

Course syllabus

Department of Civil Engineering, Indian Institute of Technology Madras

CE5021 - GIAN 151003L12: Megaproject Leadership and Governance: Capabilities for New infrastructure develop

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

Course Type: Others

Description: The course equips students with knowledge and mastery of, first, the megaproject lifecycle from inception of an idea through project planning and delivery to hand over to operations; and second, alternative governance and organisational structures through which work coordination gets achieved and decision-making power gets distributed in megaprojects. Students will also learn practical tools and conceptual framing useful to support the difficult judgement calls at the essence of exercising megaprojects.

Course Content: Part 1: Risks and Challenges on Megaprojects: Coordination Requirements on Megaprojects, the Infrastructure Development lifecycle and the Infrastructure Business Ecosystem. Part 2: Governing Megaprojects: Interorganizational collaboration, delivery and development partner roles, managing complexity, risk management and design, coordination strategies.

Text Books

- Miller R., Lessard D. R., Michaud P., & Floricel S. (2001). The strategic management of large engineering projects: Shaping institutions, risks, and governance. MIT press.

Reference Books

- Flyvbjerg B. (2014). What you should know about megaprojects and why: an overview. Project Management Journal, 45(2), 6-19.
- Malone T.W., & Crowston K. (1990, September). What is coordination theory and how can it help design cooperative work systems? In Proceedings of the 1990 ACM conference on Computer-supported cooperative work (pp. 357-370).
- ACM Davies A., & Mackenzie I. (2014). Project complexity and systems integration: Constructing the London 2012 Olympics and Paralympics Games. International Journal of Project Management, 32(5).
- Gil N., Lundrigan C. (2012). Megaproject Leadership and Governance. Msulwa R., Gil N. (2014). UK high-speed 2: Designing an engine for growth (A)
- Gil N., Lundrigan C. (2012). London 2012: The Regeneration Games (A)
- Msulwa C. Gil N. (2014). India's Golden quadrilateral: The Mother of All Projects

Prerequisite: NIL