

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 9th 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. The 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 endeavours in tune with the changing times.

ABOUT THE PROGRAMME

The programme on “Electrical Safety and Protection in Mines” has been specially designed keeping in view the diverse aspects of electrical safety under the operations of coal machineries in underground and open cast coal mines. Also, the realization of vast potential of its applications in various dimensions of its functioning has been taken into account.

Coal industry produces millions of tonnes of coal and moves earth as well as in million cubic meter every year. Besides this

production, safety is the first choice for the miners as well as machineries used in mines.

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:

- Transmission and distribution of Electrical Power in Mines.
- Mining type switchgears and protective devices.
- Symmetrical faults and circuit breaker rating calculation.
- Protective relaying scheme, shock hazards and prevention.
- Application of Power Electronics in mines and future drives.
- Neutral grounding and equipment earthing practice in mines
- 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.
- Electrical Wheel Drive (EWD) in Dumpers.
- 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.
- Signaling and communication.
- 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.

VENUE

Department of Electrical Engineering Indian Institute of Technology (Indian School of Mines), Dhanbad, Jharkhand – 826004

DATE AND DURATION

Five days, from **17th – 21st December 2017**, 4.5 hours every day.

REGISTRATION

Interested participants should submit their nomination on the prescribed registered form to the coordinators of the program. The course fee amount is Rs. 30,000/- per participant (includes charges towards 5-days accommodation in EDC, registration kit, course material, 5-days working lunch & dinner and GST). Number of participation is limited on first-come-first-serve-basis.

The payment in the form of account payee **Demand Draft** drawn in favour of **“THE REGISTRAR, INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD”** payable at **SBI, ISM Campus Branch, Dhanbad** (Branch Code – SBIN0001641) and duly filled registration form should be sent to the coordinator on or before **30th November, 2017** by **SPEED POST**. Advanced copy of the filled registration form should be sent by **email/fax**. The course fee is refundable if the course is cancelled for unavoidable circumstantial reasons.

REGISTRATION FORM

SHORT PROGRAMME
ON
"ELECTRICAL SAFETY AND PROTECTION IN
MINES"

17th – 21st December 2017

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

Programme

On

"Electrical Safety and Protection in Mines"

Duration:

17th – 21st December 2017



Organized by

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

PROGRAMME COORDINATORS

Dr. Nitai Pal, Associate Professor
and

Prof. (Dr.) Pradip Kumar Sadhu, Professor & Head
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Indian Institute of Technology
(Indian School of Mines)

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