

# **Engineering Staff College of India**

An Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachi Bowli, Hyderabad-500 032
(IMS [ISO 9001:2015, ISO 14001:2015, ISO 50001:2018, ISO 45001:2018],
ISO/IEC 17025:2017 Certified, AICTE & CEA Recognized Institution)



**CIVIL & TRANSPORTATION ENGINEERING DIVISION** 

## **Training and Development Programme On**

Enhancing structural durability with advanced waterproofing solutions

Date: 10<sup>th</sup> – 12<sup>th</sup> October, 2023



#### **INTRODUCTION:**

The rapid growth of the construction industry over the last decade, the importance of waterproofing chemicals has become well established Waterproofing used to be considered as a part of the repair market, being employed only after damage from water caused a water leakage. While waterproofing at the time of construction can prevent water leakage and associated damage and certainly used for repair, another important role that has emerged for waterproofing products is one where the use of the appropriate Water proofing technique and their correct application can Enhance the Structure stronger, more durable and sale

Waterproofing can also help to maintain the appearance of newness by protecting against damaging effects of weather and pollutants. Water proofing is one of the essential processes in construction to prevent Structure from leakages and dampness Recent days advanced techniques are used for waterproofing the structure to enhance its strength and durability. An effective waterproofing system needs to be durable both during and after construction and need to be robust and durable for the life of the structure. This training programme will give knowledge in choosing ideal materials for water proofing and recommend the best structural solutions and Enhancing Structural Durability with Advanced Waterproofing Technique.

## **COURSE OBJECTIVES:**

- The objective is to disseminate knowledge in the field of waterproofing of structures.
  Water is one of the primary vehicles to cause deterioration of structures before their
  expected life span and its penetration inside the building elements is mainly caused by
  poor construction practices, poor workmanship, wrong selection of materials, improper
  mixing, unauthorized structural changes and so on.
- The programme will provide an in-depth understanding the source of water leakages through the building areas along with suggestions for the remedial measures to be adopted.
- The Programme will give knowledge on waterproofing and Types of Waterproofing solutions
- Provide knowledge on Quality Construction Practices for Durability. Strength and Watertight Structures

## **COURSE COVERAGE:**

- Overview on Enhancing Structural Durability with Advanced Waterproofing Solutions
- Concepts on waterproofing and Types of Waterproofing solutions
- Quality Construction Practices for Durable and Watertight Structures
- Water Penetration in Built Structures and Resultant Deterioration and Analysis
- Non-Destructive Testing for Structural Diagnostics and Monitoring
- Waterproofing of Basements & Wet Areas-Design, Construction and Specifications
- Advancement in Waterproofing Technologies: Nano Technology in Waterproofing.
   Crystalline Waterproofing, Self-healing, water-repellent, spray-on coating. Ultra water Resistant surface etc.,
- Impact of Waterproofing Chemicals on the strength and durability of Structure
- Field visit

## **BENEFITS TO THE ORGANISATION AND PARTICIPANTS:**

- Emphasis on moisture induced distresses, need of waterproofing and protection of concrete structures with demonstration of modern systems and products.
- Participants will understand about Non-Destructive Testing for Structural Diagnostics and Monitoring.
- Participants will know about Design, Construction and Specifications of Waterproofing of Basements & Wet Areas
- Interactive sessions with relevant case studies encouraging the participants to clarity their doubts.

## **TARGET PARTICPANTS:**

Officers and Engineers from Government departments like Roads and Buildings, PWD, Municipal Corporations, Panchayat Raj, Housing Boards, Border Roads organization, Public and Private sector like RITES, Construction companies, organizations involved in Construction activities, Professionals and Consultants etc., working at junior level to senior level will all be benefited by attending this program.

## **RESOURCE PERSONS:**

Renowned personalities both from Industry / Educational Institutions like IIT's/ NIT's / Research Institutes, Reputed Universities, who are experts in this field, will be involved in providing the training.

## PROGRAMME VENUE, DATES &TIMINGS:

**VENUE**: Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad- 500 032.

DATES : 10<sup>th</sup> – 12<sup>th</sup> October, 2023

Registration : 09:45hrs.

Session timings : 09:45 – 17:15 hrs with 3 times breaks.

## **COURSE DIRECTOR:**

Dr. R Venkat Reddy, Ph.D (Osmania), FIE Head

## **COURSE COORDINATOR:**

Ch. Tilak – Faculty

## **COURSE FEES:**

Rs.15,000 (Rupees Fifteen Thousand Only) (Residential fee) + GST 18% per participant. Fee includes, Soft copy of course material, course kit and Twin Sharing AC accommodation, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training programme.

## **DISCOUNTS**

- ❖ Non-Residential Fee- 10% discount on course fee is allowed for non-residential participants.
- ❖ **Group Discount:** Additional 10% discount for three or more participants, if sponsored by the same organization.

GST 18% is to be paid extra over and above the training fee, as training is also brought under the purview of Service Tax. PAN Card No AAATT3439Q; Service Tax registration No AAATT3439QST008 (under commercial training or coaching services – clause 65(105) (ZZC) of Finance act – 1994). GSTN Number – 36AAATT3439Q1ZV (HSN Number – 999293)

Programme fee is to be paid in favor of "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. While using

EFT method of payment, please ensure to communicate us your company name, our invoice reference and programme title.

## **REGISTRATION:**

Please send your nominations

To
The Head
Civil & Transportation Engineering Division

Engineering Staff College of India Old Bombay Road, Gachi Bowli, Hyderabad - 500 032

Mobile: **9490011311 / 9492011311** Phone: 040-6630 4114, 4115, 4107

Email: cte@escihyd.org

## **CERTIFICATE:**

A certificate of participation will be awarded to each participant.

## **GENERAL INSTRUCTIONS**

- > ESCI encourages participants to present case studies from their respective organizations.
- ➤ ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200hrs) and one day after conclusion (Check-out 1100hrs) of the program duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation).