial Intelligence in Teaching and Learning” was conducted from **06th April 2026 to 10th April 2026** for faculty members. The programme aimed to enhance the knowledge and practical skills of faculty in integrating Artificial Intelligence (AI) into Teaching, Learning, Research, and Assessment processes.

The objectives of this programme were to enable participants to:

- Introduce the fundamentals of Artificial Intelligence
- Explore AI applications in teaching and learning
- Enable faculty to use AI tools for curriculum design and content creation
- Enhance knowledge in AI-based assessment and analytics
- Promote the ethical use of Artificial Intelligence in education
- Encourage the integration of AI in research and academic practices

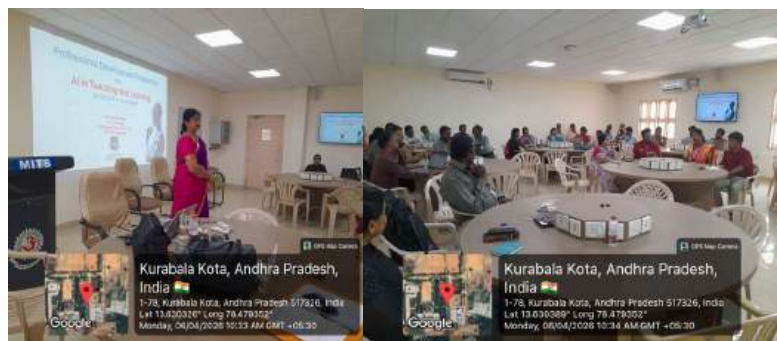
The program commenced with an inaugural session, marking the formal beginning of the five-day Professional Development Programme. Dr. P. Ramanathan, Principal of MITS, highlighted the growing importance of Artificial Intelligence in higher education and encouraged faculty members to adopt AI tools to enhance teaching–learning practices. Dr. K. Sathesh, IQAC Coordinator, introduced the resource persons. The Resource Person, Dr. P. Malliga, Professor and Head, Department of Computer Science and Engineering, NITTTR Chennai, explained the objectives of the programme and emphasized the need to integrate AI technologies into curriculum design and research activities. The Resource Person, Dr. T. Subha, Associate Professor, Department of Educational Media and Technology, NITTTR Chennai, addressed the participants on the role of AI in developing learning resources, digital content creation, and enabling personalized learning experiences.

The sessions of the Faculty Induction Program are as follows:

#### Day 1: 06.04.2026 (Monday)

##### Forenoon Session: Foundations of Artificial Intelligence

The forenoon session was handled by Dr. P. Malliga, on the topic “**Foundations of Artificial Intelligence.**” The session began with an introduction to **Artificial Intelligence (AI)**, explaining its meaning, significance, and applications in various domains. She elaborated on the **seven stages of AI maturity**, providing insights into the evolution and advancement of AI technologies. She further discussed the **layers of AI**, offering a structured understanding of how AI systems are developed and deployed. The session also covered **the use cases of Generative AI (GenAI)**, highlighting its growing importance in education and other sectors. A comparison between **Traditional AI and Generative AI** was presented, helping participants understand their differences and practical implications. Additionally, the session included an overview of **AI chatbots and smart assistants**, demonstrating their role in enhancing user interaction and automation. The session concluded with insights into the application of AI in **Learning Management Systems (LMS)**, particularly focusing on **student analytics** to improve personalized learning and academic performance.



##### Afternoon Session: AI in Learning and Prompt Engineering

The afternoon session was handled by Dr. T. Subha, on the topics “**AI in Learning**” and “**Prompt Engineering.**” The session began with an overview of how Artificial Intelligence can be effectively integrated into teaching and learning processes, enhancing student engagement and enabling personalized learning experiences. She then introduced the concept of **Prompt Engineering**, explaining its significance in interacting effectively with AI tools. Various prompting techniques were discussed in detail, including **zero-shot prompting, few-shot prompting, role-based prompting, instruction-based prompting, prompt chaining, and chain-of-thought prompting**. A live demonstration was conducted to illustrate the application of these techniques in real-time scenarios. Participants were also given hands-on exercises to practice different prompting strategies, which helped them gain practical experience in using AI tools effectively. The session

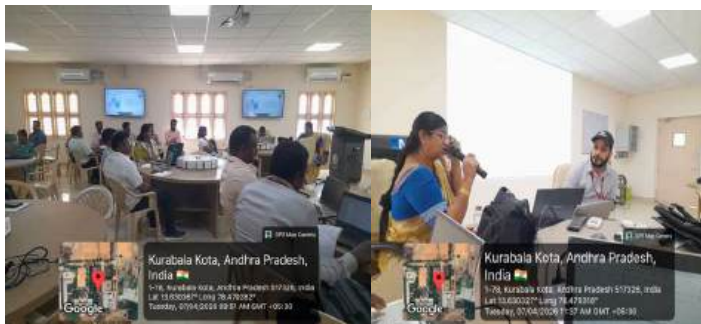
was highly interactive and enabled participants to understand the importance of well-structured prompts in achieving accurate and meaningful AI-generated outputs.



