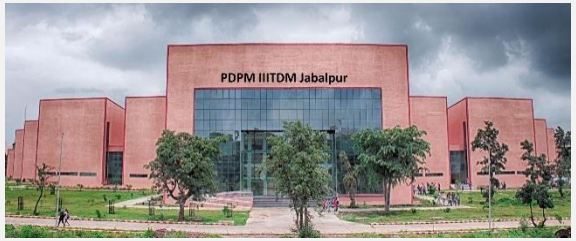
About Electronics & ICT Academy at PDPM IIITDM Jabalpur



The Ministry of Electronics and Information Technology (MeitY), Government of India has instituted Electronics and ICT Academies in the year 2015. In the second phase, the academy at PDPM IIITDM Jabalpur aims at scalable training programmes in niche areas of Electronics and ICT for the development of the required knowledge base, skills and tools to unleash the talent of the Indian population. The Academy is identified by the MeitY as a hub of activities for capacity building through training, internships, research, and consultancy programmes in fundamental and advanced topics in electronics, information and communication technologies. The Academy conducts customized academic programmes for students, corporate sectors and researchers.

About NIT Delhi

NIT Delhi is one of India's premier public engineering institutions, renowned for its excellence in education, research, and innovation. Established in the year 2010 by an Act of Parliament. The Institute has been declared an Institute of National Importance. With a sprawling campus spread over 51 acres, NIT Delhi offers cutting-edge programs in engineering, science, and humanities. NIT Delhi consistently ranks 45th rank in 2024 among 4000 engineering colleges in India by NIRF, fostering a vibrant academic and entrepreneurial ecosystem.

About the Program

This 12-day online Faculty Development Program (FDP) aims to provide participants with a comprehensive understanding of Digital Forensics, including the advanced applications of Machine Learning (ML), Deep Learning (DL), and Biometrics in both forensic investigations and Cybersecurity defence systems.

Participants will explore the fundamental principles of Digital Forensics while integrating cutting-edge technologies in Machine Learning, Deep Learning, and Biometrics. These tools play a pivotal role in modern investigations by automating data analysis, improving the speed and accuracy of threat detection, and assisting in criminal case resolutions. Additionally, Biometrics will be discussed in detail as a powerful tool for identity verification, fraud detection, and secure digital environments.

Who can attend: This program is designed for academic professionals and researchers, focusing on enhancing teaching and research capabilities related to the evolving fields of Forensics, Security, and AI.

Important Dates

Last date of online registration: **September 10, 2025**
FDP Dates: **September 11-24, 2025**

Course Coordinators

Dr. Ranjeet Ranjan, Assistant Professor
Department of CSE, PDPM IIITDM Jabalpur
Email: ranjeet.kr@iiitdmj.ac.in, 9013733204

Dr. Munesh Singh, Associate Professor
Department of CSE, NIT Delhi
Email: munesh.singh@nitdelhi.ac.in

Dr. Gautam Kumar, Assistant Professor
Department of CSE, NIT Delhi
Email: gautam@nitdelhi.ac.in

Faculty Development Programme On
Innovations in Forensic Science: The Role of ML, DL, and Biometrics in Cybersecurity

Organized by

Department of Computer Science & Engineering, NIT Delhi, India

In association with

Electronics and ICT Academy, PDPM IIITDM Jabalpur, India

Digital India
Power To Empower

An Initiative of
Ministry of Electronics and Information Technology, Government of India

Resource Persons (tentative)

- **Dr. Ajita Rattani**, *University of North Texas, USA*
- **Dr. Gaurav Gupta**, *Scientist 'F', Cyber Security, MeitY, Government of India.*
- **Dr. Kiran Raja**, *Norwegian University of Science and Technology, Norway*
- **Dr. Sumantra Dutta Roy**, *Professor, IIT Delhi*
- **Rajat Subhra Chakraborty**, *Professor, IIT Kharagpur*
- **Dr. Ruchira Naskar**, *Expert in Digital Forensics, IIEST Shibpur*
- **Dr. Sambit Bakshi**, *National Institute of Technology Rourkela*
- **Dr. Nilay Mistry**, *School of Cyber Security & Digital Forensics, National Forensic Sciences University*
- **Dr. Ankit Kumar Jaiswal**, *JNU, New Delhi*
- *And other eminent professionals from reputed institutions.*

Course Contents

- Introduction to Digital Forensics, Biometric Security, Cybersecurity, Machine Learning and Deep Learning.
- Network Forensics and Intrusion Detection with AI, SDN, SDIoT, GenAI, Adversarial Machine Learning, and Federated Machine Learning.
- Malware Analysis, SDN Security, and Data Protection.
- Cloud Forensics, Serverless Computing, IoT Forensics, Biometric Security, and Digital Twin.
- Teaching Digital Forensics, Lab setup requirements and Experiments.
- Hardware security, Network Security, Edge IoT, Fog IoT.
- Integrating AI, Biometric Security, and Cybersecurity in Academia and Industries.

Hands-On Sessions

- Data Anomaly Detection using ML models.
- Development of Biometric Systems using various biometric traits.
- Slow DDoS Defence System.
- Serverless Computing in the Cloud to Edge Computing.
- Hardware security, Voltage glitch, Side-channel analysis, power analysis, clock glitch.
- Implementing a machine learning model to detect network intrusions.
- Adversarial machine learning, Malware Classification using Convolutional Neural Networks (CNN).
- Using Deep Learning techniques for data encryption and securing forensic data.
- IoT Forensics using data from smart home devices and detecting vulnerabilities.

Programme Features

- Participants will be proficient in the latest digital forensics and security technologies.
- Faculty will gain practical knowledge of AI and biometric tools for use in forensic investigations, Network security and academic research.
- Instructor-led, rigorous hands-on sessions with online (live streaming) sessions.
- Certificate on successful completion with full access to the course material.

Registration Details

Please fill out the registration using the following link: https://forms.gle/rr2hQV8Nvt8Uwebn7

- Registration fee: **INR 500/- only**
- Last Date for Registration: **10 September 2025**
- The program will be scheduled in the evening from 5.30 PM to 8.30 PM (tentative)

Online Payment Details

Beneficiary Name	PDPM IIITDM Jabalpur
Bank Name	Indian Bank
A/C No.	50018692852
IFSC Code	IDIB000M694
UPI ID	iiitdmj@indianbk

or Scan **QR**

Course Coordinators

Dr. Ranjeet Ranjan: ranjeet.kr@iiitdmj.ac.in
Dr. Gautam Kumar: gautam@nitdelhi.ac.in
Dr. Munesh Singh: munesh.singh@nitdelhi.ac.in

Contact Us

academy@iiitdmj.ac.in, eict@iiitdmj.ac.in
Phone: 8770958231
(Mr. Ashvarya Agrawal)