

Electronics & ICT Academy PDPM IITDM 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 IITDM 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.

National Institute of Technology Jamshedpur

National Institute of Technology Jamshedpur (NIT Jamshedpur) is an Institute of National Importance for Technical Education located at Jamshedpur, Jharkhand, India. Established as a Regional Institute of Technology on 15 August 1960. NIT Jamshedpur was ranked 82 engineering colleges in India by the National Institutional Ranking Framework (NIRF) in 2025.

Faculty Development Programme on Next-Gen AI for Healthcare and Biomedical Systems

Online (October 07 -27, 2026)

The main objective of this FDP is to provide participants with an understanding of recent advancements, key challenges, and innovative solutions in the field of Artificial Intelligence (AI) with a special focus on healthcare and Biomedical applications. The FDP aims to: Introduce foundational and emerging AI techniques. Explore real-world case studies and applications of AI in diagnostics, medical imaging, and disease prediction. Address critical challenges in AI deployment. Provide hands-on sessions for developing and evaluating AI models in health-related data analysis.

Who can attend: Suitable for faculty from colleges, universities, and technical and professional institutes can attend. Students, fresh graduates, researchers, and industry personnel working in allied disciplines can also attend.

Important Dates

Last Date of Online Registration: October 05, 2026
FDP Dates: Oct 07 – Oct 27, 2026

Coordinators

Dr. Drugesh Singh, CSE, IITDM Jabalpur
Dr. Jayendra Kumar, ECE, NIT Jamshedpur
Dr. Rajashree Nayak, ECE, NIT Jamshedpur
Dr. Munendra Singh, ECE, NIT Jamshedpur

Contact us:

Mr. Durgesh Kushwaha: 7898670354

academy@iiitdmj.ac.in, eict@iiitdmj.ac.in

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Jointly Organized
by

**Electronics and ICT
Academy IITDM Jabalpur**



And

**National Institute of Technology
Jamshedpur**



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



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Resource Persons

- Dr. Neeraj Sharma, Professor, IIT (BHU) Varanasi
- Dr. Deepak Joshi, Associate Professor, IIT Delhi
- Dr. Dinil Sasi, Research Faculty, Johns Hopkins University, USA
- Dr. Gourav Modanwal Research Assistant Professor, Emory University, USA
- Dr. Taresh Saran, Research Scientist Origin Medical
- Dr. Chiranjeev Sagar, Algorithm Development Engineer, Agada Medical Technologies

Coordinators

Dr. Durgesh Singh,
CSE, IIITDM Jabalpur

Email: durgesh@iiitdmj.ac.in

Dr. Jayendra Kumar,
Dr. Rajashree Nayak & Dr. Munendra Singh
ECE, NIT Jamshedpur

Email: jkumar.ece@nitjsr.ac.in,
rajashree.ece@nitjsr.ac.in,
munendra.ece@nitjsr.ac.in

Course Content

- Artificial Intelligence (AI)
- Machine Learning
- Ethics and Trust in AI
- Biomedical Modalities
- Magnetic Resonance Imaging (MRI)
- AI application to Biomedical Systems
- Computer Vision in Radiology
- Histopathology AI
- Computational Genomics
- Wearable AI
- Interpretable AI
- Physics Informed AI
- AI-driven Saturation Transfer MRI
- Recent Trends in Biomedical and AI

Hands-On Sessions

- Train a U-Net model to segment brain tumors from multi-modal MRI scans using the BraTS dataset.
- Build an encoder-decoder network to reduce motion artifacts in CEST imaging from raw Z-spectrum resonance signals.
- Design a 1D CNN or Transformer to predict transcription factor binding sites from raw DNA sequences.
- Implement a lightweight temporal model for real-time arrhythmia classification using continuous ECG stream data.
- Apply SHAP and Grad-CAM to generate visual attention heatmaps & audit clinical models for demographic bias.

Registration Details

Registration link – Please fill out registration using the following link:

<https://forms.gle/YmpMetgQtBU5kBSV8>

Registration fee: 500/-

Last Date for Registration: October 05, 2026

Online Payment Details

Internet banking

Beneficiary Name	PDPM IIITDM Jabalpur
Bank Name	INDIAN BANK
A/C No.	50018692852
IFSC Code	IDIB000M694

UPI ID: iiitdmj@indianbk



Program Features

- Rigorous training in theoretical and practical knowledge on drug design
- Opportunities to connect with experts in the field.
- Instructor-led rigorous hands-on sessions

Certificates will be issued on successful completion of the course with 80% attendance. It is strict mandate of the EICT academy for issuing certificates to the participants.