



**E & ICT Academy MNIT Jaipur**  
<http://www.mnit.ac.in/eict>

# Joint Online Faculty Development Programme

# BLOCKCHAIN

## TECHNOLOGIES AND APPLICATIONS

**Dates**  
**January 3 – 8, 2022**  
(Monday to Saturday)

**Timings**  
**10:00 AM – 1:00 PM**  
**2:00 PM – 5:30 PM**  
(6.5 hours a day)

**Chairman, Advisory Board, EICT Academy &  
Director MNIT Jaipur**  
Prof. Ajay Pal Singh Rathore

**Honorary Academic Chair, EICT Academy**  
Prof. Vishwanath Sinha

**Chief Investigator, EICT Academy**  
Prof. Vineet Sahula, ECE

**Co- Chief Investigators, EICT Academy**  
Prof. Lava Bhargava, ECE  
Dr. Pilli Emmanuel Shubhakar  
Dr. C. Periasamy, ECE  
Dr. S. J. Nanda, ECE  
Head, ECE (Prof. Vijay Janyani)  
Head, CSE (Dr. Dinesh Gopalani)

### Preamble (Electronics & ICT Academy)

Government of India had announced a National Policy on Skill Development, which has set a target of skilling 500 million people by 2022 in the domain of Electronics & IT. Under the plan scheme of “Digital India Manpower Development”. MeitY has set up seven (07) Electronics and ICT Academies as a unit in 03 IITs, 03 NITs and 01 IIIT with an objective of faculty/mentor development/up gradation in the areas related to Electronics & ICT leading ultimately to improved employability of graduates/diploma holders. MNIT Jaipur has set up such an academy for providing specialized training to faculty and industry persons in the states/UTs of Rajasthan, Gujarat, Daman & Diu, Dadra Nagar Haveli.

### (A) Issues-

1. IT Hardware and Electronics Manufacturing industry- availability of properly trained, skilled and qualified manpower
2. Number of quality PhDs generated in IT / Computer Science is very low
3. In E & ICT domain- there is a very high degree of obsolescence of existing technologies and faster emergence of newer technologies

### (B) Approach-

1. A focused faculty training/updation programme for IT, Electronics and related sectors
2. Spreading up and continuous updation regarding Emerging Technology
3. Training and consultancy services for Industry
4. Design, Develop and Deliver specialized modules for specific research areas and Industry
5. Providing advice and support for technical incubation and entrepreneurial activities

An intensive one-week online certification programme on **Blockchain Technology and Applications** is being organized jointly by **PDDM IIITDM Jabalpur, MNIT Jaipur, IIT Kanpur, IIT Roorkee, and NIT Patna** for the **Faculty Members of Engineering and Technological Institutions**. It is also open to **Industry Personnel and Doctoral Students** of Indian organizations. The course will be **Instructor led Online sessions** combined with rigorous hands-on sessions. Great opportunity to connect with experts from academia, industry and government. A **Certificate of Completion** on successful completion of the course **with full access to the course material**.

### Experts / Speakers

**Prof. Sandeep Shukla, IIT Kanpur**      **Prof. Aparajita Ojha, IIITDMJ**  
**Dr Amey Karkare, IIT Kanpur,**      **Shri Santosh Mishra, IAS**  
**Dr Emmanuel Pilli, MNIT Jaipur**      **Dr Sushma Ruj, ISI Kolkata**  
**Dr Mani Madhukar, IBM, India**      **Shri Ras Dwivedi, IIT Kanpur**  
**Shri Samir Jain, IIITDM Jabalpur**

### Course Content:

**Introduction to Blockchain, Blockchain Evolution, Bitcoin Blockchain, Consensus Mechanisms, Proof of Work, Ethereum, Forks in Blockchain, Smart Contracts, Solidity language, Remix Environment, Decentralized Applications and Decentralized Autonomous Organizations Truffle, Ganache and Metamask for Network based Dapp Development Permissionless & Permissioned/ Private & Enterprise level Blockchains Hyperledger Fabric & Chaincode, Storage in Blockchain, Data Encryption, Cryptographic Protocols – SHA, RSA and ECC Algorithms Security and Privacy issues in Blockchain, Government Services, Use cases, Challenges and Solutions, Research trends in Blockchain**

### Registration:

Registration is open to faculty, industry persons, doctoral, postgraduate and graduate students. Participants will be admitted on first-come first-served basis. Register online at - <http://online.mnit.ac.in/eict/>

### Course and Certification Fee:

#### Indian Participants –

Academic (Student / Faculty): ₹ 500/-,      Industry / Others: ₹ 1,000/-

#### Foreign Participants –

#### SAARC/African countries

Academic (Student / Faculty): ₹ 500/-,      Industry / Others: ₹ 1,000/-

#### Rest of the countries

Fee - US\$ 60 or British £ 50



**Ministry of Electronics and  
Information Technology**  
**Government of India**

**Joint Programme Coordinator**  
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