



# Engineering Staff College of India

Mining Division



*4-Day Continuing Professional Development Programme*

*Residential / Classroom*

## **“Reliable Mine & Land Surveying Through Advanced Technology”**

*Total Station, DGPS, 3D Laser Scanner, LiDaR, Drones, GIS, Remote Sensing*

**18 – 21 June 2024**

### **Introduction**

Land & Mine Surveying is the technique, profession, and science of determining the terrestrial or 3-dimensional positions of points and the distances and angles between them and collection of field data on the surface of the earth and preparation of a plan or map on a suitable scale before an engineering operation is actually executed to begin a mining or an infrastructure project. Today's technology is changing the face of surveying.

Revolutionary changes have taken place in surveying instruments. New technology like Laser Scanners and Drones, Unmanned Aerial Vehicles (UAV) are challenging traditional surveying methods that create data along with software solutions that maintain, display, analyse and manage the voluminous amounts of spatially located digital data.

Thus the industry can draw on the collective wisdom and experience of owners and software vendors delivering solutions for today's requirement and tomorrow's need.

### **Objectives**

The course is to disseminate the changing face of surveying within the mining and civil engineering industry and to realize that surveying and mapping are indispensable in the field of engineering. Geospatial and sub-surface data constitutes the foundation of mining & civil engineering projects. Surveyors fulfil an essential function since they provide indispensable information to all the other disciplines. Surveyors are responsible for accurate measurement of areas and volumes excavated, precise representation of the surface and underground situation on mining plans. Surveying has gone beyond the ubiquitous theodolite and today's surveying relies heavily on technology to provide accurate maps of the topography with safety and speed in mind.

### **Benefits to the participant**

To learn and understand, conduct survey, develop maps, plans with the latest technology & advanced surveying instruments.

### **Course Coverage**

#### **Advanced Mine Surveying:**

**Total Station**

**DGPS**

**3d Laser Scanner**

**LiDaR**

**Drones/Unmanned Aerial Vehicles**

**GIS**

**Remote Sensing**

### **Methodology**

- Lectures/presentations by identified industry experts and eminent faculty/resource persons in the classroom.
- Interactive sessions.

## Target Participants

This programme would be useful to surveyors, geologists, mining engineers, civil engineers, mine managers. faculty, students

## Programme Dates & Timings

**18 – 21 June 2024**

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

## Resource Persons

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

## Course Fee for 4 –Days:

- **Residential: INR 27,000/-** (Rupees Twenty seven 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 the actual days of training programme.
- **Online: INR 15,000/-** (Rupees Fifteen Thousand only) per participant which includes soft copy of the course presentations.
- **Special concession of 10% in course fees to organization for 5 or more delegates attending the programme.**
- **GST @18%** is to be paid extra over and above the course fee.
- ESCI provides complimentary accommodation to 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 as per ESCI norms.

**PAN: AAATT3439Q, GST No: 36AAATT3439Q1ZV, HS No.: 999293** (under commercial training or coaching services – clause 65(105) (ZC) 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

**Online registration** shall be available on ESCI web portal: [www.esciupskill.org](http://www.esciupskill.org) / [www.escihyd.org](http://www.escihyd.org)

**To register manually** please send your nominations giving details of name, designation, contact address, fax, telephone, email address and mobile number along with the details of mode of payment of fee, addressed to the **Course Director**.

## Certification

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



**Mr A Bhaskar** pursued B.E (Mining) at Kothgudem School of Mines, Osmania University. Worked in SCC Ltd as under manager. Did dissertation on spontaneous heating and mine fires. Passed First Class Mine Managers Certificate of Competency (Coal) in the year 1993. Joined Survey and Land records department as Assistant Director and worked in Karimnagar District. Worked at Hyderabad urban district as Deputy Director S&LRs, Deputy Director Bhubharati Project Nizamabad District and Regional Deputy Director. Worked as Joint Director Headquarters in O/o Commissioner Survey Settlement Land Records, Telangana. Visited and studied land administration in Karnataka, Tamil Nadu, Pondicherry, Maharashtra, Bihar, Haryana and Gujrat states. He has rich experience of underground coal mining in conventional methods LHD, Road Headers and Longwall Technology.

