About The Course

The short-term course on **Blockchain and Cybersecurity for Cyber Threat Prevention** will cover two important technologies: Blockchain and Cybersecurity. Blockchain technology has found more attraction in the current digital era since its decentralised architecture significantly impacts the protection of digital infrastructure through the immutable property of blockchain technology. Cybersecurity is essential in protecting digital data in the context of confidentiality and integrity. Further, data access control is also managed securely through different public key cryptosystems. The course covers both cryptography and Blockchain simultaneously and explores how combinational approaches may be fruitful for enhancing security. The key focus of this short-term course will be to conduct several lecture series by eminent speakers from India and abroad in the thrust area of information security and Blockchain. In addition, some hands-on sessions will be conducted to explore how Blockchain and various cryptographic mechanisms can enhance the conventional security framework. Such courses will be fruitful for participants who want to carry out research to develop robust applications in various domains using cryptographic techniques and blockchain frameworks.

Programme Highlights

- Introduction to Cybersecurity
- Modern Symmetric-Key Ciphers and Their Cryptanalysis
- Asymmetric-key cryptography and Their Cryptanalysis
- Blockchain Fundamentals for Security
- Blockchain-based User Authentication and Data-sharing Framework
- Blockchain Frameworks for Multimedia Protection
- Hands-on Demonstration & Interactive Sessions

Salient Features of the Course

- The short-term Course will be conducted over a period of **6 days**, with each day comprising **six hours of sessions**. The program will include expert lectures, practical hands-on sessions, and other engaging activities.
- An **MCQ-based assessment** examination will be conducted at the end of the course.
- This course will be considered for fulfillment of the requirements as laid down by UGC for the **Career Advance Scheme**.
- Application/registration is **free of cost**.
- **Participants' Certificate** will be issued to those who have attended all the sessions and have qualified for the assessment examination.
- **Campus Accommodation for outstation participants** may be arranged on a first-come, first-served basis (on payment basis).
- **Complimentary food and refreshments** will be provided for the entire duration of the course.

Patron

Prof. Sukumar Mishra
Director, IIT (ISM) Dhanbad

Co-patron

Prof. Chiranjeev Kumar
HOD, Computer Science and Engineering

MMTTC Coordinator

Prof. Mrinalini Pandey

Course Coordinator

Prof. Arup Kumar Pal

Application Procedure

- Participants should first **register** at **https://mmc.ugc.ac.in** as **Participant** using their email ID (if not already registered).
- After successfully logging in, navigate to the Participant **Dashboard**, click on **Apply for Other Programmes**, and select **Short Term Programme/Faculty Development** from the drop-down list under **Apply for**.
- Search and choose **Program Name & Center Name** as "**Indian School of Mines, Dhanbad (07/07/2025 - 12/07/2025)**", select the Short Term Programme **Title** "**Short Term Programme on Blockchain and Cybersecurity for Cyber Threat Prevention**", and complete the application form.
- The nomination letter must be uploaded as the **NOC** on the application submission portal. A sample nomination letter format is **available on the submission page** of the portal.

Application Deadline: 05 July 2025

Registration Fee: Nil

Participants Elligibility Criteria

- Faculty Members at Central / State government educational institutes, Deemed / Deemed to be Institutes, Private Universities, Institute of National Importance, Colleges, and other HEIs.
- Contractual/Adhoc Faculty Members at HEIs
- Faculty Members from professional academic councils

Resource Persons

Eminent experts from premier institutes in India—such as IITs / NITs / IIITs / ISI / Central / State Universities / Research organizations, Industries—as well as reputed institutions abroad, will be joining as resource persons.

Contact Details

Prof. Arup Kumar Pal
Associate Professor, Department of Computer Science and Engineering
Indian Institute of Technology (ISM) Dhanbad
Dhanbad - 826004, Jharkhand, India
✉ arupkrpal@iitism.ac.in
☎ +91 9471191835

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

https://www.iitism.ac.in

IIT (ISM) DHANBAD
1926-2026
LEGACY THAT INSPIRES THE FUTURE.
100 YEARS OF EXCELLENCE IN EDUCATION & RESEARCH

📍 **Program Venue**

Indian Institute of Technology (Indian School of Mines) Dhanbad
Dhanbad - 826004, Jharkhand, India