

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 on

Storm Water Drainage System- Design, Construction and O&M



11 – 13 May 2021



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

Introduction

Eighty percent of a municipality's problems are caused by twenty percent of its sanitary sewers & storm water drainage systems. The best way to avoid the majority of future problems is to pay greater attention to them during the planning, design and implementation phase.

To design an effective urban drainage and storm water management system, knowledge of the technical design principles for each component of the system is required. After giving a brief introduction this Training Programme will focus on the practical application of sound planning and design practices as well as specific storm water management techniques. This three days workshop is aimed at those who want to hone their skills in storm water drainage systems design & storm water management. Participants will learn to develop a plan to mitigate the environmental impact caused by urban development & the management of storm water.

The uniqueness of this course is its emphasis on hands-on exercises for designing the various components of drainage and storm water management systems.

Storm water drainage systems include surface drainage systems, underground drainage systems, storm water management facilities, and erosion and sediment control systems. The design of the storm water drainage system and management addresses several elements including storm water management plan, temporary and permanent erosion and sediment control practices, site grading, utilization of overland flow and natural site features, as well as the construction of culverts, ditches, and other drainage structures.

Objectives

- To understand the Storm Water Drainage creation, designing network system and ensuring that the network doesn't clash with the other utility services
- > To understand the techniques for hydrological and hydraulic analysis and design of the network.
- Understanding on Analysis of Storm Water Drainage Network System using latest methods like Rational and Ilsax hydrology, HGL check hydraulics etc.
- > Understanding of 12d Model's Dynamic Hydraulic Model
- > Understanding on storm water drainage systems to meet given planning objectives
- Strengthening the skills on urban drainage system design and applying the knowledge of basic hydraulics to drainage design problems
- Better understanding on technical design issues by focusing on related planning and environmental impact considerations
- > Understanding on Storm Water Management and its integration with Rain Water Harvesting

Course Coverage

- > Storm water Drainage Network System-CPHEEO Manual Guidelines and Design Criteria
- > Rainfall analysis, Hydrology methods of computing runoff and Hydraulic design of open channel flow
- > Hydrological and Hydraulic Design and analysis of the Storm Water Drainage Network System
- > Modeling and Analysis of Storm Water Drainage System using software
- > Introduction to 12d Model's for the design and analysis of Storm water Drainage Systems.
- Integration of Rainwater Harvesting with Storm Water Drainage Design
- Storm Water Management-Innovations and Best Practices.

Methodology

Methodology of the programme includes lectures by expert faculty, 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

Participants from Consulting Engineers, Municipal Engineers, Civil Project Engineers Construction Managers, Engineering Field Managers, Works Engineers, Public Works Directors, City Engineers, Superintendents of Operations, Wastewater System Managers, Safety Inspectors & Procurement Officers, EITs, Technicians & Technologists, Sewer Construction Contractors. This course is for designers who wish to use the 12d Model for the design and analysis of Storm water Drainage Systems for urban drainage system. It is intended for people who have an understanding of the concepts of storm water drainage hydraulics and hydrology.

Programme Dates & Timings

Dates: 11 – 13 May 2021

Timings: After Registration Participant can access **ESCI LMS platform** for digital Learning **Session timings** 10:00 AM onwards.

Course Director

Ms. Anita Aggarwal

Faculty & Head I/c. Environment Management Division, Engineering Staff College of India, Old Bombay Road, Gachi Bowli, Hyderabad 500 032 Phone: Direct 040 6630 4120 to 4122 Fax: 040-23000336 Email: <u>em@escihyd.org</u>

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

- > Online fee Rs. 9,000/- (Rupees Nine Thousand only) per participant.
- 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

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.esciupskill.org. / 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**

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

Environment Management, Engineering Staff College of India Gachi Bowli, Hyderabad – Telangana 500 032 Phone: 040 – 66304120, 66304122, Fax: 040 – 66304103 Email: em@escihyd.org, web portal: www.esciupskill.org; / www.escihyd.org