

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

Air Pollution Monitoring & Modeling using Software Applications – Theory & Practical

18 - 20 June 2025

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

Introduction

Air pollution has become a common phenomenon in the urban centres of the country. In recent times, a lot of emphasis has been placed on improving the air quality in urban centres. Air pollution in India is quite a serious issue with the major sources being fuel wood and biomass burning, fuel adulteration, vehicle emission and traffic congestion. In autumn and winter months, large scale choad residue burning in agriculture fields - a low cost alternative to mechanical tilling - is a major source of smoke, smog and particulate pollution. India has a low per capita emissions of greenhouse gases, but the country as a whole is the third largest after China and the United States.

The Air (Prevention and Control of Pollution) Act was passed in 1981 to regulate air pollution and there have been some measurable improvements. However, the 2016 Environmental Performance Index ranked India 141 out of 180 countries.

Air quality modeling is a tool for predicting the air quality at the places where it is not being monitored and also across the time horizons. It has been used extensively in devising appropriate strategies for air quality management. Moreover, air quality models have been used in environmental impact assessment studies to predict the impact of proposed projects over the air quality of the region, so that mitigation measures can be drawn for pollution prevention.

Both the monitoring and modeling of air pollution is essential to provide a picture of the damage humans are doing to the environment, and to enable pollution problems to be discovered and dealt with Air Pollution abatement.

Objectives

The objective of this programme is

- 1. To understand the basic concepts of Air quality monitoring and modeling
- 2. To learn the data requirements, input data preparation and methodologies for carrying our air quality modeling
- 3. To provide a demonstration on the use of an Air quality model

Course Coverage

- Air Pollution Rules and Regulation
- Air Quality Standards
- Air Pollution Monitoring Procedures (Ambient and Stack)
- Air Pollution Monitoring through pollution apps
- Air Pollution Modeling
- AERMOD software Demonstration & Practicals
- Air Pollution Control
- 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: 18-20 June 2025, (EM 6062) & Timings: 10:00 AM onwards.

Course Director

Ms. Anita Aggarwal Faculty & Head I/c.

Environment Management Division,

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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 Rs. 22,000/- (Rupees Twenty Two 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) (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. 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.