**Day:2 07.04.2026 (Tuesday)**

### **Forenoon session : AI in Curriculum and Outcome-Based Education (OBE)**

The forenoon session was handled by Dr. P. Malliga, on the topic “**AI in Curriculum and Outcome-Based Education (OBE).**”The session focused on the integration of Artificial Intelligence in curriculum design aligned with **Outcome-Based Education (OBE)** principles. She explained the significance of defining clear and measurable **Course Outcomes (COs)** and demonstrated how AI tools can assist in formulating COs for various courses. An interactive exercise was conducted where participants practiced **framing Course Outcomes using AI tools**, enabling them to understand the practical application of AI in academic planning. The session also covered the different domains of learning, namely **cognitive, psychomotor, and affective**, and their importance in designing comprehensive course outcomes. Additionally, a demonstration on **Brisk Teaching AI** was presented, showcasing how AI can support educators in curriculum development and instructional planning. The session was highly engaging and provided valuable insights into leveraging AI for effective curriculum design and outcome mapping.



### **Afternoon Session: AI Tools for Preparing Learning Resources**

The afternoon session was handled by Dr. T. Subha, on the topic “**AI Tools for Preparing Learning Resources.**” The session began with an overview of the capabilities of **AI writing tools**, highlighting how they assist educators in generating content such as notes, summaries, and teaching materials efficiently. A live demonstration was conducted on **text-to-notes generation** using tools such as **ChatGPT** and **Google Gemini**, illustrating how faculty can quickly create structured academic content.

The session further explored various categories of AI tools, including:

- **Presentation Tools** : Canva, Gamma, Beautiful.ai
- **Image Generation Tools** : DALL·E, MidJourney
- **Lesson Slide Creation Tools** : SlidesAI, Simplified AI, PPT.ai, Slidesgo
- **Video Creation Tools** : Pictory, Synthesia, Powtoon, Animaker, Unity, Blender, InVideo
- **Teaching Support Tools** : Eduaide

In addition, tools such as **Jasper**, **Copy.ai**, **SEO Wind**, and **Buffer** were introduced for content creation, optimization, and digital engagement. The session was highly interactive, providing participants with hands-on exposure to a wide range of AI tools that can be effectively utilized for preparing teaching and learning resources.

**Day 3: 08.04.2026 (Wednesday)**

### **Forenoon Session: AI in LMS and Personalized Learning**

The forenoon session was handled by Dr. P. Malliga, on the topic “**AI in LMS and Personalized Learning.**” The session began with a brief overview of **Artificial Intelligence (AI)** and **Machine Learning (ML)**, highlighting their significance in modern education systems. She explained the **typology of AI applications**, providing insights into different categories and their relevance in academic environments. The discussion then focused on the integration of AI within **Learning Management Systems (LMS)**, particularly emphasizing the use of AI in platforms like **Moodle** to enhance teaching–learning processes. A demonstration was conducted on **Khanmigo**, an AI-powered learning assistant, showcasing how it supports personalized learning, provides guidance to students, and enhances engagement through interactive learning experiences. The session provided valuable insights into how AI can be leveraged to deliver customized learning pathways and improve overall student performance.



### **Afternoon Session: AI in Data Analytics**

The afternoon session was handled by Dr. T. Subha, on the topic “**AI in Data Analytics.**” The session began with an introduction to **data analytics** and its significance in extracting meaningful insights from data to support decision-making in education. She explained the **types of data analytics**, including descriptive, diagnostic, predictive, and prescriptive analytics. She further discussed the role of **Artificial Intelligence in the data lifecycle**, highlighting how AI supports data collection, processing, analysis, and visualization. A series of demonstrations were conducted using various AI-powered tools such as **Julius AI, Quadratic AI, Power BI, Tableau, Tableau AI, and Bricks**. These tools were used to illustrate how data can be analyzed and visualized effectively to gain actionable insights. The session provided participants with practical exposure to modern analytics tools and emphasized the importance of data-driven decision-making in academic environments.



**Day 4: 09.04.2026 (Thursday)**

### **Forenoon Session: AI in Research and AI Plagiarism Detection**

The forenoon session was handled by Dr. T. Subha, Associate Professor, Department of Educational Media and Technology, NITTTR Chennai, on the topic “**AI in Research and AI Plagiarism Detection.**” The session began with an introduction to the role of **Artificial Intelligence in research**, highlighting how AI can enhance the efficiency and quality of academic work. She explained the **key steps involved in conducting research**, including problem identification, literature review, data collection, analysis, and documentation. She then

introduced various **AI tools for research**, focusing on tools that assist in literature review, problem identification, and academic writing. Participants were divided into teams, and each team was assigned a specific tool for hands-on demonstration and exploration.



