

264/est/18

OFFICE OF THE CHIEF ENGINEER  
LOCAL SELF GOVERNMENT DEPARTMENT  
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PUBLIC OFFICE COMPOUND,  
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No.DB4/281/09/CE/LSGD

Dated: 04.09.2018

CIRCULAR

A training programme on “**Bridges & Culverts – Planning, Design and Construction**” during **25 to 28 September 2018** at **ESCI Hyderabad**. Interested Local Self Government Department Engineers can attend the programme after getting permission in advance from the controlling officers without affecting the functioning of the office and the same shall be communicated to this office also. Fees and Financial requirement if any shall be meet by the incumbent themselves. The department is not in a position to meet the financial requirements. The brochure is attached along with the circular for information.

  
Chief Engineer  
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ESCI

# Engineering Staff College of India

An Autonomous Organ of The Institution of Engineers (India)  
(ISO 9001:2015 Certified Institution)

Old Bombay Road, Gachibowli, Hyderabad – 500 032

☎ : 040-66304114, 66304115, 66304138 / Fax : 040 – 23000336

✉ : cte@escihyd.org / Website : www.escihyd.org



P. Muralikrishna, Faculty & Head I/C  
Ch.Jyostna, Faculty, CTE Division

ESCI/CTE/CT1019/2018-19  
Date: 12.07.2018

To  
The Joint Secretary  
Rural Development Dept.  
Govt. of Kerala  
Govt. Secretariat,  
THIRUVANANTHAPURAM  
KERALA-695001



Continuing Professional Development Programme on  
**Bridges & Culverts – Planning, Design and Construction**  
25 – 28 September, 2018

Dear Sir,

We are glad to inform you that Engineering Staff College of India (ESCI) is organizing a 4-day training programme on "Bridges & Culverts – Planning Design and Construction" from 25 – 28 September, 2018 at ESCI Campus, Gachibowli, Hyderabad.

The main function of Bridges and Culverts is to connect two communities which are separated by streams, river, valley, or gorge, etc. Modern bridges are the evolution of Log Bridges, Log-tree trunk Bridges, Clapper Bridges, canoes joined with timber and Rope Bridges etc. The basic components of Bridges are Deck Slab, Beams/Girders, Abutments, Piers and Foundations.

The factors effecting the decision on type of bridge to be constructed are:

1. Choice of Superstructure
2. Choice of Substructure

Bridge Structures are designed depending on the following parameters:

- Available Hydrological data
- Effective Span
- Conditions of subsoil
- Loads to be applied
- Materials
- Shapes

In order to discuss the issues related to the above parameters, Engineering Staff College of India (ESCI) has designed and organized a practical training course on the topic of "Bridges and Culverts – Planning Design and Construction" discusses different issues related to design and execution of different types of culverts and Bridges. Various issues regarding maintenance of Culverts and Bridges are also discussed.

Faculty for this programme will consist of eminent speakers from Universities and Industry, who are experts in the field.

The course fee for this 4-day programme is Rs.20,000/- (Rupees Twenty Thousand Only) per participant which is fully residential. The course fee is to be paid in favour of "IE (I) – Engineering Staff College of India" in the form of demand draft payable at Hyderabad. Other details of the course are explained in detail in the enclosed brochure. GST @ 18% is to be paid extra to the ESCI by the concerned sponsoring organization.

ESCI encourages participants to present case studies of their respective organizations.

We request you to take advantage from this 4-day programme which would benefit your organization and engineers working with you. Kindly nominate officers for this programme.

Expecting an early and positive response from your side.

Thanking you,

Yours sincerely,

P. MURALIKRISHNA

Encl: Brochure



# Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)  
Old Bombay Road, Gachi Bowli, Hyderabad - 500032, Telangana, India.



Civil / Transportation Engineering Division

Continuing Professional Development Programme on

## Bridges & Culverts – Planning, Design and Construction

25 - 28 September, 2018



(An ISO 9001 : 2015 Certified, AICTE & CEA Recognized Institution)

**Centre for Promotion of Professional Excellence.**

## **INTRODUCTION**

The total design, construction and management of bridges can be as simple as or as complex as desired but ultimately it starts with a solid inspection program.

Bridges should have a level 1 maintenance inspection annually to determine if there are any issues that need to be remedied to keep the public safe. A level 1 inspection can be used effectively to screen and develop a program for more detailed needs such as higher level inspections.

