Five-Day FDP on "Next-Gen Digital Forensics & Incident Response Using Artificial Intelligence"

Under ISEA Project Phase–III (MeitY)
Organized by GTU – School of Engineering and Technology

Date: January 6 – 10, 2026

About the FDP

Faculty members must continuously upgrade their knowledge and competencies to effectively respond to the rapid technological advancements and evolving paradigms in technical education. A well-structured Faculty Development Program (FDP) equips educators with updated expertise, enabling them to disseminate advanced knowledge among students and contribute meaningfully to academic and research excellence.

With this objective, the GTU School of Engineering and Technology, in association with the GTU-PG Research Centre, organized a five-day FDP on *"Next-Gen Digital Forensics & Incident Response Using Artificial Intelligence"* from January 6 to 10, 2026, at the GTU Chandkheda Campus. The program was conducted under the **Information Security Education and Awareness (ISEA) Project Phase–III (MeitY)**.

Eminent experts from **NFSU, ISRO, RRU, C-DAC, and Adani Green Energy Ltd.** shared their domain expertise, practical knowledge, and industry insights through interactive lectures and hands-on sessions focused on next-generation digital forensic technologies and AI-driven incident response mechanisms.

FDP Proceedings

The five-day Faculty Development Program (FDP) was conducted successfully with a balanced blend of theoretical foundations and practical exposure. The program commenced on 6th January 2026 with a formal welcome session, followed by an expert lecture on *Basics of Digital Forensics and Digital Evidence* delivered by **Dr. Pratik Patel, Associate Professor, NFSU**. The day concluded with a hands-on session on *Disk Forensics* conducted by **Prof. Pritesh Prajapati, Assistant Professor, Charusat University**, providing participants with practical investigative experience.

On 7th January 2026, **Shri. Rohit Tyagi, Scientist, Space Applications Centre (SAC), ISRO, Ahmedabad**, delivered insightful sessions on *AI-Integrated Threat Analytics and Threat Intelligence*. The post-lunch sessions were conducted by **Mr. Divan Raimagia, CISO, Adani Green Energy Ltd., and Mr. Ankit Gandhi, OT Security Expert, Adani Green Energy Ltd.**, focusing on *Operational Technology (OT) Security* and its importance in safeguarding critical infrastructure.

On 8th January 2026, **Dr. Akash Thakar, Assistant Professor, Rashtriya Raksha University (RRU)**, delivered sessions on *Foundations of Next-Generation Digital Forensics, Digital Evidence, Memory Forensics,* and the application of *Large Language Models (LLMs) in Digital Forensics*. On 9th January 2026, **Mr. Vamshi Krishna**

Palakurthi, Scientist 'E' / Joint Director, C-DAC Hyderabad, conducted expert sessions on *Cyber Deception in Digital Forensics using Artificial Intelligence* and *Quantum Technologies in Cyber Forensics*, highlighting future-ready investigative approaches.

The FDP concluded on 10th January 2026 with a practical session on *Mobile Application Security*, including hands-on demonstrations using a mobile emulator, delivered by **Mr. Aakash Khunt, Industry Expert**. The program ended with a Valedictory Session graced by **Mr. Deepak Upadhyay, Assistant Professor, Gujarat Technological University**, as the Chief Guest. Overall, the FDP successfully provided participants with comprehensive knowledge, practical competencies, and industry-aligned exposure to address emerging challenges in digital forensics and cyber incident response.

Objectives of the FDP

This FDP served as a collaborative initiative between academia and industry. The objective was to cover both conceptual and application-oriented aspects of Artificial Intelligence in Digital Forensics. The program addressed fundamental design principles, architectural frameworks, system-level security considerations, and diverse real-world use cases in digital forensic investigations.

Topics Covered

- Basics of Digital Forensics
- Digital Evidence
- Hands-on Disk Forensics
- AI-Integrated Threat Analytics
- WAZUH and Threat Intelligence
- Operational Technology (OT) Security
- Digital Evidence and Memory Forensics
- Digital Forensics using LLMs
- Cyber Deception in Digital Forensics using AI

Participation: More than 80 faculty members, research scholars, and Ph.D. scholars representing various national and international universities, institutes, and organizations.

Coordinators

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Faculty Development Program
(FDP)

Event Outcomes

At the end of the program, participants were able to:

- Gain fundamental knowledge of Digital Forensics concepts, tools, and techniques.
- Develop practical skills in analyzing and investigating digital evidence.
- Integrate advanced Digital Forensics topics into academic curricula.
- Promote interdisciplinary collaboration and research initiatives.