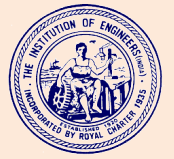




Engineering Staff College of India



Mining Division



*Continuing Professional Development Programme
Residential/Classroom*

**“Mechanization and Mining Technology for Maximizing
Extraction of Ores & Minerals”**

6 – 8 May 2026

Centre for Promotion of Professional Excellence

Introduction

Mechanization & Technology Development in Underground & Opencast Mines plays an important role to improve safety, productivity profitability and sustainability. This program would focus on mechanization and automation of mining activities with the state of the art technologies in underground & opencast mines to design a safe and efficient mining method like longwall, continuous miner, bolter-miner in underground and shovel-dumper, bucket-wheel excavators, surface-miners, high wall mining, draglines in opencast with due consideration to safety, quality, productivity and sustainability

Objectives

This program would be a platform to share the knowledge on advancement in methods & technologies with integrated holistic approach for application in mining, resolution of issues pertaining to the introduction of modern technology, to significantly contribute in reduction of accident rate, mitigate barriers to success, selection of appropriate design, training requirements & maximizing benefits to all the stakeholders.

Course Coverage

Trends in technology, best practices in UG & OC mining, remote mining, smart sensors and the use of robotics, proximity detection system, trackless equipment, conveyors, concepts of digital mine using IoT, AI, ML to increase efficiency, effectiveness and to mitigate environmental and safety concerns through technical presentation by expert speakers.

Benefits to the participant

Insights into best practices, high-end technology in Mining.

Methodology

- Lectures/presentations in classroom

Resource Persons

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, mine managers, mine surveyors electrical & mechanical engineers.

Programme Dates & Timings

6 – 8 May 2026

10.00 a.m. - 5.00 p.m. each day

Course Fee

- **Residential: INR 24,000/-** (Rupees twenty Four thousand only) per participant which includes course material, course kit, twin-sharing AC accommodation, breakfast, lunch, dinner, tea and snacks during the actual days of training programme.
- **Non-Residential: INR 21,000/-** (Rupees twenty One thousand only) per participant which includes course material, course kit, lunch, tea and snacks during actual days of training programme.

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) (ZCC) of Finance act – 1994).

- *Special concession of 10% in course fees to organization for 5 or more nominations and attendance.*
- ESCI provides complimentary boarding & lodging to participants a day prior to the commencement of training programme and a day after the conclusion of the programme. The check in & check out at 12:00 noon respectively.
- Overstay charges will be charged as per ESCI norms.

Spouses may be allowed to stay along with the delegates on prior request and on additional payment of INR 1000 per day for boarding & lodging

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

Certification

A Certificate of participation signed by the Director, ESCI would be awarded to each participant on conclusion of the programme.

Profile of Expert Speakers



Dr. G Karthik did B.Tech and M.Tech from Jawaharlal Nehru Technological University, Hyderabad & Ph.D. from NIT Rourkela during 2013-18. He has published various Technical papers in 15 International and 5 National Journals, 12 International Conferences and 24 National Conferences. Published one Patent. Research areas include Landslides, Slope Stability, Internet of Things, Wireless Sensor Networks, and soft-computing. He was conferred with Young Scientist-2019 organized by International Association of Research and Development organization (IARDO) and Homi J Baba Award 2020 by Eudoxia Research Centre. He is working as an Associate Professor, R&D Coordinator, and DQAC Member in the Electronics and Communication Department at Stanley College of Engineering and Technology for Women, Hyderabad since June 2019. He is a member in various professional bodies such as UACEE, IAENG, IDES, IFERP, IETA and ASR and as an editorial board member in various international Journals



Mr. P Ranganatheswar graduated in Mining Engineering from Osmania University in the year 1979. Immediately thereafter, joined The Singareni Collieries Company Ltd (SCCL) as a Graduate Trainee and risen up to the Mine Manager level & well experienced in the coal winning operations from manual, semi mechanized to fully mechanized working faces including highly productive long-wall faces. Joined Directorate General of Mines Safety/DGMS as Dy. Director and retired as Dy. Director General spanning about 27 years' work experience in the Government sector. Experienced in enforcing the provisions of the Mines Act, 1952 and allied regulations made therein to ensure safety of workmen employed in the mines and oil fields and for improving working conditions by ensuring the strict compliance of statute. He worked as Secretary to the Board of Mining Examinations (Coal and Metal). Actively associated in the important national activities like National Safety Conferences and National Safety Awards functions and played key role. He has visited Germany, France, U.K., Australia, USA, South Africa and China on different collaborative projects to oversee and understand the best mining practices adopted in their countries. After Retirement he worked as Advisor (Mining) at Gayatri Projects Limited and worked as task based Advisor (Mining) for M/s Central Coal Fields Limited.



