

Short Term Course  
on  
**FIREFIGHTING PRACTICES IN  
MINING INDUSTRY**  
(FPMI-24)  
22<sup>nd</sup> – 26<sup>th</sup> JULY, 2024



**Coordinators**  
**Prof. Devidas S. Nimaje**  
**Prof. B. K. Pal**  
**Prof. D. P. Tripathy**



**Department of Mining Engineering**  
**National Institute of Technology**  
**Rourkela – 769008**

### Introduction

Mine fires in opencast and underground mines are challenging issues in rapidly growing mining industry as they may result in safety risk to miners and infrastructure. Hence, it is imperative to deal surface or deep seated mine fires using effective firefighting practices by direct or indirect means, thereby minimise loss of life, loss of coals/infrastructure due to burning, production losses etc. When a fire occurs, mine workers/fire or rescue brigade not only need to be engaged in extinguishing it and must respond to rescue and recovery operations at the earliest in the fire affected areas.

This course is aimed to enhance knowledge and skill of participants with fundamentals of fire, fire dynamics, usage of firefighting equipment, firefighting methods in opencast and underground mines and stacks, rescue and recovery operations, emergency preparedness and measures to respond swiftly and effectively to deal with fire incidents competently in the mining/allied industry.

### Course content

The course will cover:

- ❖ Concepts and dynamics of mine fire
- ❖ Firefighting equipment/systems in mines
- ❖ Fire risk assessment and management
- ❖ Opencast firefighting methods
- ❖ Underground firefighting methods
- ❖ Fire drills
- ❖ Legislative provisions on prevention and control of mine fires
- ❖ Emergency preparedness and response in dealing with mine fires
- ❖ Fire disasters: case studies
- ❖ Rescue and recovery operations after mine fire

### Course structure

The course will consist of lectures and presentations/demonstrations on firefighting with case studies. The course will be primarily offered by faculty members of NIT Rourkela. Experts from other academic institutions and research organization like IIT's, CIMFR and industry experts may be invited to share their knowledge and experience of firefighting in industry with the course participants. Each session will be followed by interactive Question & Answer session.

### Participation

The course will be useful for the academicians, scientists, consultants, practicing engineers, safety officials and decision makers in mining and allied industries.

### How to send nomination

Please send the names of your nominees with their designations and addresses, e-mail address along with sponsorship certificate to the Course Coordinator preferably before 15.06.2024.

### Accommodation

Limited accommodation is available at NIT Rourkela guest house and shall be booked on prior request on payment basis. Alternatively, there are Luxury hotels available in the city. However, the accommodation in the campus is considered convenient.

### Sponsorship

Sponsorship opportunities for industries are available under three categories.

- **Platinum Sponsor:** Sponsorship fees is Rs.3.00 Lakhs (4 free participants)
- **Gold Sponsor:** Sponsorship fees is Rs.2.00 Lakhs (3 free participants)
- **Silver Sponsor:** Sponsorship fees is Rs.1.00 Lakh (2 free participants)

\*Additional GST @18% shall be applicable as per Govt. of India Rules.

### Course fee

The course fee of this course is **Rs. 30,000.00 (Rupees Thirty thousand only)** per sponsored participant from **industries/academic institution**. Additional **18% GST will be levied as per GOI rules**. The course fee for other institute **students and research scholars** is **Rs. 5,000.00 (Rupees Five thousand only)** per participant.

The course fee is payable by demand draft in favor of " **CONTINUING EDUCATION NIT ROURKELA** " payable at Rourkela or by electronic money. The course fee does not include boarding and lodging or transportation charges. **NIT Rourkela is exempted from Income Tax and while sending the course fee, no TDS should be deducted.**

The registration fees can also be paid directly by account transfer through NEFT/RTGS/IMPS using following Bank details:

**Branch name: SBI, NIT Campus, Rourkela**

**IFSC code: SBIN002109**

**Account Name: CONTINUING EDUCATION NIT ROURKELA**

**Account Number: 10138951784**

**MICR No: 76 9002 007**

**SWIFT Code: SBININBB137**

## Address for communication

For any other information or sending nomination, please write to:

**Prof. Devidas S. Nimaje**  
**Course Coordinator**  
Department of Mining Engineering  
NIT Rourkela-769008 Odisha  
Phone: +91-661-2462604  
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E-mail: dsnimaje@nitrl.ac.in;  
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Link: <https://website.nitrl.ac.in/Home/Events/>

## National Institute of Technology Rourkela

NIT Rourkela is one of the premier national level institutions of repute for technical education in the country and is funded by the Government of India. Government of India has elevated the Regional Engineering College, Rourkela to a deemed university under the name of National Institute of Technology, Rourkela. The main objective of the Institute is to produce quality Engineers and Scientists in Graduate and Post-Graduate levels in various branches of Engineering and Science. The Institute is managed by the Board of Governors of National Institute of Technology (Rourkela) Society and vested with significant degree of administrative and financial autonomy. The campus of the Institute consisting of the academic buildings, halls of residence and staff colony is situated at the eastern end of Rourkela steel city, beyond Sector-1 over an area of 262 hectares of land provided by the Government of Orissa. It is a residential campus offering accommodation to faculty, staff and students. The campus has all the amenities for developing personal, social and academic skills of the student community. NIT Rourkela was ranked 601-800 in the world by the Times Higher Education World University Rankings (Engineering) of 2023 and 59th in Southern Asia University Ranking. In India, it is ranked 16th in Engineering Category by the National Institutional Ranking Framework (NIRF) in 2023.

## Department of Mining Engineering

Established in the year of 1979, the Department of Mining Engineering has grown over the years as one of the pioneer mining education centres in the country. It has played a pivotal role in introducing the modern mining engineering curriculum in India. The department offers undergraduate, postgraduate, and doctoral courses in mining engineering. The department is actively involved in research activities in the areas of spontaneous heating of coal and mine fire, rock mechanics and ground control, mining machinery, underground and surface environment, coalbed methane, mine safety and reliability, remote sensing and GIS, mine closure planning and relevant computer applications.

## SPONSORSHIP CERTIFICATE

Dr./Mr./Ms..... is an employee of ..... institute/organization and his/her application is hereby sponsored. The applicant will be permitted to attend the short-term course at NIT, Rourkela during **22<sup>nd</sup>-26<sup>th</sup> July, 2024**, if selected.

**Signature with Date & Seal  
of Sponsoring Authority**

The duly sponsored application should be mailed to

**Prof. Devidas S. Nimaje**  
**Course Coordinator**  
**Department of Mining Engineering**  
**National Institute of Technology Rourkela – 769008, Odisha**  
**Phone: 0661-2462604, 9437943121(M)**  
**Fax: 0661-2472926, 2462999**  
**E-mail: dsnimaje@nitrl.ac.in**  
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## Rourkela Attraction