He is presently working as Vice-Principal and Joint Director at Telangana Academy of Land Information and Management (TALIM), Hyderabad.



**Dr Arvind R** completed B.E CIVIL in 1999 at Gulbarga University. He is Professional in Land Surveyor/Business Development Manager with extensive experience in all types of surveying, project management, and leadership and mentoring. He worked as Assistant Director/ Deputy Director, National Academy of Construction (N.A.C) Hyderabad 1999 – 2006, Business Development Manager – Bharath Associates and Consultancy 2006-Till date, Holding License of civil engineer from GHMC, Holding life time membership from Association of Consulting Civil Engineers (Hyderabad Chapter), Visiting faculty at N.A.C, Certified Assessor from PMKVY-SKILL-INDIA.



**Mr Bhaskar Kannoju** completed M.Tech specialization in GIS and Remote sensing from JNTU Hyderabad and Master of Science in Geology from Osmania University.

He is an innovative thinker, having more than two decades of rich experience in various scientific projects in Geospatial domain. His professional career begins from multinational companies such as Hitachi Consulting erstwhile Sierra Atlantic and Hexagon Geospatial erstwhile Intergraph. His innovative thinking and sincere efforts make him to start Adepto Geoinformatics Pvt. Ltd. in 2011. He has travelled across the country for several times, having prominent presence at Government, Defense, Space and R&D Labs etc., and travelled more than 10 countries such as USA, Singapore, Malaysia, Hongkong, Vietnam, Thailand, Kenya, Bhutan, Madagascar and Macau etc. He has published national and international papers on GIS applications for various sectors. He has experience in Geospatial domain and Scientific Research Organizations. He is associated with several National and International Organization in the GIS industry.

He has made MoU with premium institutes for capacity building, knowledge sharing and product development with KL University, Malla Reddy College of Engineering, CVR Engineering College, Vignan's University and NAARM, India Council of Agriculture Research (ICAR), Government of India and Board of Studies Member for M.Tech Spatial information technology, also Industrial Consulting Committee Member JNTU Hyderabad.

**Life Memberships** in Indian Society of Remote Sensing –Dehradun, Indian Society of Geomatics, ISRO-Ahmedabad and Indian National Cartographic Association, Survey of India – Hyderabad.



**Dr. H. Sarvothaman** functioned in different scientific capacities in Geological Survey of India in many places of India before retiring as Deputy Director-General. He conducted Geological Mapping and Mineral Exploration for tungsten, graphite and limestone, besides other research activities of GSI.

He authored 4 (four) books. 1. WATER: Resource Augmentation, Management & Policies; 2. Disaster Management: Engineering & Environmental Aspects; 3. Environment Science—Issues & Solutions .4. Disasters and Hazards: Risk Reduction, Mitigation and Management. These books are used as text books in Universities, libraries and references.

Currently, he is (i) Visiting Faculty in the Earth Science Department of University of Hyderabad; (ii) Member, Training Quality Improvement in Centres for Agrarian Studies (CAS) and Natural Resources Management (CNRM), NIRD&PR, Hyderabad; (iii) Guest Faculty in GSI Training Institute, Hyderabad and Badruka College, Hyderabad; and (vi) Treasurer, Vivekananda Educational Centre, an NGO managing Vivekananda Public School for the economically and socially downtrodden students..



**Mr Nagireddy Palle, Geospatial Engineer (Photogrammetry, GIS, UAV)**

He completed Master of Science Geo Informatics

He dedicated in Photogrammetry and UAV professional with history of meeting company goals utilizing consistent and organized practices. Skilled in working under pressure and adapting to new situations and challenges to best enhance the organizational brand.