Dr. P Balamadeswaran graduated in Mining Engineering (B.E) from the College of Engineering Guindy, Anna University, Chennai in 1991. He holds M. Tech in Opencast Mining and Ph.D. in Mining Engineering with special reference to 'Investigation of Blast Design Parameters on Rock Fragmentation and Ground Vibrations in Opencast Mines' obtained from the Indian Institute of Technology (ISM), Dhanbad. He is also a holder of First-Class Manager's Certificate of Competency (Metal-Restricted) and a Recognized Qualified Person (RQP). He worked in Hindustan Copper Limited, Malanjkhand, Madhya Pradesh for seven years and as Area Sales Manager in Tamil Nadu Industrial Explosives Limited. After a short stint in a MNC located in Indonesia, he joined M/s. Dempo & Co (P) Limited, Goa in 2006. Since December 2007, he is associated with the Department of Mining Engineering, Anna University, Chennai and presently working as Assistant Professor. His areas of specializations are Rock Blasting Engineering, Slope stability in Surface Mines, Surface Mine Planning & Design. He has presented and published more than 90 Technical & Research papers in the Journals, National and International Seminars. He received the prestigious 'Distinguished Mining Engineer' award for the year of 2018 from the 'Institution of Engineers (India)'. He is presently the National Council Member of Mining Engineer's Association of India (MEAI).



Mr Lolla Sudhakar, Master of Technology (**M.Tech**) – Mining from Indian School of Mines, Dhanbad, 1994; Bachelor of Engineering (**BE**)-Mining from Kakatiya University, Andhra Pradesh, 2000; *PG Diploma in Environmental Studies (PGDES) from Andhra University, Vishakhapatnam, 1995* First Class Manager's Certificate of Competency: A total of **30 years** of experience in coal mining field. Experience in Project Planning, Preparation of Feasibility Reports & Government Approvals for green field projects .Project Implementation and monitoring, equipment selection and DGMS approvals. *He Visited Poland* to gain experience in Polish Longwall Mines and Longwall Equipment manufacturers. Visited **Siberia and Russia** to study the workability of Bolter miners in steep mines, Suburb Coal Fields of **Tajikistan, China** for training in highly mechanized and automated Longwall Project and research establishments, **United Kingdom** for six months in various highly mechanized and automated Longwall Mines and research establishments of British coal. Trained in mine planning software and project evaluation.

Awards University **GOLD MEDAL** in Graduation from Kakatiya University.



Mr H. Veera Swamy graduated in Mining Engineering from Kothagudem School of Mines (KSM), Osmania University (OU), in the year 1984 and obtained M. Tech in Mine Planning from KSM (OU), in the year 1996 and Post Graduate Diploma in Computer Science from Central University Hyderabad in the year 2000. He is holding professional life membership of FEI, MEAI, MMGI and QCFI. He obtained "First class Manager's Certificate of Competency" 1992.

He retired as General Manager from The Singareni Collieries Company Limited (SCCL) in 2019 after putting meritorious service of 35 years. He is a high calibre, accomplished, resourceful mining engineer with 37 year of rich and varied experience in all aspects of underground and opencast coal mining where state-of-the-art technologies and methods are employed. He underwent training in Continuous Miner Technology in Republic of South Africa. He submitted / presented several papers on liquidation of developed coal pillars by Continuous Miners / LHD in the National conference of IEI, Hyderabad. Active rescue trained person for about 25 years,

He is presently working as a Regional -Head for SCCL Coal Projects in JMS Mining Private Limited, Kolkata, India and the Chairman, Institution Engineers (India), Ramagundam Local Centre.



