Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. Telangana, India

Centre for Climate Change Division

Continuing Professional Development Programme

AI-Enabled GHG Emissions Management and Their Impact on Climate Change

08 - 10 September 2026

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

Introduction

Greenhouse Gas (GHG) emissions are the primary drivers of climate change, resulting from activities such as fossil fuel combustion, industrial production, transportation, agriculture, and waste management. The increasing concentration of greenhouse gases in the atmosphere has led to global warming, extreme weather events, sea-level rise, and ecosystem degradation. With advancements in digital technologies, Artificial Intelligence (AI) is emerging as a powerful tool for monitoring, predicting, managing, and reducing GHG emissions while supporting climate change mitigation and adaptation efforts.

Objectives

The programme aims to:

- Provide a comprehensive understanding of Greenhouse Gas (GHG) emissions and their role in climate change.
- Familiarize participants with global and national climate policies, frameworks, and net-zero commitments.
- Introduce methodologies for GHG accounting, carbon footprint assessment, and emissions inventory preparation.
- Explore the application of Artificial Intelligence (AI), Machine Learning (ML), GIS, Remote Sensing, and IoT in climate and emissions management.
- Enhance knowledge of decarbonization strategies across energy, industry, transportation, agriculture, and waste management sectors.
- Demonstrate AI-enabled tools for climate risk assessment, emissions monitoring, and sustainability reporting.
- Promote sustainable development through innovative technologies and data-driven decision-making

Course Coverage

This training program will broadly cover the following key areas:

Fundamentals of Climate Change and GHG Emissions: Climate Change Science and Global Perspectives, Greenhouse Gas Emissions and Carbon Accounting, International and National Climate Policies, Sectoral GHG Emissions Assessment.

AI Applications in GHG Monitoring and Climate Action: Introduction to Artificial Intelligence for Environmental Management, AI-Based Emissions Monitoring and Reporting, GIS, Remote Sensing, IoT and Digital Technologies, AI for Climate Risk Assessment and Adaptation.

Decarbonization, Net-Zero Strategies and Future Technologies: Decarbonization Strategies Across Sectors, AI for Circular Economy and Resource Efficiency, Net-Zero Pathways and Carbon Neutrality

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

This programme is designed for Environmental Engineers and Scientists, Climate Change and Sustainability Professionals, ESG Managers, Energy Auditors, Urban Planners, Industry Professionals, Government and Pollution Control Board Officials, Academicians, Researchers, Consultants, and Project Managers involved in climate change mitigation, environmental management, sustainability, and net-zero initiatives.

Programme Dates, Timings & Code

Dates: 08 - 10 September 2026, Timings: 10 AM Onwards. & Code: 8076

Course Director

Dr. K. Chandrakala Sr. Faculty, Centre for Climate Change **Dr. Aadhi Naresh,** Faculty, CCC
Engineering Staff College of India,
Phone: Direct 040 6630 4164/4137, Fax: 040 - 6630 4163,
Mob: 94948 72533 Email: ccc@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. 18,500/-** (Rupees Eighteen Thousand 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** 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 Directors**.

Each participant will receive a Certificate of Participation upon program completion.