A level 2 condition inspection is a more comprehensive inspection and is completed on a less frequent and scheduled basis. Handover inspections can be completed as a level 2 inspection or as a separate report as required. It is imperative that any problems with the infrastructure are identified. Regular inspections make it easier to plan and manage future network demand including budgets and risk.

## **OBJECTIVES**

Through this programme on “**Bridges & Culverts – Planning, Design and Construction**”, it is proposed to discuss different issues related to design and execution of different types of culverts and Bridges. Various issues regarding maintenance of Culverts and Bridges are also discussed.

## **COURSE COVERAGE**

- Soil Investigations: Location of Bridges, Site Investigations
- Types of Foundations, SBC & Settlements
- Overall Aspects of Bridge design – IRC and Other relevant codes
- Design of Well Foundations, Piers, Abutments and Deck Slab
- Culverts Design – Overall Study
- Maintenance of Bridges Including Bearings
- Restoration of Bridges – Case studies
- Lab Visit

## **METHODOLOGY**

This programme will be conducted in an interactive environment providing ample scope for discussions. More emphasis will be given in the direction of providing practical solutions. Each of the participants will be given reading material on all the topics covered during the training process.

## **TARGET PARTICIPANTS**

This programme is planned especially for all the agencies, involved in Infrastructure Projects in National Highway Development Programme, PMGSY programmes, Airports and other similar development activities, Construction Engineers, contractors etc. In addition, faculty members from technical institutes / Universities, dealing in the areas of Infrastructure will also get an exposure to the developments with this training programme and it will help them in reorienting their curriculum to suit the field requirements.

## **BENEFIT TO THE PARTICIPANTS**

After completion of this training course, the participants will be able to:

- Understand basic knowledge on design and execution of Culverts and bridges
- Understand basic knowledge on Maintenance of Culverts and bridges

## **RESOURCE PERSONS**

Renowned personalities both from construction industry as well as educational institutes / 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-500032.

**Dates** : 25 – 28 September, 2018

**Timings** : On the first day Registration will commence at 0900 hrs 25 September, 2018. On all other days, the programme timings will be from 0945 - 1715 hrs with breaks in between for tea and lunch.

**COURSE DIRECTOR**

**Shri P. Murali Krishna**

Faculty & Head I/C

**COURSE ADVISER**

**Shri A.R.K. Murty**

Adviser

**COURSE COORDINATOR**

**Miss. Ch. Jyostna**

Faculty - 7207744982

**FEES**

₹. 20,000/- (Rupees Twenty Thousand Only) (Residential fee) per participant. Fee includes, course material, course kit and 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, 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) (ZCC) of Finance act – 1994).**

**GSTN Number – 36AATT3439Q1ZV (HSN Number – 999293)**

Programme fee is to be paid in favour 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**

Online registration shall be available on ESCI website.

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 and addressed to:

**Head, Civil & Transportation Engineering Division**

Engineering Staff College of India

Old Bombay Road, Gachi Bowli, Hyderabad - 500 032

Phone: Direct 040-6630 4114, 6630 4115, 66304138 / Fax: 040-23000336

Email : cte@escihyd.org

**CERTIFICATE**

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

**GENERAL INSTRUCTIONS**

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of outstation participants, ESCI will facilitate pick-up and drop from Airport / Railway Stations / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participant directly to the Cab.
- 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)
- Well developed Information Centre and Internet facilities are available at free of cost to the participants.

# About Engineering Staff College of India

**GENESIS** Engineering Staff College of India (ESCI's) is a unique Institution set up in October, 1981 by the premier body of engineers, The Institution of Engineers (India).

## PHILOSOPHY & OBJECTIVES

The Primary objectives of ESCI are to impart professional and need based Continuing Professional Development Programmes (CPDP) and training in frontier areas of Engineering and Management fields, simultaneously providing professional consultancy and technical services to the Industry. ESCI's operations are firmly grounded in its desire to act as a bridge between academic institutions, R&D laboratories and organizations in private and public sectors to promote the growth and increased availability of latest know-how and expertise to professional engineers, executives and managers in all these sectors.

## ESCI's DOMAINS

- Climate Change
- Environment Management
- Management & Technology
- Quality & Productivity
- Skill Development Cell
- Technology & Automation
- Civil & Transportation Engineering
- Information Technology
- Power & Energy
- Water Resource Development
- Design & Prototyping Centre
- Corporate Relationship Cell

## SCHOOL OF PG STUDIES

School of PG Studies of ESCI conducts AICTE approved two Year full time Post-Graduate Diploma in Infrastructure Management (Power, Transport, Telecommunications & Civil) and PGDM. Aim of the courses is to build the capacity of the engineers and other graduates by imparting skills to make them effective and productive managers.

