

Course syllabus

Department of Civil Engineering, Indian Institute of Technology Madras

CE5332 - Special Topics in Metro Engineering

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

Course Type: Theory

Description: Introduce topics to PG Diploma students on topics that were not covered in the regular courses.

Course Content: PROCUREMENT FOR METRO SYSTEMS: Civil work procurement; Equipment Procurement “ rolling stock, S & T system, power system; Consultant procurement; Day to day local purchases and minor procurements; Concessionaire procurement-PPP, O & M and service contracting; e-procurement and tendering; Dispute resolution mechanisms. PPP for Investing, Building, O & M: Risk sharing; Financial closure; Performance specifications; Legal provisions O & M service contracts for Equipment and Services: Metro systems; Individual contracts for equipment; Warranties, DLP and Guarantees PROPERTY DEVELOPMENT AND OTHER COMMERCIAL EXPLOITATIONS: Capturing value of existing metro stations within and outside; Commercial property development as an additional source of income; Advertising space management within the trains etc.; Business development for metro services and property development. COMMISSIONING, TESTING AND SYSTEM INTERFACING PROCESSES AND PROTOCOLS: Independent Safety Assessments.; Framework of approvals/statutory requirements for commissioning of services “Metro Rail Safety Commissioner etc.

Text Books: NIL

Reference Books: NIL

Prerequisite: NIL