

## 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.



### About ABV-IIITM Gwalior

Atal Bihari Vajpayee-Indian Institute of Information Technology and Management, Gwalior, is a premier institution for higher education and research in the fields of information technology and management. Established by the Government of India, it focuses on grooming professionals with a blend of technical expertise and managerial skills. The institute offers undergraduate, postgraduate, and doctoral programs, fostering innovation and entrepreneurship among its students. With state-of-the-art facilities, experienced faculty, and industry collaborations, ABV-IIITM Gwalior aims to produce leaders capable of addressing contemporary challenges in technology and management domains.

## Online Faculty Development Programme

On

### Intelligent and Sustainable Communication Technology for 6G and Beyond Networks

This course offers a detailed analysis of cutting-edge advancements in AI-driven network design, focusing on the development of intelligent, scalable, and energy-efficient communication infrastructures for 6G and emerging beyond-6G networks. Participants will explore advanced techniques for resource optimization and enhanced connectivity, specifically examining the application of AI to achieve seamless integration of intelligent reflecting surfaces (IRS) with cognitive radio (CR) and non-orthogonal multiple access (NOMA). Through practical examples and hands-on, the course emphasizes the development of sustainable and efficient network ecosystems for future communication paradigms.

**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:** 8<sup>th</sup> June 2025

**FDP Dates:** 10<sup>th</sup> June to 19<sup>th</sup> June 2025

### Coordinators:

**Dr. Binod Prasad, ABV-IIITM Gwalior**

**Dr. Vinal Patel, ABV-IIITM Gwalior**

**Dr. Satish Kumar Tiwari, IIITDM Jabalpur**

**Contact us:**

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**Mr. Vishwash Srivastava : 9926926054**

## Faculty Development Programme On

### Intelligent and Sustainable Communication Technology for 6G and Beyond Networks

Jointly Organized by  
**ABV-IIITM Gwalior**



विश्वजीविनामृतं ज्ञानम्

and

**Electronics and ICT Academy  
IIITDM Jabalpur**



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



## Faculty Development Programme On

### Intelligent and Sustainable Communication Technology for 6G and Beyond Networks

**Date: 10<sup>th</sup> June to 19<sup>th</sup> June 2025 (online)**

#### Resource Persons

- Prof. Shankar Prakriya, IIT Delhi
- Prof. Ratnajit Bhattacharjee, IIT Guwahati
- Dr. Aniruddha Chandra, NIT Durgapur
- Dr. Pranabesh Maji, CEERI Pilani
- Dr. Munesh Singh, IIITDM Jabalpur
- Dr. Satish Kumar Tiwari, IIITDM Jabalpur
- Dr. Binod Prasad, ABV-IIITM Gwalior
- Dr. Vinal Patel, ABV-IIITM Gwalior
- Dr. I.A. Ansari, ABV-IIITM Gwalior
- Dr. Pratik Chakraborty, IIIT Kalyani
- Dr. Pragya Swami, ABV-IIITM Gwalior

#### Coordinators

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**PDPM IIITDM Jabalpur**

## Course Contents

- Core principles of Wireless Communication.
- The architectural framework and standards of 6G networks.
- The basic theories and implementations of Machine Learning.
- Practical applications of Machine Learning within Wireless Communication.
- Cognitive Radio Networks and their adaptive capabilities.
- Modern Multiple Access Techniques.
- The emerging field of IRS-assisted Wireless Communication.
- Leveraging Deep Learning for Channel Estimation.
- Recent innovations in Antenna Design.

## Hands-On Sessions

- Hands on Session on Machine Learning (ML) aided spectrum sensing in CR.
- Hands on Session on Resource allocation using Deep Reinforcement Learning (DRL) in underlay communication.
- Hands on Session on IRS phase tuning for IRS assisted CRN.
- Hands on Session on channel estimation using Deep Learning (DL)

## Programme Features

- Application of artificial intelligence in various applications of Network Systems.
- Opportunities to connect with experts in the field.
- Instructor-led rigorous hands-on sessions with Online (live streaming) sessions.
- Certificate on successful completion with full access to the course material.

## Registration Details

- Registration link: [Registration](#)
- Registration fee: 500 INR/- (For Online)
- Last Date for Registration: **8<sup>th</sup> June 2025**

**Seats will be allocated on a first-come, first-served basis. Candidates will be issued satisfactory certificates on successful completion of the course.**

## Online Payment Details

- **Internet banking**

Beneficiary Name	ABVIIITM FDP ACCOUNT
Bank Name	Bank of India
A/C No.	945210110009380
IFSC Code	<b>BKID0009462</b>



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