

ABOUT THE INSTITUTE

The Indian Institute of Technology (Indian School of Mines), Dhanbad formerly known as Indian School of Mines, Dhanbad was formally opened on 09th December 1926, by Lord Irwin, the then Viceroy of India to address the need for trained manpower related to mining activities in the country with disciplines of Mining and Applied Geology. In 1967 it was granted the status of a deemed to be university under Section 3 of UGC Act, 1956. Since its establishment, IIT (ISM), Dhanbad has undergone considerable expansion of its activities and presently it can be considered as a total technology education Institute. Indian Institute of Technology (Indian School of Mines) is the only Institute of its kind in India caters to human resource needs of the nation in the areas of Mining, Petroleum, Mining Machinery, Mineral Engineering and Earth Sciences besides training manpower in the related disciplines of Management, Electrical Engineering, Electronics Engineering, Environmental Science and Engineering, Computer Science and Engineering, Chemical Engineering, Civil Engineering, Applied Science, Humanities and Social Science. The School has linked with reputed Universities and Institutes across the globe and has an alumni base all over the world. The School today is making foray into the newer areas of academic endeavors in tune with the changing times.

ABOUT THE PROGRAMME

The program has been designed to keep in view the diverse aspects of electrical safety issues of the minors and machineries under operations in underground and open-cast mines. Besides the huge production, safety is the first and foremost choice for the miners as well as the machineries used in mines. Also,

the realization of vast potential of its applications in various dimensions of its functioning has been taken into account. So, the topic is quite relevant nowadays for sustainable mines to increase the productivity efficiently and effectively.

PROGRAMME PROFILE

The program is encapsulated in five days and the presentation and reading materials shall be made available by resource persons.

The following modules will be offered in the program:

- Electrical Power supply system in Mines.
- Mining type switchgears, protective devices and relaying scheme.
- Electric shock hazards and its prevention.
- Symmetrical faults analysis and circuit breaker rating.
- Application of Power Electronics in mines and electric drive system.
- Neutral grounding and equipment earthing practices for safe operation of mining equipments.
- Provision of standards and National Electric Code with regard to the general earthing.
- Importance of electrical safety audit, safety management plan in achieving zero accident.
- Principles of flameproof enclosure, IS protection, intrinsic safety.
- Central Electricity Authority Regulation as applied to mines with case studies of fatalities in mines due to electrical causes and ways to mitigate risk.
- Mine instrumentation, signaling and communication in mines.
- Emergency lighting and communication systems for mines in future.

ABOUT THE DEPARTMENT

Department of Electrical Engineering was formed in February 2005. The B.Tech. course in Electrical Engineering has been started in the academic session 2006-2007. As a part of Department of Mining Machinery Engineering, the Electrical Engineering Section was fully functional with teaching and R&D activities from 1975. Along with the B.Tech. in Electrical Engineering, the Department runs M.Tech. in Power Systems Engineering, M.Tech. in Power Electronics and Electrical Drives. The Department also runs Ph.D. programmes. The Department has a history of strong R&D base research activity and it has produced a number of Ph.D. students. It has also published a large number of research papers in foreign and Indian Journals and Conferences.

DURATION

Five days, from **25th–29th May 2024**, 6.0 hours every day.

VENUE

Executive Development Centre (EDC), Indian Institute of Technology (Indian School of Mines), Dhanbad, Jharkhand–826004.

COURSE FEES

- 1) Residential (Accommodation provided): **Rs. 50,000/- per participant** (includes charges towards 5-days accommodation in EDC on twin-sharing basis as per availability, registration kit, course material, certificate, 5-days working lunch, tea & dinner and GST).
- 2) Non-residential (No accommodation): **Rs. 45,000/- per participant** (includes charges towards registration kit, course material, certificate, 5-days working lunch, tea and GST).

REGISTRATION

The registration form duly filled along with the course fees may be sent to the coordinator on or before **15th May, 2024** by **SPEED POST**. The program brochure/registration form may also be available in the institute website (www.iitism.ac.in). Number of participations is limited on first-come-first-serve-basis. Being an educational institute, IIT (ISM) is exempted of Income Tax.

The course fees may be paid through any one of the following :

1) **Demand Draft (DD):** DD in favor of “IIT (ISM) SPECIAL FUND” payable at Dhanbad.

2) **Electronic Transfer:** Electronic transfer may be done to the following bank details:

- i) Name of Bank: Canara Bank
- ii) Branch Name: Saraidhela, Dhanbad
- iii) Account No: 0986101024892
- iv) Account Holder Name: IIT (ISM) SPECIAL FUND
- v) IFSC Code: CNRB0000986
- vi) MICR Code: 826015003

Advanced copies of the duly filled registration form and course fees payment details are to be sent to the **Email ID:** nitai@iitism.ac.in. The course fee is refundable if the program is cancelled due to unavoidable circumstances.

REGISTRATION FORM

EDP PROGRAMME
ON

“ELECTRICAL SAFETY IN SUSTAINABLE MINES: CHALLENGES AND MITIGATION”

25th – 29th May, 2024

Organized by

DEPT. OF ELECTRICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY
(INDIAN SCHOOL OF MINES)
DHANBAD – 826004, JHARKHAND

1. Name: _____
(Capital Letters with Surname)

2. Designation: _____

3. Organization/Institution: _____

4. Office Address: _____

5. Phone (Office) : _____
(Residence): _____

6. Mobile No.: _____

7. Email ID: _____

8. Gender (M/F): _____

9. Payment Details: Payment enclosed

(DD No. _____ Date _____, Drawn
from _____ Amount _____).

Date: _____
Signature

EDP Programme

On

*“Electrical Safety in Sustainable Mines:
Challenges and Mitigation”*

Duration: 25th – 29th May, 2024

Venue: EDC, IIT(ISM) Dhanbad



Organized by

DEPT. OF ELECTRICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY
(INDIAN SCHOOL OF MINES)
DHANBAD – 826004, JHARKHAND

PROGRAMME COORDINATORS

Prof. Nitai Pal, Professor & CI
and
Prof. Pradip Kumar Sadhu, Professor (HAG) & Co-CI

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