

About Electronics & ICT Academy at 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. In addition to the faculty development programmes (FDPs) on fundamental and advanced topics in electronics, information and communication technologies, the Academy conducts customized training programmes for students, corporate sectors and research promotion workshops in emerging areas. The Academy is identified by the MeitY as the central hub of activities on training, internships, research, and consultancy programmes.

About PDPM IITDM Jabalpur

PDPM IITDM Jabalpur was established in 2005 with a focus on education and research in IT-enabled Design and Manufacturing. Since its inception, PDPM IITDM Jabalpur has been playing a vital role in producing quality human resources for contribution to India's mission of inclusive and sustainable growth. The Institute offers undergraduate, postgraduate and PhD programmes in Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, Design and PhD programmes in Mathematics, Physics and Literature. Further, the Institute offers an undergraduate programme in Smart Manufacturing. Under IIT act, the Institute has been declared as an Institute of National Importance. The Institute campus is developed on 250 acres of land close to Dumna Airport, Jabalpur. The Institute is 10 kms from the main railway station and 5.5 kms from Dumna Airport, Jabalpur.

Faculty Development Programme

5G & B5G Wireless Technologies with Simulations and Hands-on Training

The course is designed to provide participants with in-depth knowledge of emerging 5G and B5G technologies covering basics of wireless communication such as fading, bit-error-rate and outage analysis. Further, performance evaluation of emerging technologies such as NOMA, RIS, Physical layer security, visible light communication, semantic communication etc. will be covered. Emphasis will be placed on hands-on sessions to design, simulate, and implement 5G technologies using MATLAB, LabVIEW, and 5G use case labs.

Who can attend: The Programme is open to faculty from all colleges, universities, and technical and professional institutions. Students, fresh graduates, researchers, and industry personnel working in allied disciplines can also attend.

Important Dates

Last Date of Online Registration: **March 12, 2026**

FDP Dates: **March 14-21, 2026**

Coordinators

Dr. Matadeen Bansal, ECE, IITDM Jabalpur

Dr. Mahendra Shukla, IT, IITM Gwalior

Dr. Shikha Maurya, ECE, IIT Surat

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Faculty Development Programme

5G & B5G Wireless Technologies with Simulations and Hands-on Training

March 14-21, 2026 (Online mode)



Electronics and ICT Academy, Phase II



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



PDPM Indian Institute of Information Technology,
Design and Manufacturing, Jabalpur
Dumna Airport Road, Jabalpur 482005

Faculty Development Programme

5G & B5G Wireless Technologies with Simulations and Hands-on Training

March 14-21, 2026 (Online mode)

RESOURCE PERSONS

- Prof. Aditya Trivedi, IIITM Gwalior
- Prof. Neetesh Purohit, SGSITS Indore
- Dr. Mahendra Shukla, IIITM Gwalior
- Dr. Anand Singh Rajpoot, PDPU Gandhinagar
- Dr. Shikha Maurya, IIIT Surat
- Dr. Prabhat Sharma, NIT Nagpur
- Dr. Radhika Gaur, IIIT Allahabad

COURSE COORDINATORS

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Course Contents

- 5G and B5G goals and overview of key technologies.
- Introduction to 5G standard and 5G use case lab
- Random variables and wireless fading channels
- NOMA and its performance evaluation
- Cooperative and cognitive NOMA
- Semantic Communication for 6G
- NOMA enabled semantic communication
- Visible light communication for B5G.
- Physical layer security.
- Wireless communication through intelligent reflective surfaces (IRS).
- MATLAB-based wireless channel modelling, BER evaluation and outage analysis.

Programme Features

- Interactive lectures and hands-on workshops conducted by leading academicians, industry professionals, and domain experts
- 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 – Please fill out registration using the following link:
<https://forms.gle/CG7gs2ANeGbCM74JA>
- Registration fee: 500 INR/- (For Online)
- Last Date for Registration: **March 12, 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**

- **QR CODE**

