

INTRODUCTION

Structural engineering is a major specialisation in civil engineering which primarily addresses design and construction of various infrastructural elements. In spite of being one of the established specialisations under civil engineering, newer challenges are being faced toward attaining efficiency and sustainability. Availability of better computational facilities and software solutions has enabled engineers to visualise and evaluate systems of varying degree of complexity. In order to ensure these components in the learning content of the students, the resourcefulness of academic system is inevitable.

COURSE OBJECTIVES

The prime objective of the course is to support the structural engineering teachers to function as professional consultants and hence to extend their expertise to the service of the society. This course is designed to address the basic requirement that must be available at engineering colleges by bridging the professional demands in the structural engineering through interactive sessions with leaders in academia and industry.

ELIGIBILITY

Prerequisite for this course is basic knowledge in structural analysis, and design of concrete and steel structures. Faculty members from AICTE approved engineering colleges can apply. The number of participants is restricted to 30. Selection will be on a 'first come, first served' basis.

REGISTRATION FEE

There is no course fee for the participants from AICTE approved engineering colleges. All the participants will be given entitled TA/DA as per the Government norms.

BOARDING AND LODGING

Free Boarding and lodging facilities will be provided on request, for the participants from AICTE approved institutions on twin sharing basis. No family accommodation will be provided.

HOW TO APPLY

The scanned copy of the application form along with sponsorship certificate should reach the coordinators by e-mail on or before 27th November 2017. The original documents should be provided at the time of registration.

COURSE OVERVIEW

The course encompasses one week of lectures by eminent professors and practicing structural engineers, followed by another week of hands on training on software.

The first part would include all the necessary theoretical information for a detailed structural analysis and design in RCC and steel. The following topics shall be covered in the course:

- ✚ Structural idealisation, load calculation
- ✚ Structural analysis, matrix method, FEM
- ✚ Fundamentals of RCC and steel design
- ✚ Design of foundation systems
- ✚ Design and detailing of RC building
- ✚ Seismic evaluation of structural systems

In the second part, the participants would be trained to use a specific software tool (E-TABS) with a specific case/project taken as the key learning component.

RESOURCE PERSONS

Sessions will be handled by eminent researchers from IITs, NITs and other reputed academic institutions and practicing engineers.

