



Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. Telangana, India



Environment Management Division

CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMME

Environmental Compliance and Sustainability in Infrastructure Projects: Legislation, Air Pollution Monitoring, EIA/EMP & Open-Source Reporting Tool



08 – 12 June 2026

Interactive Sessions | Digital Learning | Assessments | 24/7 Experts Online/Offline Support

Introduction

India is undergoing rapid infrastructure growth through initiatives such as Smart Cities Mission, AMRUT, Bharatmala, and Metro Rail expansion. This growth has significantly increased environmental pressures, particularly in air quality, resource use, and compliance management.

- Over **130 non-attainment cities** identified under the National Clean Air Programme (NCAP) by the Central Pollution Control Board (CPCB)
- Construction activities contribute nearly **30–40% of particulate pollution (PM10/dust)** in major urban areas
- More than 400 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) operational across India for real-time monitoring, enabling timely data-driven decision-making and improved air quality management.
- Increasing adoption of **Online Continuous Emission Monitoring Systems (OCEMS)** and digital platforms like **PARIVESH** for environmental compliance
- Growing emphasis on **real-time monitoring, digital compliance systems, and ESG frameworks**

Globally, environmental governance is evolving towards **data-driven, transparent, and technology-enabled systems**:

- Air pollution causes approximately **7 million premature deaths annually** (WHO)
- Around 99% of the global population is exposed to air quality levels exceeding recommended limits, with PM_{2.5} and PM₁₀ concentrations surpassing the safe thresholds prescribed by the World Health Organization (WHO).
- The construction sector accounts for nearly 37% of global CO₂ emissions (UNEP), highlighting its significant contribution to climate change and the urgent need for sustainable building practices and low-carbon materials.

These trends highlight the urgent need for integrating **technology, regulation, and sustainability** in infrastructure development.

This programme is designed to bridge the gap between **regulatory requirements, practical implementation, and sustainability integration**, equipping participants with the latest tools, techniques, and global best practices.

(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

Objectives

The objective of this programme is

- Understand environmental legislation and compliance systems in India
- Identifying ways for implementation of appropriate environmental legislation...
- Learn practical approaches to compliance in infrastructure projects
- Gain knowledge of air pollution monitoring techniques and standards
- Develop skills in preparation and evaluation of EIA & EMP
- Explore latest **software tools and digital compliance systems**
- Integrate sustainability and ESG principles into infrastructure development

Course Coverage

- Environmental Laws & Regulatory Framework (India)
- Environmental Clearances & Digital Compliance (PARIVESH, CPCB)
- Environment Impact Assessment (EIA) & Environmental Management Plans (EMP)
- Air Pollution Monitoring & Control (CAAQMS, CEMS)
- Real-Time & IoT-Based Monitoring Systems
- EIA & Environmental Management Plans (EMP)
- GIS & Remote Sensing Tools (QGIS)
- Environmental Monitoring, Data Analysis & Reporting
- Digital Platforms (SCADA, Dashboards) & AI Applications
- Sustainable Construction & Circular Economy
- Climate-Resilient Infrastructure & ESG Frameworks
- Global Best Practices in Environmental Sustainability Case Study & Discussion

Methodology

Methodology of the programme includes lectures by expert faculty, case studies and practical demonstration and also Online Video Interactive sessions with Hand-on Practical, Lecture / Discussion with audio visual aid, bench marked video shows, chalk & talk sessions, online case studies, debates, sharing of experiences etc. All the sessions will be interactive, demanding active participation from all the members.

Target Participants

This course is useful for engineers and managers working in the areas of project formulation including Environment and Forest clearances in Public and Private Sectors, Government Departments (undertaking Development Projects), Regulatory Boards, Consultancy firms, R&D & Educational Institutions, NGOs etc. Engineers & Executives involved in Air Pollution Monitoring and Modeling from different sectors can also attend the programme.

Programme Dates, Code & Timings

Dates: 08-12 June 2026, (EM 6062) & Timings: 10:00 AM onwards.

Course Director

Ms. Anita Aggarwal

Faculty & Head I/c.

Environment Management Division,

Phone: 040 6630 4120, 4122 / Fax: 040-66304163

Mob: 8374362306; Email: em@escihyd.org

Faculty/Speaker Details

Apart from the core internal faculty, Experienced Professionals/Faculties/Sector experts will be delivering the lively lecture with practical knowledge & case study.

(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

Course Fee

- **Course Fee** – Rs. 30,000/- (Rupees Thirty Thousand only) per participant. Fee includes course material, course kit, twin-sharing/single AC accommodation as per availability, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training programme. ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200 h) and one day after conclusion (Check-out 1200 h) of the programme duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation).
- **Non-Residential Fee:** 10% discount on course fee is allowed for non-residential participants.
- **Group Incentive:** 10% discount for five or more participants, if sponsored by the same Organization.

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

Programme fee is to be paid in in favour of “**THE IE(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. 10007111201 with The SBI, PBB, Rajbhavan Road Branch, Khairatabad, Hyderabad-500004** by **NEFT/ RTGS. IFSC Code No. SBIN 0004159 – MICR No.500002075. PAN Card No AAATT3439Q; GSTIN No. 36AAATT3439Q1ZV.** While using EFT method of payment, please ensure to communicate us your company name, Contact details, our invoice reference and programme title. **Kindly provide your organization GSTIN No. along with your nominations**

Registration

Online registration shall be available on ESCI **web portal** : www.escihyd.org

To register manually please send your nominations giving details of 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: **Course Director**, (or) Contact us at: Mr. GNM. Rao (Prog. Manager) – 9866431555.

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