

Course syllabus

Department of Civil Engineering, Indian Institute of Technology Madras

CE5020 - Construction Planning and Control

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

Course Type: Theory

Description: To learn the techniques used for planning, scheduling and control of construction projects. To apply these techniques for a real world project and demonstrate the learning.

Course Content: Introduction to Project Management Gantt Charts and Work Breakdown Structure (WBS) Network Diagrams Critical Path Method (CPM) Precedence Diagram Method (PDM) Program Evaluation and Review Technique (PERT) Time cost tradeoff analysis (Network Crashing) Resource Allocation and Leveling Project Control - Earned Value Analysis Linear Scheduling Method Scheduling and Control using Microsoft Project Lab Guest Lectures Case Studies and Advanced Topics

Text Books

- Project Management for Engineering and Construction, GD. Oberlender, McGraw-Hill.
- Construction Project Scheduling and Control by Saleh Mubarak, Prentice Hall of India

Reference Books

- Construction Project Scheduling, Callaghan, MT., Quackenbush, DG. and Rowings, JE., McGraw-Hill.
- Construction Project Management, SK. Sears, GA. Sears, RH. Clough, John Wiley & Sons

Prerequisite: NIL