

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 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.

Faculty Development Programme

On

Next-Generation Computing: Blockchain, Post-Quantum Cryptography

This course bridges the gap between decentralized technologies and the emerging era of quantum-secure computing systems. The ten-day program covers the fundamentals of blockchain and distributed systems, introduces key concepts in quantum computing and explores post-quantum cryptographic techniques to secure future digital infrastructure. Participants will understand how quantum advances may threaten existing cryptography and how quantum-resistant solutions can protect next-generation decentralized platforms.

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: 17-July-2026

FDP Dates: 20-July-2026 to 29-July-2026

Coordinators:

Dr. Ashish Singh Parihar,
IIITDM Jabalpur

Dr. Amrendra Singh Yadav,
ABV-IIITM Gwalior

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Faculty Development Programme

On

Next-Generation Computing: Blockchain, Post-Quantum Cryptography

July 20-29, 2026 (Online mode)

Jointly Organized by

**Electronics and ICT Academy
IIITDM Jabalpur**



and

ABV-IIITM Gwalior



विश्वजीवनामतं ज्ञानम्

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



Faculty Development Programme On

Next-Generation Computing: Blockchain, Post-Quantum Cryptography

Date: 20-July-2026 to 29-July-2026 (online)

Resource Persons (Tentative)

- Prof. Dharmender Singh Kushwaha (MNNIT Allahabad)
- Dr. Amrendra Singh Yadav (ABV-IIITM Gwalior)
- Dr. Santosh Singh Rathore (ABV-IIITM Gwalior)
- Dr. Ashish Singh Parihar (IIITDM Jabalpur)
- Dr. Debanjan Sadhya (ABV-IIITM Gwalior)
- Dr. Awaneesh Kumar Yadav (IIT BHU)
- Dr. Rohit Kumar Upadhyay (QNu Labs)
- Dr. Avadh Kishor (ABV-IIITM Gwalior)
- Dr. Vijayant Pawar (Bennett University)
- Dr. Manu Vardhan (NIT Raipur)
- Other faculty members from IITs, IIITs, NITs, and Industry experts.

Coordinators

Dr. Ashish Singh Parihar

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Dr. Amrendra Singh Yadav

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Course Contents

- Blockchain Fundamentals: Core principles of blockchain, decentralized systems, and consensus mechanisms with key applications.
- Consensus Mechanisms in Blockchain Networks Study of Proof of Work (PoW), Proof of Stake (PoS), PBFT, and modern consensus models.
- Applications of Blockchain in Emerging Industries: Use cases in finance, healthcare, supply chain, digital identity, and governance..
- Quantum Computing Concepts: Basics of quantum computing, including qubits, quantum algorithms, and computational advantages.
- Quantum Algorithms and Computational Advantages: Overview of Grover's Algorithm, Shor's Algorithm, and quantum.
- Post-Quantum Security: Impact of quantum computing on classical cryptography and emerging quantum-resistant techniques.

Hands-On Sessions

- Implement basic Ethereum Machine.
- Smart Contracts and their implementations.
- Decentralized applications (DApps).
- Web3 ecosystem and NFTs and tokenization.
- Introduction to Quantum Computing using Qiskit.
- Hands-on Quantum Circuit Design
- Quantum Computing Simulation using IBM Quantum Experience.

Programme Features

- Lectures and demonstrations by domain experts covering real-world challenges.
- Opportunities to connect with experts in the field.
- Instructor-led rigorous hands-on 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/ioAE18SrR87kFnVh9>
- Registration fee: INR 500 for online participation
- Last Date for Registration: **17-July-2026**

Online Payment Details

- **Internet banking**

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

- **UPI ID: iiitdmj@indianbk**
- **QR Code:**

