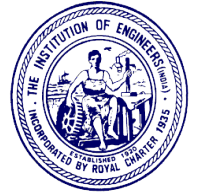




Engineering Staff College of India

Mining Division



3-Day Continuing Professional Development Programme
Residential

“Advanced Fleet Monitoring and Control Systems for Safe & Productive Operations in Opencast Mining”

16-18 September 2026



Introduction

Efficient Fleet Management is a critical component in enhancing productivity, safety, and cost-effectiveness in Opencast Mining Projects. A Mining Fleet Management System (FMS) is a digital platform utilizing GPS, IoT sensors, and wireless networks to track, dispatch, and optimize heavy machinery like haul trucks and excavators in real time, reducing idle times, cutting fuel costs, and enhancing safety across open-pit and underground operations

Fleet Management System (FMS) enables real-time monitoring, coordination, and optimization of heavy earth-moving machinery, thereby ensuring smooth operational flow across excavation, hauling, and dumping activities. By integrating technologies such as GPS tracking, onboard sensors, dispatch systems, and data analytics, FMS supports informed decision-making and minimizes operational delays, equipment downtimes, and fuel consumption. This Programme aims to provide participants with a comprehensive understanding of FMS applications, benefits, and best practices, equipping mining professionals to implement efficient, technology-driven solutions for improved operational performance in opencast environments.

An Advanced Fleet Management System (FMS) is an integrated technology platform that uses telematics, AI, and IoT to monitor, optimize, and maintain HEMM. It drastically cuts operational costs by utilizing real-time GPS tracking, predictive maintenance, and driver behavior analysis to reduce fuel consumption and prevent unexpected breakdowns

Objectives

This is to enhance participants' understanding of modern fleet management concepts, technologies, and best practices essential for efficient mine operations. The programme aims to equip professionals with knowledge on integrating real-time monitoring, equipment utilization analysis, productivity optimization, and maintenance planning through digital fleet management systems.

Benefits

Reduced Operating Costs

Enhanced Safety & Compliance

Improved Customer Satisfaction

Cost & Fuel Reduction

Enhanced Safety

Course Coverage

- Introduction to Fleet Management in Opencast Mining.
- Types of Heavy Earth Moving Machinery (HEMM) Used in Opencast Projects
- Fleet Management Technologies
- Production Planning and Optimization
- Maintenance Management and Health Monitoring
- Fuel Management and Cost Control
- Safety and Compliance in Fleet Operations
- Data Analytics and Decision-Making
- Integration of Autonomous & Semi-Autonomous Systems

Methodology

Lectures/Presentations /Interactions

Resource Persons/Faculty

The faculty consists of experts from the industry, research establishments and academia besides in-house faculty of ESCI.

Target Participants

This programme would be useful to mining engineers, executives, managers, faculty, Government & regulatory authorities etc. in the field of mining & allied engineering

Programme Dates & Timings

16-18 September 2026

10.00 a.m. - 5.30 p.m. each day.

Course Fee

- ❑ **Residential: INR 24,000/-** (Rupees Twenty Four Thousand only) per participant which includes course material, course kit, single/twin-sharing AC accommodation as per availability, breakfast, lunch, dinner, tea and snacks during the actual days of training programme.
- ❑ **Non-Residential: INR 21,000/-** (Rupees Twenty One Thousand only) which includes course material, course kit, lunch, tea and snacks during the actual days of training programme.
- ❑ *10% discount in course fee would be offered to organizations if 5 or more delegates are nominated for the programme.*
- ❑ ESCI provides complimentary boarding & lodging for the participants a day prior to the commencement of training programme and a day after the conclusion of the programme (check in & check out at 12:00 noon respectively).
- ❑ Overstay will be charged INR 1200 per person/day
- ❑ Spouses may be allowed to stay along with the delegates with prior intimation and on payment of nominal charges of INR 1200/day including food.

GST @18% is to be paid extra over and above the course fee. **PAN: AAATT3439Q, GST No: 36AAATT3439Q1ZV, HS No.: 999293** (under commercial training or coaching services – clause 65(105) (ZZC) of Finance act – 1994).

Course fee is to be paid in favour of **“THE I.E. (I) – ENGINEERING STAFF COLLEGE OF INDIA”** in the form of demand draft payable at Hyderabad. Alternatively the payment may be made by **Electronic Fund Transfer (EFT)** to ESCI –**SB A/c No. 33705165550 with State Bank of India, Manikonda Branch, Door No.2-30/1, Indira Nagar, Gachibowli, Hyderabad – 500032, our NEFT/RTGS/IFSC Code No. SBIN0011076 – MICR No. 500002107.** While using EFT method of payment, please ensure to communicate your company name, contact details, our invoice reference and programme title.

Registration

To register manually, please send your nominations by providing name, designation, contact address, email address, mobile no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to: mining@escihyd.org.

Certification

A **Certificate of Participation** will be awarded to each participant on conclusion of the programme.

Contact Person

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Course Director

Sr. Faculty & Head

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