

Faculty Development Programme Blockchain Security and Performance

Sept 01 - 12, 2026

(10:30 AM - 12:30 PM and 2 PM - 4 PM) live streaming

Jointly organized by Electronics and ICT Academies
Established by the Ministry of Electronics and Information Technology, Govt. of India

Objectives (Electronics & ICT Academy-Phase II)

1. To conduct specialized FDPs for faculty/mentor training in line with the vision of MeitY by promoting emerging areas of technology and other high-priority areas that are pillars of both the "Make in India" and the "Digital India" programs.
2. To promote synergy and collaboration with industry, academia, universities and other institutions of learning, especially in emerging technology areas.
3. To support the National Policy on Electronics 2019 (NPE 2019) which envisions positioning India as a global hub for ESDM sector, including MeitY Schemes/policies such as Programme for Semiconductors and Display Fab Ecosystem; India AI; National Programme on AI, Production Linked Incentive Scheme for IT Hardware & Large-Scale Electronics Manufacturing; EMC; SPECS; Chips to System (C2S); etc.
4. To promote standardization of FDPs through Joint Faculty Development Programmes.
5. To support the vision of the National Education Policy (NEP 2020), which mandates that Indian educators go through at least 50 hours in professional development programmes/year.

Programme Coordinators

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An intensive 40 Hour Training Programme in online mode is being organized for faculty and doctoral students of engineering and technological institutions. It is also open to working professionals from industry/organizations. The main theme of training program will be oriented around exploring the methods for Blockchain Security and Performance, focusing on secure decentralized systems, smart contract security, consensus mechanisms, scalability challenges, performance optimization techniques, and emerging trends in blockchain technologies.

Resource Persons:

Speakers from IITs, NITs, and IIITs, together with practical perspectives from industrial leaders

Programme Modules:

A Broad Overview of Blockchain Technology: Introduction to Blockchain, Decentralization, Trust, Consensus, and Web3 Ecosystem, Bitcoin Blockchain, Proof-of-Work, Mining Security, Forks, Double Spending, and 51% Attacks

Cryptographic Foundations for Blockchain: Hash Functions, Digital Signatures, Merkle Trees, Commitments, and Randomness, Ethereum Architecture: Accounts, Transactions, Gas, EVM, Smart Contracts, and Security Model, Smart Contract Vulnerabilities: Reentrancy, Integer Issues, Front-Running, Oracle Attacks, DoS, and Access Control Flaws

Blockchain Consensus Protocols, Scalability and Performance, Enterprise Blockchain with Hyperledger Fabric as a Case Study, Privacy-Preserving Blockchains: Bitcoin Traceability, Monero, Zcash, Stealth Addresses, Ring Signatures, and Confidential Transactions

Quantum Computing Attacks on Blockchain, Post-Quantum Security for Blockchain, Blockchain Security in Fintech, Electric Vehicle ISO15118 Security using blockchain

Registration Link: <https://forms.gle/7KZN12TQpzGggqBM8>

Beneficiary Name -PDPM IITDM Jabalpur

Bank Name - INDIAN BANK

A/C No. - 50018692852

IFSC Code - IDIB000M694

Last Date of Registration – 30 August 2026

Registration fee is nonrefundable

Certification Fee: Academic (Faculty / Students): ₹ 885/-

Industry Professionals / Others: ₹ 1770/-

Participants from the Rest of the World USD: US\$ 60



Contact for queries: Mr. Durgesh Kushwaha 789 867 0354

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