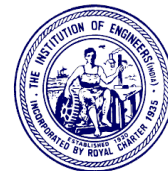




Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

ESCI Road, Gachibowli, Hyderabad – 500 032, Telangana, India



Environment Management Division

CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMME

Technical Exposure Program: Design & O&M of ETPs with Real-Time Online Monitoring (CEMS & CEQMS) for Industrial Development Corporation



21-24 December 2026

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

Introduction

Industrial development and expansion of manufacturing activities have increased the need for effective management of industrial wastewater and emissions. Properly designed and efficiently operated Effluent Treatment Plants (ETPs) are essential for ensuring compliance with environmental standards, protecting receiving water bodies and promoting water reuse and resource efficiency.

With increasing emphasis on continuous environmental compliance, real-time online monitoring systems, including Continuous Emission Monitoring Systems (CEMS) and Continuous Effluent Quality Monitoring Systems (CEQMS), are becoming important tools for monitoring industrial emissions and effluent quality. Integration of monitoring data with regulatory and management systems can support timely intervention, process optimisation and improved environmental performance.

This four-day technical exposure programme is designed to provide participants with practical knowledge of ETP planning, design, process selection, operation and maintenance, along with an understanding of online monitoring technologies and their integration with industrial environmental management systems.

The programme will combine technical sessions, case studies, demonstrations and practical/field exposure to enable participants to understand the complete chain from industrial wastewater characterisation and treatment-process selection to ETP operation, performance evaluation, online monitoring, data interpretation and regulatory compliance.

Objectives

The programme aims to provide participants with practical and technical understanding of ETP design, operation and maintenance and real-time online environmental monitoring systems. It will enable participants to understand appropriate treatment technologies, assess ETP performance, interpret CEMS/CEQMS data and identify measures for improving treatment efficiency, compliance and resource recovery.

Course Coverage

- Industrial Wastewater Characteristics and ETP Design Fundamentals
- ETP Process Selection and Treatment Technologies
- Primary, Secondary and Tertiary Treatment Systems
- Advanced Treatment, Reuse and Resource Recovery
- ETP Operation, Maintenance and Process Optimisation
- Troubleshooting and Performance Evaluation of ETPs
- Sludge Management and Handling
- Continuous Emission Monitoring Systems (CEMS)
- Continuous Effluent Quality Monitoring Systems (CEQMS)
- Online Sensors, Instrumentation and Data Acquisition
- Real-Time Environmental Monitoring and Data Management
- Regulatory Compliance, Monitoring and Reporting
- Integration of Online Monitoring with Industrial Environmental Management
- Case Studies and Good Practices in Industrial Pollution Control

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

Centre for Promotion of Professional Excellence

- Technical Demonstrations / Practical Exercises / Field Exposure

Methodology

Methodology of the programme includes classroom Sessions with Lectures/discussions, with audio visual aid; bench - marked video shows, Chalk & Talk sessions, group discussions, case studies, debates, sharing of experiences, etc. All the sessions will be interactive, demanding active participation from all the participants.

Target Participants

Municipal Commissioners and senior officials from **Municipal Corporations, Urban Local Bodies (ULBs), Urban Development Authorities and Municipal Administration Departments**; Water Supply, Sewerage and Public Health Engineers; officials from **PHEDs, Water Boards and Urban Water Utilities**; Town Planning, Sanitation and Infrastructure Officers; professionals involved in **GIS, IT, digital governance, data management and smart-city initiatives**; officers and technical personnel from Pollution Control Boards, research and academic institutions; and representatives from **technology companies, consulting organisations and private sector agencies** involved in urban water supply, sewerage, sanitation, digital transformation and smart infrastructure solutions.

Programme Dates, Prog. Code & Timings

Dates: 21-24 December 2026, (Prog. Code:6123) & Timings: 10:00 AM onwards at ESCI Campus, Gachibowli, Hyderabad.

Course Director

Ms. Anita Aggarwal

Faculty & Head, Environment Management Division,
Engineering Staff College of India,
ESCI Road, Gachibowli, Hyderabad 500 032
Phone: Direct 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.

Course Fee

- **Course Fee (Residential) – Rs. 24,000/-*** (Rupees Twenty Four 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 and above the training fee as training. **PAN Card No. AAATT3439Q. GST No: 36AAATT3439Q1ZV, HS No.: 999293** (under commercial training or coaching services – clause 65(105) (ZZC) 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 and TAN No along with your nominations.**

Registration

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

To register 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.

Environment Management, Engineering Staff College of India

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