About Electronics & ICT Academy at PDPM IIITDM Jabalpur

The MeitY, Govt of India, instituted Electronics and ICT Academies in the year 2015. In the 2nd 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, the corporate sector, and researchers.

About MANIT

Maulana Azad National Institute of Technology (MANIT) Bhopal is an Institute of National Importance. Presently, along with about 300 faculty members and 7000 students, the Institute is successfully meeting the objective of producing skilled manpower of the highest quality to cope with the challenges of ever-evolving industrial needs of the country.

Faculty Development Programme

On

AI, Signal Processing, and Wireless Communication: Foundations for Next-Generation Intelligent Systems

May 18-28, 2026 (Online)

The programme is designed to provide fundamental knowledge of recent developments in artificial intelligence (AI), signal processing, and wireless communication, forming the foundation for next-generation intelligent systems. It will cover the basics of AI, signal processing, and wireless communication to build a strong conceptual understanding, while also equipping participants with the theoretical and practical skills required to design and develop advanced intelligent solutions. The programme includes hands-on sessions that enable participants to apply these concepts using modern tools in real-world scenarios, helping them analyses signals and design efficient communication systems.

Who can attend: Faculty from polytechnic, science and engineering 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: **May 16, 2026**

FDP Duration: May 18- 28, 2026

Coordinators:

Dr. Anil Kumar, IIITDM Jabalpur

Dr. Rahul Pal & Dr. Ashish Kumar Sahu, MANIT Bhopal

Contact us: Mr. Durgesh Kushwaha 7898670354

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

Faculty Development Programme

On

AI, Signal Processing, and Wireless Communication: Foundations for Next-Generation Intelligent Systems

May 18-28, 2026 (Online)

Jointly Organized by

Electronics and ICT Academy IIITDM Jabalpur

and

Maulana Azad National Institute of Technology, Bhopal

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

Digital India
Power To Empower

Faculty Development Programme

on

AI, Signal Processing, and Wireless Communication: Foundations for Next-Generation Intelligent Systems

May 18-28, 2026 (Online)

Resource Persons

- Dr. Rahul Pal, MANIT Bhopal
- Dr. Ashish Kumar Sahu, MANIT Bhopal
- Dr. Anand Jee, MANIT Bhopal
- Prof. (Dr.) Aparajita Ojha, IIITDM Jabalpur
- Dr. Anil Kumar, IIITDM Jabalpur
- Dr. Ankur Bansal, IIT Jammu
- Mr. Vikram Singh, Tejas Networks
- Dr. Shikha Maurya, IIIT Surat
- Dr. Aashish Mathur, IIT Jodhpur
- Dr. Mitul Ahirwal, MANIT Bhopal
- Dr Soumya Prakash Das, IIT BBS
- Dr. Hathiram Nenavath, IIT Bhilai
- Dr. Neha Singh, IIIT Bhopal

Coordinators

Dr. Anil Kumar
Dept. of ECE,
IIITDM Jabalpur
Email: anilk@iiitdmj.ac.in

Dr. Rahul Pal
Dept. of ECE,
MANIT Bhopal
rahulpal@manit.ac.in

Dr. Ashish Kumar Sahu
Dept. of CSE,
MANIT Bhopal
ashish.sahu@manit.ac.in

Course Contents

- Introduction to Python and Scientific Computing Libraries
- Fundamentals of AI and Machine Learning
- Fundamentals of Signal Processing
- Fundamentals of Wireless Communication Systems
- AI for Signal Processing
- AI for Wireless Communication Systems
- Massive MIMO and Advanced Beamforming Techniques
- Non-Orthogonal Multiple Access (NOMA)
- 5G-Advanced & 6G
- Terahertz Communication for 6G Networks
- Integrated Sensing and Communication
- Reconfigurable Intelligent Surfaces (RIS)
- Future Trends and Career Opportunities in AI, Signal Processing, and Communication

Hands-On Sessions

- Introduction to Python Programming and Scientific Computing Libraries (NumP1y, SciPy, Matplotlib)
- Implementation of Basic Machine Learning Algorithms
- Deep Learning Model Development using TensorFlow/PyTorch
- Implementation of Signal Processing and Wireless Communication Algorithms
- Introduction to Software-Defined Radio (SDR)-Based and Its Implementation
- AI-based applications in Communication

Programme Features

This programme features expert-led sessions by industry professionals and faculty from premier institutions. It provides hands-on training in artificial intelligence, signal processing, and wireless communication, covering key advancements such as machine learning/deep learning, Massive MIMO, 5G/6G, ISAC, and NOMA technologies. Participants will engage in interactive discussions and practical exercises and receive a certificate along with guidance on emerging research and career opportunities in intelligent communication systems.

Participants will be awarded certificates only on successful completion of the course.

Registration Details

- Registration link – Please fill out the registration using the following link:
  https://forms.gle/DLB5Fv6k1DiEbYpL8
- Registration fee: INR 500/ (Online participation)
- Last Date for Registration: **May 16, 2026**
- **Tentative Time: Session 1- 3:00 PM to 5:00 PM**
  Session 2- 6:00 PM to 8:00 PM

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**
- **QR Code:**