

Course syllabus

Department of Civil Engineering, Indian Institute of Technology Madras

CE6750 - CAD in Civil Engineering

Credit Distribution: C:9 L:2 T:1 P:0 E:0 O:6 TH:0

Course Type: Theory

Description: Develop a theoretical understanding of computing concepts that are useful for engineering tasks such as design and planning. Develop programming skills for implementing computer support for engineering tasks

Course Content: Programming fundamentals, Representation of data, Algorithms and computational complexity, Object representation, Databases, Optimization, Geometric modeling, Computer Graphics, Building Information Modeling (BIM), Applications of Artificial Intelligence and Knowledge Systems

Text Books

- B. Raphael and I.F.C. Smith, Engineering Informatics: Fundamentals of computer aided engineering, Edition 2, John Wiley, 2013.

Reference Books:

- BIM Handbook: A Guide to Building Information Modeling for Owners, Managers, Designers, Engineers and Contractors, Chuck Eastman et al.

Prerequisite: NIL