

FACULTY DEVELOPMENT PROGRAMME BLOCKCHAIN SECURITY & PERFORMANCE

Septmeber 1 – 11, 2026

(10:30 AM - 12:30 PM & 2:00 PM - 4:00 PM) · Online Live Streaming

Jointly organized by Electronics and ICT Academies

IIIT Jabalpur, IIT Kanpur, MNIT Jaipur, NIT Patna and IIT Roorkee Established
by the Ministry of Electronics and Information Technology (MeitY), Govt. of India

Patron: Prof. P.K. Jain, *Director, National Institute of Technology Patna*

EICT Academy-Chief Investigator: Prof. M. P. Singh · **Co-CI:** Dr. Bikash Chandra Sahana

Coordinators of the Course: Prof. M. P. Singh · Dr. Jyoti Prakash Singh

ABOUT NIT PATNA

Established in 2004, NIT Patna is the 18th NIT under the Ministry of Education, Govt. of India. With roots dating back to 1886, it is the 6th oldest engineering institute in India. The campus, situated on the picturesque southern bank of the Ganges near the historic Gandhi Ghat, combines architectural heritage with natural beauty. NIT Patna ranked 53rd in the NIRF Rankings 2025 and is celebrated for academic excellence, dynamic curriculum design, and exceptional placement records.

OBJECTIVES

- Conduct specialized FDPs aligning with MeitY's vision for "Make in India" and "Digital India".
- Promote functional synergy between industry and academia.
- Support the National Policy on Electronics 2019 (NPE 2019).
- Align with NEP 2020 professional growth mandates.

PROGRAMME MODULES

- **Overview & Foundations:** Trust, Consensus, Web3 Ecosystem, Bitcoin, PoW, Mining Security, Forks, Double Spending, and 51% Attacks.
- **Cryptographic Foundations:** Hash Functions, Digital Signatures, Merkle Trees, Commitments, and Randomness.
- **Ethereum Architecture:** Accounts, Transactions, Gas, EVM, Smart Contracts, and Security Models.
- **Vulnerabilities:** Reentrancy, Integer Issues, Front-Running, Oracle Attacks, DoS, and Access Control Flaws.
- **Enterprise & Privacy Systems:** Hyperledger Fabric Case Study, Bitcoin Traceability, Monero, Zcash, Stealth Addresses, Ring Signatures, and Confidential Transactions.
- **Advanced Security Trends:** Quantum Computing Attacks, Post-Quantum Security, Fintech Security, and Electric Vehicle ISO15118 Security.

REGISTRATION DETAILS

Registration Link:

<https://forms.gle/J5H5HVe6YgPuD7MM6>

Last Date to Apply: 31st August, 2026

Note: Registration fee is non-refundable.

Certification Fees:

- Academic Faculty / Students: 885/-
- Industry Professionals / Others: 1770/-
- International Participants: US\$ 60

PROGRAMME OVERVIEW

An intensive 40-hour online training programme organized for faculty and doctoral students of engineering and technological institutions, as well as industry professionals. The course focuses on exploring core methodologies for secure decentralized architectures, smart contract analysis, consensus reliability, scalability barriers, and emerging optimization paradigms in blockchain ecosystems.

RESOURCE PERSONS

Speakers drawn primarily from premier institutions including IITs, NITs, and IIITs, alongside expert engineering perspectives and practical framework insights contributed by top industrial leaders.

BANK PAYMENT DETAILS

Beneficiary: E and ICT Academy
Bank Name: INDIAN BANK
Branch: NIT PATNA
Account No: 50380476798
IFSC Code: IDIB000B810
UPI ID: eictacademy@indianbk



Scan to Pay via UPI

Contact for Queries:

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