The tools demonstrated included:

- **Elicit.ai, Semantic Scholar, Jenni AI, Paperpal, SciSpace, NotebookLM, and Research Rabbit** for literature review and research support
- **Zotero and Mendeley** for reference management and citation
- **Turnitin, Plag.ai, QuillBot, and Grammarly** for plagiarism detection and content refinement

Through team-based demonstrations, participants gained practical experience in using these tools effectively for research activities. The session was highly interactive and provided valuable insights into leveraging AI for conducting efficient and ethical research, as well as ensuring originality and academic integrity.

### **Afternoon Session: AI in Digital Content Creation**

The afternoon session was handled by Dr. P. Malliga, on the topic “**AI in Digital Content Creation.**”The session focused on the use of Artificial Intelligence tools for creating engaging and interactive digital learning materials. She introduced **H5P**, a platform for developing interactive content such as quizzes, presentations, and learning modules. She also discussed tools like **Draw.io** for creating diagrams and visual representations, which are essential for effective teaching and concept visualization. A live demonstration was conducted using **ElevenLabs**, showcasing advanced text-to-speech capabilities for generating realistic voice content. Another demonstration was given on **Wayground**, highlighting its application in content creation and instructional design. The session also introduced **MIT OpenCourseWare (MIT OCW)** as a valuable resource for accessing high-quality educational content. Further, various **text-to-video generation tools** such as **InVideo, FlexClip, VEED, and Fliki** were demonstrated, enabling participants to create instructional videos efficiently. The session provided hands-on exposure to modern AI tools and emphasized the importance of integrating digital content creation techniques into teaching practices to enhance student engagement.

### **Day-5 10.04.2026(Friday)**

#### **Forenoon Session: AI in Assessment**

The forenoon session was handled by Dr. T. Subha, on the topic “**AI in Assessment.**”The session focused on the use of digital and AI-enabled tools to enhance student assessment and engagement. She introduced various interactive platforms such as **Slido, Kahoot, Quizizz, Socrative, Mentimeter, and Google Forms**, explaining their features and applications in conducting quizzes, polls, and real-time assessments. She also discussed innovative assessment techniques like **exit tickets**, which help in quickly evaluating student understanding at the end of a session. Additionally, tools like **Jeopardy Labs** were introduced to create game-based quizzes, making assessment more engaging and interactive. The session emphasized the importance of formative assessment and demonstrated how these tools can provide instant feedback, track student performance, and improve learning outcomes. The session was highly interactive, enabling participants to explore different assessment tools and strategies for effective teaching–learning practices.

Dr. P. Malliga, focusing on emerging trends in Artificial Intelligence and the importance of ethical AI practices. She explained key AI ethics principles such as **accountability, human-centric and socially beneficial AI, fairness, security and safety, and transparency**. The session also emphasized core values like **learning to know, to do, to live together, and to be**.

#### **Afternoon Session: Course Assessment & Feedback and Valediction**

The programme concluded with a course assessment aimed at evaluating the participants' understanding of the AI concepts covered throughout the sessions. The valedictory function was held in the Scale-up classroom, where the programme began with a welcome address and brief report of the five-day PDP presented by Mrs. Kowsalya P., IQAC. This was followed by addresses by Dr. A. V. Pavankumar, Assistant Dean of Accreditation, and Dr. D. Pradeep Kumar, Registrar (I/c). The resource persons, Dr. P. Malliga and Dr. T. Subha, shared their reflections on the programme and appreciated the active participation of the faculty members. Participants also shared their feedback, highlighting their learning experiences. The programme concluded with a vote of thanks delivered by Mrs. P. Anuradha, IQAC.

#### **Outcomes of the Programme:**

The Professional Development Programme on **AI in Teaching and Learning** enabled participants to:

- Gain a clear understanding of **AI concepts and applications in education**
- Apply **AI tools for teaching, content creation, and assessment**
- Design **AI-integrated curriculum aligned with OBE principles**
- Utilize AI for **personalized learning and student analytics**
- Explore AI tools for **research, data analysis, and academic writing**
- Develop awareness of **ethical AI practices**
- Enhance overall **teaching effectiveness and digital competencies**

#### **Group Photo:**

#### **Programme Schedule**

We sincerely thank the Management and all those who contributed to the successful completion of this programme for their valuable support in ensuring its smooth conduct.

With regards,

**Dr. C. Kamal Basha, M.E., Ph.D.**

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