



Engineering Staff College of India
Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. TS, India

WATER RESOURCES DEVELOPMENT DIVISION

Continuing Professional Development Programme on
**Planning, Design of Water Resources Structures using
Finite Element Method**
26 – 28 December, 2024



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

Centre for Promotion of Professional Excellence

INTRODUCTION

India has developed extensive irrigation infrastructure facilities bringing more than 110 million hectares of land under irrigation in minor, medium and major irrigation projects. Accessibility of irrigation resources has increased manifold in terms of Irrigation Potential created over the plan periods. There has been a progressive increase in the number of large dams, number of major and medium irrigation projects and network of field channels; over the years canal discharge or capacity is the most important parameter to be prescribed for designing a canal. It is also necessary in managing the canal system. For irrigation canals, the water requirement depends upon the command area, the type of cropping pattern and irrigation practices, and the rainfall on the command area. For successful functioning the lift irrigation schemes require appropriate technique, planning, designing and execution through knowledgeable technical person. Participation of beneficiaries is quite necessary. The purpose of instrumentation and monitoring of Structures is to maintain and improve safety by providing information to (i) evaluate whether a structure is performing as expected and (ii) warn of changes that could endanger the safety of structure. Instrumentation and monitoring combined with vigilant visual observations can provide early warning of many conditions that could contribute to failures and unpleasant incidents. Thus, in addition to other studies, it was emphasized that it is important for irrigation engineers to planning, design and analysis models throughout the entire process, not only in the planning phase but also from the planning phase to the life of the total irrigation infrastructure and to keep records of all recording intervals that will be needed in digital analysis models.

OBJECTIVES

The proposed programme aims at providing an opportunity to the Engineers involved with Planning, design, construction, of Water resources infrastructure in a systematic manner and analysis using Software applications.

COVERAGE

- Irrigation Development in India
- Principles of Planning and Design of Water Resources Structures
- Irrigation Canal Network Design
- Understanding Structural Analysis with ANSYS Software
- FEM Model for the Dam Structure
- Structural Analysis and Simulation Software
- Field Visit

METHODOLOGY

Methodology includes classroom lectures with audio visuals, interactive sessions through group discussions, case studies etc. Emphasis would be laid on sharing of experiences of participants and active participation is solicited from the participants. Medium of training is English.

TARGET PARTICIPANTS

The program is meant for all level of officers involved in central and state Irrigation and Water Resources Depts., R&D, Consultants etc.

PROGRAMME VENUE

Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad - 500032, TS India.

DATES

26 – 28 December, 2024

TIMINGS

On the first day registration will commence at 0900 Hrs. On all other days the programme timings will be from 0915 to 1715 hrs with breaks in between for tea and lunch.

COURSE DIRECTOR

Er. M. Rajasekhar Reddy, M.E, FIE

Former – Chief Engineer

Panchayat Raj Engg. Dept., Govt. of Telangana

Senior Faculty and Head

Contact details: 040-66304117 (D)

Er. G Naresh, M.Tech (Ph.D), MIE

Faculty

Mobile : +918801193075

COURSE FEE

Residential Fee is Rs.16,500/- per participant + GST 18 % per participant. Residential fee includes course material, course kit, and twin-sharing / single AC accommodation as per availability, Breakfast, Lunch, Dinner, Tea / Coffee and Snacks.

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.

(All discounts are applicable only if fee is received at ESCI before the commencement of the programme)

GST @18% as applicable is to be paid extra over and above the training fee. **PAN Card No AAATT3439Q; GSTIN 36AAATT3439Q1ZV** under commercial training or coaching services.

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, telephone and fax numbers of the participant along with the details of mode of payment of fee, addressed to:

Head

Water Resources Development Division

Engineering Staff College of India

Gachi Bowli, Hyderabad – 500 032

Phone: 040 – 66304117 – 9 (Dir.) 23000465 (EPABX): Extn: 4117– 9

Fax: 040 - 23000336

E-Mail : wrd@escihyd.org

Url : www.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 the outstation participants ESCI will facilitate pickup and drop from Airport / Railway Station/ 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 participants directly to the cab.
- ESCI provides complimentary accommodation to participants a day prior to the commencement and after the conclusion of the programme. (Check in at 12:00Hrs) one day after conclusion (Check out at 12:00 hrs) of the programme duration.
- Overstay charges of @ Rs.990/- per day, per head will be charged.
- Well developed Information Centre and internet facilities are available to the participants.