



MNNIT Allahabad, India



IIT Delhi, India

## IIT Delhi and MNNIT Allahabad are Jointly Organizing a SPARC Workshop on

### Introduction to Emerging Information and Communication Technology: Blockchain and its Implications

July 16 to 20, 2024 (One Week)

Venue: Department of Management Studies, IIT Delhi

#### About SPARC:

*Scheme for Promotion of Academic and Research Collaboration* (SPARC) aims at improving the research ecosystem of India's Higher Educational Institutions by facilitating academic and research collaborations between Indian institutions and the best institutions in the world from 28 selected nations to jointly solve problems of national and/or international relevance.

#### Programme Overview:

This workshop serves as a primer to blockchain technology, tailored for participants new to the concept or seeking foundational knowledge. It covers the basics of blockchain, from its decentralized nature and cryptographic underpinnings to its applications beyond cryptocurrencies, such as smart contracts. Each session is structured to build upon the last, gradually deepening the participants' understanding while interspersing case studies to reinforce learning. This comprehensive approach aims to equip attendees with a solid foundation in blockchain technology, enabling them to grasp its implications for various sectors and its potential to drive innovation.

The course will be delivered in face-to-face mode only. Interested participants can join the course at the Department of Management Studies, Indian Institute of Technology Delhi in offline mode (face-to-face). There is no course fee/ registration fee to attend the course. However, all the participants need to fill up a registration form showing their interest in attending the course. A maximum number of 50 participants will be allowed. The shortlisting of candidates will be done on a first come first serve basis. The course completion certificate will be given to the participants on the evaluation of the course and those having more than 80% attendance.

#### Course Objectives

1. To establish a foundation in the principles and mechanics of blockchain technology.
2. To delve into the cryptographic techniques that underpin blockchain technology and the concept of decentralization, highlighting its significance and applications.
3. To encourage critical thinking about blockchain technology's potential, limitations, and applicability across various sectors.
4. To illustrate the practical applications of blockchain technology through detailed case studies and real-world examples.
5. To explore recent innovations and developments within the blockchain space, and other emerging technologies.

#### Learning Outcomes

After completing this course, the participants will be able to:

1. Understand the structure and components of a blockchain along with its potential use cases.
2. Understand and explain the role of cryptography in blockchain technology, specifically how it secures data and ensures the integrity of transactions.
3. Recognize the major challenges in implementing blockchain technology across various sectors and propose viable solutions or approaches to overcoming these challenges.
4. Understand the potential future developments of blockchain technology and its integration with other emerging technologies.



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**Tentative Course Schedule:**

July 16, 2024	Lecture Module 1 (2 Hours): Introduction to Blockchain Lecture Module 2 (2 Hour): Blockchain: Cryptography and Decentralisation
July 17, 2024	Lecture Module 3 (2 Hours): Impact of Blockchain on Organizations Lecture Module 4 (2 Hours): Blockchain and Supply Chain Management
July 18, 2024	Lecture Module 5 (2 Hours): Impact of Blockchain Technologies on Business Models and Marketing Lecture Module 6 (2 Hours): Blockchain for Education, Grading and Certification
July 19, 2024	Lecture Module 7 (2 Hours): Blockchain and Cybersecurity Lecture Module 8 (2 Hours): Confronting the Challenges: GenAI in Academic Research
July 20, 2024	Lecture Module 9 (3 Hours): Blockchain and Land Titling Lecture Module 10 (3 Hours): Concluding Remarks and Future Prospects of Blockchain Technology

**Eligibility to participate:**

Working Professionals, Faculty Members, Researchers, Students at all levels (Undergraduate / Postgraduate / PhD) interested in learning about Blockchain and its Applications.

**Registration:**

There is no course fee. All the participants need to fill-up and submit a form given in the following link: <https://forms.gle/cBNRL8qnL4KRzzT87>



**Subject Experts:**

Prof. Yogesh K. Dwivedi, Swansea University, Wales, UK  
Prof. G. P. Sahu, MNNIT Allahabad, India

**International Expert**



**Yogesh K. Dwivedi** is a Professor of Digital Marketing and Innovation and Founding Director of the Digital Futures for Sustainable Business & Society Research Group at the School of Management, Swansea University, Wales, UK. Professor Dwivedi is also currently leading the *International Journal of Information Management* as its Editor-in-Chief. His research interests are at the interface of Information Systems (IS) and Marketing, focusing on issues related to consumer adoption and diffusion of emerging digital innovations, digital government, and digital and social media marketing particularly in the context of emerging markets. Professor Dwivedi has published more than 600 articles in a range of leading academic journals and conferences that are widely cited (more than 70 thousand times as per Google Scholar). He has been named on the annual Highly Cited Researchers™ 2020, 2021 and 2022 lists from Clarivate Analytics. Professor Dwivedi is an Associate Editor of the *Journal of Business Research*, *European Journal of Marketing*, and *Government Information Quarterly*, and Senior Editor of the *Journal of Electronic Commerce Research*.



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### **About Indian Institute of Technology Delhi**

Indian Institute of Technology Delhi is one of the 23 IITs created to be Centres of Excellence for training, research and development in science, engineering and technology in India. Established as College of Engineering in 1961, the Institute was later declared as an Institution of National Importance under the “Institutes of Technology (Amendment) Act, 1963” and was renamed as “Indian Institute of Technology Delhi”. It was then accorded the status of a Deemed University. Since its inception, over 60000 have graduated from IIT Delhi in various disciplines including Engineering, Physical Sciences, Management and Humanities & Social Sciences. Of these, nearly 5070 received Ph.D. degrees. The number of students who graduated with B.Tech. degree is over 15738. The rest obtained Master’s Degree in Engineering, Sciences and Business Administration. These alumni today work as scientists, technologists, business managers and entrepreneurs. There are several alumni who have moved away from their original disciplines and have taken to administrative services, active politics or are with NGOs. In doing so, they have contributed significantly to building of this nation, and to industrialization around the world.

### **About Motilal Nehru National Institute of Technology Allahabad**

Motilal Nehru National Institute of Technology Allahabad, Prayagraj (MNNIT) is an Institute with total commitment to quality and excellence in academic pursuits. It was established as one of the seventeen Regional Engineering Colleges of India in the year 1960 as a joint enterprise of the Government of India and the Government of Uttar Pradesh and was an associated college of the University of Allahabad, which is the third oldest university in India. With over 64 years of experience and achievements in the field of technical education, having traversed a long way, on June 26, 2002 MNREC was transformed into the National Institute of Technology and Deemed University fully funded by Government of India. With the enactment of National Institutes of Technology Act-2007, the Institute has been granted the status of the Institution of National Importance by the Special Act of Parliament w.e.f. August 15, 2007. The Institute offers nine B.Tech., nineteen M.Tech. Degree Programmes, MCA, MBA, M.Sc. (Mathematics and Scientific Computing), M.S.W., and PhD programs ([www.mnnit.ac.in](http://www.mnnit.ac.in)).

#### **Venue:**

Department of Management Studies, Vishwakarma Bhawan, Indian Institute of Technology Delhi, New Delhi.

#### **Accommodation:**

There is no accommodation facility at IIT Delhi.

#### **Course Coordinators:**

Prof. G. P. Sahu  
(Indian PI, SPARC Research Project)  
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Prof. P. Vigneswara Ilavarasan  
(Indian Co-PI, SPARC Research Project)  
Professor, Department of Management Studies,  
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#### **Student Coordinators:**

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