The PGDM (Infrastructure) is uniquely designed to amalgamate technical talent with the latest management techniques to transform them into Techno Managers in the core sectors of Civil, Power, Transportation and Telecommunication to handle challenges of massive development of infrastructure. Engineering Graduates from any branch are eligible for this program. The admission process for the new batch starts in January every year and the courses commence from July.

## TRAINING PROGRAMMES

Continuing Professional Development Programmes are formulated by ESCI from time to time and announced, on topics of current technology and relevance. In Addition to Open Programmes, ESCI also organizes and conducts customized in-house programmes to meet specific requirement of such organizations.

## CAMPUS & HOSTEL FACILITIES

The 70-acre sprawling Campus of ESCI is about 15 km from the centre of Hyderabad City. ESCI, situated in serene and tranquil surroundings, has its main building and five hostel blocks which can accommodate upto 150 participants. The hostel rooms are air conditioned and well furnished for comfortable stay of the participants and arrangements for catering and recreational activities on Campus are also provided.

## CLASS ROOMS

The 16 lecture halls and two seminar halls are air conditioned and well equipped with all modern audio-visual aids to conduct concurrent programmes.

Chanakya Seminar Complex has two lecture halls & seminar halls of seating capacity of 200+ for National & International Conferences and Seminars.

*For details about training programmes, consultancy, or any other information, please write to :-*

## Director

## Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)  
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Old Bombay Road, Gachi Bowli, Hyderabad 500032, Telangana, India  
Phones : +91 40 2300 0465 / 2300 0466, Fax : 91 040 66304103 / 23000336  
Email: director@escihyd.org, ic@escihyd.org  
URL www.escihyd.org



Kautilya Complex is a new addition having 4 state of the art class rooms.

## INFORMATION CENTRE

ESCI Information Centre has a valuable collection of about 8000 books & reports and 100 periodicals including international journals, online database EBSCO is available.

## FACULTY

ESCI has core faculty in all the engineering and management disciplines comprising of very senior engineers, eminent scientists and teachers who have rich experience. ESCI derives faculties from a large number of national and international organisations of high repute. They are drawn from industries, consulting firms, government organisations, academics and research institutions etc.

## CONSULTANCY ASSIGNMENTS

ESCI provides consultancy services to suit the requirement of clients in all engineering disciplines, Quality (ISO 9000/ISO 14000) Management & Technology areas. ESCI's group of thorough-bred consultants with their expertise execute these assignments and co-opt experts as necessary. ESCI has successfully executed many prestigious projects in the areas of water resources, power & energy, transportation, minings etc.

## COLLABORATIONS

ESCI has large number of national and international collaborations which provide an impetus to improve the quality of its activities.

**International** : European Institute for Energy Research Electricite de France, Karlsruhe, Germany, Planning Transport Verkehr AG (PTV), World Bank & JICA aided Projects, Germany, Massachusetts Institute of Technology (MIT) USA, Kansas State University (USA), University of Illinois at Chicago (USA), British Council, INTERTEK, Nigel Bauer & Associates, DFID, Govt. of UK, Nepal Electricity Authority etc.

**National** : Ministry of Urban Development, Ministry of Drinking Water & Sanitation, RWS & S, MoEF & CC, Ministry of Skill Development MoRTH, MNRE, DST, PFC, Central Electricity Authority, Power Grid, DVC, MSETCL, GETRI, Torrent Power, MPPTCL, MPPKVVCL, PSPCL, PSTCL, CBIP, CPRI, CPCB, World Bank TEQIP funded Institutions, DGET, DGAQA, NRRDA, UTL, NALCO, SAIL, JNTU, CMC, C-DAC, NTPC, BHEL, NHPC, DRDO, NFC, CIRE, NPC, ONGC, BPR&D, NRSC, HAL, NMDC, GAIL, Coal India Ltd, MacLead, all SEBs, and State Govt. Depts., In addition, ESCI makes use of the various bilateral agreements between its parent body, The Institution of Engineers (India), and professional bodies in many other countries to further its overall goals & activities.



ESCI



**A Learning Centre for Practicing Engineers, Scientists and Managers.**