

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

AI-Driven Innovation in Environmental Engineering

(A Case Study base Hands-On Practical Training)

23 - 25 July 2025

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

Introduction

Al is transforming environmental engineering by enabling more precise environmental monitoring, predictive analytics, and optimized resource management. This includes monitoring air and water quality, predicting climate patterns, and optimizing energy consumption in buildings and industries. Additionally, Al is used in waste management, deforestation monitoring, and even developing sustainable materials.

Objective

This 3-day, hands-on professional training program on "Al-Driven Innovation in Environmental Engineering", designed to offer practical exposure across key domains such as water quality, air pollution, waste management, and climate modelling. This training includes theory, Real-time case studies, tools, and hands-on practice using Python and Al platforms

Course Coverage

- Introduction to AI in Environmental Engineering
- · AI in Water Quality Monitoring
- Al for Wastewater Treatment Optimization
- · Cloud Platforms & IoT in Water Monitoring
- · Al in Air Pollution Monitoring
- Remote Sensing & Satellite Data Processing
- · Al for GHG Emission Modeling
- · Climate Change Impact Assessment with AI
- Smart Waste Management Using AI
- · AI in Urban Sustainability & Smart Cities
- Building Al Dashboards for Environmental Monitoring
- Ethics, Policy & Deployment

Methodology

Methodology of the programme includes lectures by expert faculties, case studies and practical demonstration and also Digital Learning through LMS Platform, 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 designed in consideration with the Environmental Professionals, Working employees, Town Planners, Students and related stakeholders, engineers, managers who are involved in planning, designing, analysing and optimizing their water and wastewater collection systems, Sewerage Schemes implementators and in charge of design, monitoring, O&M of Water Treatment Plants, Sewage Treatment Plants from Metro Boards, Public Health Engineering Departments, Municipal Corporations, Municipal Administration Departments, Development Authorities, Townships and other Govt. PSU departments etc

Programme Dates, Code & Timings

Dates: 23-25 July 2025

Timings: 10:00 AM Onwards. After Registration Participant can access ESCI LMS platform for digital

Learning.

Course Director

Ms. Anita Aggarwal

Faculty & Head I/c. Environment Management Division, Phone: Direct 040 6630 4120, 4122 / Fax: 040-66304163

Email: em@escihyd.org

Or Contact us at: Mr. GNM. Rao (Prog. Manager) – 9866431555

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 Rs. 16,500/-* (Rupees Sixteen Thousand and Five hundred 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 on course fee 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) (ZZC) of Finance act 1994).

Programme fee is to be paid in in favour of "THE INSTITUTION OF ENGINEERS (INDIA) – 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.

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 Mr. GNM. Rao (Prog. Manager) – 9866431555.

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