Introduction
With urbanization the demand for urban infrastructure facilities like water supply and sewage treatment and disposal is rising sharply, posing a big challenge to urban planners and policy makers. This has thrown up two self-perpetuating problems of providing water supply and collection and disposal of sewage from these towns/cities. The Government of India has taken up the planning and implementation of sewerage system with Sewage Treatment Plants (STPs) for all the cities/towns with the objectives of avoiding environmental pollution, reducing the health risks and thereby improving the health and hygiene conditions of the people. There are number of STP technologies available to treat the sewage and produce effluent suitable for different options of disposal as well as reuse. To select the appropriate advanced waste water treatment technology from alternative treatment technologies for creation of high quality water for reuse economic analysis is required for which construction costs and Operation and Maintenance (O&M) costs are required. Advanced wastewater treatment methods will remove all nutrients, suspended solids, dissolved solids and toxic substances present in it.

As per CPCB report, it was evident that about 78.7 % of gap is predominant between the generation of sewage and installation capacity as well as the efficiency of STP working. Hence to fill the gap and sensitize the participants with the importance on selection of technology, this training programme is framed for its successful technical inputs.

Objectives
The objective of this programme is

- To update the knowledge and upgrade the skills on the principles and design concepts, operation and maintenance.
- To understand the waste water treatment facilities, sewage treatment plants as per the local conditions.
- Different advanced technologies based waste water treatment Processes, their Design & Principles
- To understand the selection of best waste water treatment system technically & financially
- To understand the opportunities for reuse and recycle of treated wastewater,
- To understand the new technologies and PPP models without compromising on the basic safeguards.
- Decentralized Waste Water Treatment Process

Course Coverage
This programme is designed to cover broadly the following topics.

- Advanced Treatment Technologies-CAMUS-SBT, Phytoremediation, DEWATS
- Performance evaluation of STP
- Trouble shooting in the O&M
- PPP Models
- Detailed Project Report (DPR)
- Decentralized STP
- Field visit to STPs (different technologies like Phytoremediation, CAMUS,MBBR,SBR etc. depending on availability)
- Group Discussion
Methodology
Methodology of the programme includes classroom Sessions by expert faculty, 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
The course is meant for Engineers/ Managers / Commissioners at all levels working in Metropolitan Water Supply & Sewerage Boards, Sanitation Boards, Public Health Engineering Departments, Municipal Corporations, Municipal Administration Departments, Urban Development Authorities, ULBs, Industrial Townships, Industrial Development Corporations, Consultancy Organizations, Implementing agencies and interested professionals / individuals. The programme can also be attend by the local, State and Central Government officials engaged in the decision making, planning and management of water and sanitation services from across the Country, national and international consultants’ and technology providers along with technical experts and sector professionals.

Programme Dates, Code & Timings
Dates: 24-26 April 2024, (EM 6064), Timings: 10 AM Onwards.

Course Director
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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
- **Residential Fee** – Rs. 16,000/- (Rupees Sixteen 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)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,organization name, 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.