**Skill Highlights** :•UAV Mapping, GIS, Photogrammetry, LiDAR

**Experience :**

Geospatial Engineer Project Lead- 09/2019 to 05/2022

Orbit Geospatial Services Pvt. Ltd, Hyderabad

- 13 years of combined experience in Digital Photogrammetry, GIS Mapping, UAV Mapping.
- Management of photogrammetric production and mapping
- Technical support of photogrammetric and GIS systems.
- Experience in ArcGIS online and portal for ArcGIS to publish and manage data
- Extensive experience in project Planning, Technical support, Training etc.
- UAV data Processing.

**Softwares** :• ArcGIS, Erdas, DATEM, Microstation, Agisoft, Inpho, Application Master, Global Mapper, Pix4D, Socetset,

**Certificate**, Drone Survey from SOI, Drone Pilot.



**Mr Rahul Pinnamaneni**

**CEO, Founder of Polygon Geospatial Pvt. Ltd., Hyderabad.**

He completed M.S. in Civil Engineering (Transportation Planning), UNC Charlotte, USA and M.Tech.in Civil Engineering, GITAM University, Vizag.

Professional Experience: Detail-oriented Civil Engineer with experience in managing different phases of engineering operations. Experience in drone survey, GIS, 3D mapping, traffic engineering, traffic data collection, transportation planning, traffic safety studies, traffic modelling and simulation, ITS, and streetlight design. Ability to generate high-quality leads and convert them into sales desired. Achieve a company's goals that focus on customer satisfaction and customer experience.

As COO and BD Head at Drogo Drones Private Ltd, responsible for developing new business avenues, conducting field visits, drone data collection, analysis and preparing reports with recommendations. He oversaw a startup's growth from a team of two to 50 people and was able to achieve 10cr INR revenue in the starting year. Prior to that, he worked as a Traffic Engineer for 5 years at Daniel Consultants Inc, Maryland, USA.

Roles & Responsibilities: Business Development, Ideation, Customer relationship.



**Dr N Srinivasa Rao**, Scientist – M.Sc (Physics) Osmania University. Ph.D (Remote Sensing), JNTU – Hyderabad.

Research Interests- Remote Sensing, Ocean Colour, WebGIS, Open Source GIS.

18 Years of Research Experience in Remote Sensing Application (Land ,Ocean& Atmospheric)

Guided 50 Academic Projects.

Resource Person to Universities, Academic Institutes & Research Organizations.



**Dr N Sri Chandrabhas** 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 &organised many seminars/workshops/FDP. Presently he is working as Assistant Professor in Mining Engineering Department, Malla Reddy Engineering College, Hyderabad.



**Mr Dinakar Danavada**. Mining Software Professional. He graduated in B.Com, Computers. PGDCA, DCHE and is a renowned faculty in Surveying with 17 years of extensive experience conducting training programs and encouraging learning trainer and implemented comprehensive training and professional development programs.

He is skilled in Training Program Development, Mining Employees, Training Project Implementation, Mining Plan Preparation.

He wrote Software training manuals for employees according to company guidelines protocols and conducted survey training programs by using Autodesk CIVIL 3D Software to design training for Mining Engineers and Survey employees and increase company retention and productivity



**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 which enhanced his 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), Vice-Chairman of MGMI (Mining, Geology, Metallurgical Association of India),Hyderabad Chapter and Vice-President of The Alumni of Mining Engineers' Association (Osmania University)

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



**Er L. Krishna** did his M. Tech in Mining Engineering and worked as an Assistant Professor at JBIET, Hyderabad and worked as Graduate Trainee for one year in SCCL.

He holds Second Class Manager's Certificate of Competency (Unrestricted). He published 4 papers in National Journals. He is an Associate Member of Institute of Engineers India (AMIE) and Life Member of MEAI (Mining Engineers' Association of India)

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

**Contact Persons**

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**Mining Division,**  
**Engineering Staff College of India**

An Autonomous Organ of The Institution of Engineers (India)  
(An ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 50001:2018 &  
ISO/IEC 17025:2017 Certified, AICTE & CEA Recognized Institution)  
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