

Report

One-Week Faculty Development Programme

"AI and Open Source Tools for Teaching Learning Excellence"

Duration: 18 May 2026 – 22 May 2026 (Five Days)

Mode: Hybrid (Remote Centre at Guru Nanak Dev Engineering College, Ludhiana)

Organized by: National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh

Remote Centre: Guru Nanak Dev Engineering College, Gill Road, Ludhiana

Department of Computer Science and Engineering from Guru Nanak Dev Engineering College, Ludhiana, successfully hosted a five-day Faculty Development Programme (FDP) on **"AI and Open Source Tools for Teaching Learning Excellence"** from **18 May 2026 to 22 May 2026** as a **Remote Centre** in collaboration with the **National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh**. The programme was conducted in hybrid mode with live sessions delivered by experts from NITTTR Chandigarh and coordinated locally at GNDEC.

The FDP aimed to enhance the knowledge and skills of faculty members in the effective use of Artificial Intelligence (AI) and open-source tools for improving teaching, learning, assessment, research, and academic productivity. The programme emphasized the integration of emerging AI technologies into higher education while promoting the use of freely available educational resources and software.

A total of **47 faculty members** who actively participated in the programme. The participants represented various departments and attended all technical sessions, demonstrations, and interactive discussions throughout the five-day schedule.

Major Topics Covered

The FDP covered several contemporary topics related to AI-enabled education, including:

- Introduction to Artificial Intelligence in Higher Education
- Generative AI Tools for Teaching and Learning
- AI-assisted Content Creation and Lesson Planning
- AI-based Assessment and Evaluation Techniques
- Open Source Learning Management Systems
- Open Source Tools for Research and Academic Writing
- Ethical and Responsible Use of Artificial Intelligence
- Prompt Engineering for Educational Applications
- AI-powered Productivity Tools for Faculty Members

- Best Practices for Technology-enabled Teaching

The sessions included expert lectures, live demonstrations, practical examples, case studies, and interactive discussions that enabled participants to gain hands-on exposure to various AI and open-source platforms.

Outcomes of the FDP

The programme achieved its intended objectives by enabling participants to:

- Understand the role of Artificial Intelligence in modern education.
- Explore and utilize various open-source educational tools.
- Design AI-supported teaching and learning resources.
- Improve classroom engagement using digital technologies.
- Enhance research productivity through AI-assisted tools.
- Learn ethical considerations and responsible use of AI.
- Integrate innovative technologies into curriculum delivery and assessment.
- Share experiences and best practices with faculty members across disciplines.

Participant Feedback

The overall feedback received from the participants was highly positive. Faculty members appreciated the relevance of the topics, quality of expert sessions, practical demonstrations, and the opportunity to learn emerging technologies that can be effectively incorporated into classroom teaching and research activities. Participants expressed that the programme significantly enhanced their awareness and confidence in using AI-powered educational tools.

Conclusion

The Faculty Development Programme on "**AI and Open Source Tools for Teaching Learning Excellence**" was successfully conducted at Guru Nanak Dev Engineering College, Ludhiana, from **18 May 2026 to 22 May 2026** in collaboration with **NITTTR Chandigarh**. With the enthusiastic participation of **47 faculty members**, the programme proved to be highly informative and beneficial. The coordinated efforts of **Dr. Amit Jain** and **Dr.Satinderpal Singh** ensured the smooth organization and successful completion of all activities at the Remote Centre.

The programme has strengthened the digital competencies of faculty members and will contribute significantly towards enhancing teaching effectiveness, research productivity, and the adoption of innovative educational technologies across the institution.

Dr.Satinderpal Singh

Dr. Amit Jain

FDP Coordinator(s)