Dr N Sri Chandras did B.Tech from GIET and M.Tech from IIT(ISM) and obtained II Class Manager's Certificate of Competency (Unrestricted) and PhD from ISM/ IIT Dhanbad. He has 4 years of teaching experience and 3 research publications to his credit and his research interests are Drilling and Blasting, Mine Environmental Engineering including software applications. He conducted blasting studies deploying drones. He is quite a resourceful person & organized many seminars/workshops/FDP. Presently he is working as Assistant Professor in Mining Engineering Department, Malla Reddy Engineering College, Hyderabad.



Mr P Kumar did his B.Tech (Mech) from NIT, Calicut, Kerala, M.Tech (IC Engines and Gas Turbines) from NIT, Warangal, Telangana, M.B.A (Marketing) from IGNOU. He is a Fellow of The Institution of Engineers (India) and Sr. Member in Indian Institute of Industrial Engineering.

- Worked in The Singareni Collieries Company Limited in Opencast Projects in fields of erection, commissioning, maintenance of various models and capacities of HEMM ,TPM, HRD, Tyre Management, POL of UG & OC Projects and superannuated as Additional General Manager
- Worked as Executive Director in Radials International of Michelin OTR Tyres.

Mr. Sai Sridhar Pagadala Naidu is a visionary entrepreneur, seasoned IT leader, and the Founder & Chief Architect of Extreme-Spartan Cognitive Industries Pvt. Ltd., an innovation-driven enterprise specializing in Automation as a Service (AaaS), cognitive automation, and Agentic safety systems. With over two decades of professional experience, he has consistently delivered transformative solutions in enterprise architecture, cloud technologies, and industrial automation, with a strong focus on fire safety, mining safety, and disaster response.

Renowned for his pioneering work in AI-powered fire risk management, Mr. Naidu developed AI in the SKY, a platform integrating AI, 5G-enabled IoT, BIM, robotics, and automation to revolutionize fire risk assessment and mitigation. His leadership has also produced flagship products such as Botafly (an AI-driven fire engineering app) and Botobiography (an AI-powered professional representation tool), reflecting his commitment to scalable, human-centric innovation.

Bhaskarudu Peddakotla

Diploma in Automobile Engineering & Industry

Customer Engagement, Service Excellence, Employee Engagement, Inventory Management, Warranty Administration, Facility, Talent Grooming (Training and Mentoring), Service Contracts Execution – Effective execution of AMC, PMA, MARC and other customer specific tailor-made service contracts, General Manager (Customer Support) in GMMCO Limited (Caterpillar Dealer), Vice President in Vijay Engineering (Volvo Consteqpt Dealer), Major Cement Industries i.e. Coromandel (later India Cements), Sri Vishnu, Rajashri, Zuari and Priya Cements, From 2018 – Working as freelance consultant in "Condition monitoring and predictive maintenance" of mining and construction machines, He is also an empanelled faculty at ESCI





Er K J Amarnath a Gold Medalist, in BE (Mining Engineering) from College of Engineering, Osmania University, Hyderabad He retired as Chief General Manager from The Singareni Collieries Company Ltd.

(A Government Company) after rendering a meritorious service of about 38 years in various capacities in Underground and Opencast Technology in Planning & Operations, Human Resource Development, Business Development, Education, Safety, Corporate Planning and Projects. Further, he was Director in NSGPVL, A Joint Venture Company of NTPC Ltd, A Central Government PSU and The Singareni Collieries Company Ltd, A Government Company.

He visited the United Kingdom, Spain, United States of America & Australia during his service which enhanced his capabilities in terms of Technical, Managerial & Business Skills. He is also a holder of First Class Manager's Certificate of Competency issued by The Director General of Mines Safety, Ministry of Labour, Government of India. He is a Fellow of Institution of Engineers (FIE) and Life Member of Institution of Engineers, MEAI (Mining Engineers' Association of India),MGMI(Mining, Geology, Metallurgical Association of India), Alumni of Mining Engineers' Association (Osmania University and Kakatiya University)

Presently he is working as Senior Faculty-Head, Mining Division, Engineering Staff College of India, Hyderabad.

Course Director

Er K J Amarnath, FIE

Sr. Faculty & Head

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Mining Division, Engineering Staff College of India

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