### 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 GBPIET, Pauri, Uttarakhand

Govind Ballabh Pant Institute of Engineering & Technology, Pauri (Garhwal) is an Engineering Institute established by the Government of Uttar Pradesh in 1989 for imparting Engineering Education and promoting technological environment of Garhwal region, the state and country. The institute has always been in tune to the practical problems and priorities of present scenario of the world. And as a panacea, it aims at shaping engineers, whose number can be at par with their counter parts anywhere in the country.

### Faculty Development Programme On Advancement in IoT using Artificial Intelligence and Machine Learning

#### The Department of Electronics & Communication

**Engineering** is offering this course to provide participants with a comprehensive understanding of how IoT, Artificial Intelligence (AI), and Machine Learning (ML) are utilized to develop and enhance autonomous systems across various industries.

Through a blend of theoretical concepts, hands-on projects, and real-world case studies, participants will explore IoT models, algorithms, and frameworks designed specifically for autonomy in systems such as self-driving vehicles, drones, medical imaging, and robotics.

Who can attend: Faculty members from colleges and universities are encouraged to participate. The course is also open to students, recent graduates, researchers, and industry professionals working in related fields.

#### **Important Dates:**

Last Date of Online Registration: 07 May 2025 FDP Dates: 08/05/2025- 22/05/2025

#### **Contact us:**

Dr. A.R.Verma Email: <u>arv06ei03@gmail.com</u> ; M- 9557331937 Mr. Pushkar Praveen Email:<u>pushkarcdac11@gmail.com</u> ; M- 8527069548

Mr. Durgesh Kushwaha : 7898670354 academy@iiitdmj.ac.in, eict@iiitdmj.ac.in Faculty Development Programme On Advancement in IoT using Artificial Intelligence and Machine Learning

#### Jointly Organized by



G.B. Pant Institute of Engineering & Technology, Pauri, Uttarakhand and Electronics and ICT Academy IIITDM Jabalpur



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



Faculty Development Programme On Advancement in IoT using Artificial Intelligence and Machine Learning 08/05/2025- 22/05/2025 (online mode)

#### Patron

Prof. Dhananjay Singh Director, GBPIET, Pauri

### **Coordinators**

- Dr. Manoj Kumar, GBPIET, Pauri manoj.electro@gmail.com
- Dr. A.R. Verma, GBPIET, Pauri <u>arverma06ei03@gmail.com</u>
- Mr. Pushkar Praveen, GBPIET, Pauri pushkarcdac11@gmail.com
- Dr. Neelam Dayal, IIITDM, Jabalpur <u>neelam.dayal@iiitdmj.ac.in</u>

### **Resource Persons**

This FDP will be led by eminent resource persons from the IITs, NITs, IIITs as well as renowned professionals from the industries.

- Prof. Aprajita Ojha, IIITDM, Jabalpur
- Prof. A.K. Wadhwani, MITS, Gwalior
- Prof. Ayoub Khan, University of Bisha, Saudi Arebia
- Dr. Rajib Kumar Jha, IIT, Patna
- Dr. Sudhir Kumar, IIT, Patna
- Dr. J.P. Singh, NIT, Patna
- Dr. S.J.Nanda, MNIT Jaipur
- Dr. Rahul Mishra, IIT Patna

## **Course Contents**

- Evolution & Technologies used in IoT
- Communication technologies used for IoT
- IoT and next generation communication Protocols
- IoT and ML for Biomedical Signal processing
- Edge computing and IoT
- Real-time Data Processing and Anomaly Detection
- AI-driven Predictive Maintenance and Smart Automation
- IoT Security and Privacy Challenges in AI-based Systems

## **Hands-On Sessions**

We have designed Practice Sessions that aid the participants in understanding different applications in real-world applications and development of research techniques for each of the previous topics.

## **Programme Features**

- 40 hours of instructor-led, live, online training with hands-on learning and interactive Q&A sessions. Participants may also attend lab sessions in person.
- Training resources include a soft copy of study materials, training presentations (PPTs), recorded sessions, and project source code.
- E-certificates will be issued to participants who attend more than 70% of the sessions and successfully complete the final assessment.
- Mode of Conduction: **Online**

# **Registration Details**

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

https://forms.gle/b7k5SLZhBiZLfUJJ6

- Registration fee: 500/ for online participation
- Last Date for Registration: 07 May 2025
- Seats are Limited to 50\* only (\*On a first comefirst serve basis)

# **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:

