



Engineering Staff College of India

An Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachi Bowli, Hyderabad-500 032

An ISO 9001:2015, ISO 14001:2015, ISO/TEC 17025:2017, ISO 45001:2018,
ISO 50001:2018 Certified, AICTE & CEA Recognized Institution



CIVIL & TRANSPORTATION ENGINEERING DIVISION

Training and Development Programme on Concepts on Design, Construction and Maintenance of Bridges

09th – 13th September, 2024



Centre for Promotion of Professional Excellence

INTRODUCTION:

Bridges play a major role in the national economy of a country and serve as a foundation for infrastructure development. New bridge construction and few existing bridges required to be repaired and retrofitted, it is essential to study about Design, Construction and Maintenance of Bridges. The total design, construction and maintenance of bridges can be as simple as or as complex as desired but ultimately it starts with a solid inspection program. Bridges are designed, first, to carry their own permanent weight, or dead load; second, to carry traffic, or live loads; and, finally, to resist natural forces such as winds or earthquakes. Over the years, bridge design and construction have evolved substantially, which leads to new innovative solutions.

This training programme covers the concepts on Bridges, design concepts, maintenance of bridge, the seismic effects on design and performance of bridge construction, about Restoration of Bridges, Bridge Construction Methodology & Innovative new Construction material for bridges and some case studies.

OBJECTIVES:

- To impart knowledge on Soil Investigations and selection of site for bridge construction
- Participants will understand the design and execution of different types of Bridges.
- Participants will be aware of the design concepts, IRC & other relevant codes.
- Improving the quality control of constructions
- To impart knowledge on Restoration of Bridges
- Various issues regarding maintenance of Bridges will also be discussed.
- Enhancing the durability of the bridge construction and reduce the maintenance cost in long run.

COURSE COVERAGE :

- Overview of Design, Construction and Maintenance of Bridges
- Site Investigations, Soil Investigations: Site selection of Bridges
- Foundations: SBC & Settlements
- Design Data Collection – Guidelines – IRC and Other relevant codes
- Design of Piers & Abutments
- Design of Deck Slab - Reinforced Concrete Slab Bridge Decks
- Prestressed Concrete Bridges and Composite Bridges
- Seismic Effects on design and performance of Bridges
- Bridge Construction Methodology & Innovative new Construction material for bridges
- Bridge Maintenance Techniques
- Restoration of Bridges – Case studies
- Technical Visit
- Group discussion & Case study presentations by participants

BENEFITS TO THE ORGANISATION AND PARTICIPANTS:

- Understand basic knowledge on design, execution and Maintenance of bridges
- Developing the skill set of the employees to utilize the latest materials in concrete for bridge construction.
- Understand the seismic effects on design and performance of bridge construction.
- Participants will know new Restoration methods of Bridges.
- Boost the skill for the betterment of quality in projects.

TARGET PARTICIPANTS:

This course is suitable to all engineers and officers working at junior level to senior level from Government departments like R&B, PWD, Municipal Corporations, Panchayat Raj, Housing Boards, GHMC, RITES, SCCL, and Border Roads Development. Engineers from all State and Central Government Departments, Private organizations, Structural Engineers & Contractors.

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 : **09th to13th September, 2024**

Registration : 09:45hrs.

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

COURSE DIRECTOR:

Dr. D. Adinarayana, FIE

Sr. Faculty & Head

COURSE COORDINATOR:

Ch. Tilak – Faculty

COURSE FEES:

Rs.27,500/- (Rupees Twenty Seven Thousand Five hundred Only) + GST 18% per participant. Fee includes, Soft copy of course material, course kit and Twin Sharing AC accommodation as per availability, 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) (ZC) 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

Phone: 040-6630 4114, 4115, 4107, 4134

Email : cte@escihyd.org

Mobile No : **9052313252**

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).