

Course syllabus

Department of Civil Engineering, Indian Institute of Technology Madras

CE6670-Structural Engineering Design Studio

Credit Distribution: C:9 L:3 T:0 P:0 E:0 O:6 TH:0

Course Type: Theory

Description: The course aims to develop analytical, design and detailing skills for structures.

Course Content: 1. Reinforced concrete buildings 2. Structural steel industrial sheds 3. Bridges for each of the structures, the following are covered in the form of a mini-project: conceptual design, design basis report, numerical model and analysis, structural design, structural drawings, bill of quantities. 4. Special structures: tall structures, industrial structures, large span roof structures. The conceptual design and methods of construction are covered. 5. Special topics: Thumb rule design, integrated approach for design, process and stages of design, building information modeling.

Text Books: NIL

Reference Books: Handouts of the faculty.

Prerequisite: NIL