

Course syllabus

Department of Civil Engineering, Indian Institute of Technology Madras

CE7013 - Advanced Topics in Project Delivery Finance

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

Course Type: Theory

Description: Participants will be introduced to advanced theories with regards to project procurement, finance and delivery. These will include, but will not be limited to, topics on Design-Build Construction, Public Private Partnerships, Integrated Project Development etc. Perspectives from Engineering Management, Public Administration and Economics will be presented.

Course Content: Overview of Traditional Project Delivery Methods; Design-Bid-Build approaches; Contracting Strategies Alternate methods for project procurement Need for alternative project delivery methods; Introduction to Design-Build development; Introduction to Relational Contracting, Alliance Contracting and International Joint Ventures; Project Delivery and Finance: The Economics of Public Private Partnerships (PPPs); A Transactions Cost approach to PPPs; Bounded rationality and its influence on project delivery; Management of Incomplete Contracts; When to choose PPPs – a Public Administration Perspective; Legislative, Organizational and Institutional underpinnings of PPPs, Uncertainty and Risks in PPPs; Organizational Fields and Institutions that support PPPs; Ambient environment for PPPs Project Governance: Governing complex project arrangements; Regulation of project delivery; Fair process and managing stakeholder expectations; Integrated Project Delivery for enhancing project success, Case studies.

Text Books:

- Design-Build Project Delivery, by Sidney M. Levy, McGraw Hill, NY, 2009
- "The Challenge of Public-Private Partnerships: Learning from International Experience", edited by Graeme Hodge and Carsten Greve, Edward Elgar Publishing, 2005
- "Public-Private Partnerships: Policy and Experience", edited by Abby Ghobadian, David Galleary, Nicholas O'Regan and Howard Viney, Palgrave Macmillan Publishers, 2004
- Miller, R. and Floricel, S., (2000) Building Governability into Project Structures, The Strategic Management of Large Engineering Projects.

Reference Books: Reading material will be selected from the following sources:

- ASCE Journal of Construction Engineering and Management
- ASCE Journal of Management in Engineering
- Construction Management and Economics
- Project Finance Journal
- Academy of Management Journal
- Journal of International Business Studies Public Works Management and Policy

Prerequisite: NIL