## 20.320 Project Management in the Built Environment Fall 2016

**Course Instructor** 

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**Course Description** 

Project Management is a course set in the context of Singapore's Building Construction industry. It covers management topics necessary to bring about the successful completion of building projects, including scheduling, resource allocation, risk assessment, budgeting, and cost planning, with emphasis on sustainable design and construction. Project management aims at understanding fundamental principles, modelling methods, and tools, as well as the best practices employed in the industry today. As a management course, students are required to work individually but also in groups to practice their management skills.

## Learning Objectives

After successful completion of the subject, students will be able to:

- 1. Understand project management concepts, methods, and practices and how they are employed in the architecture, engineering, and construction industry.
- 2. Perform project management analysis to collect quantitative and qualitative building project performance indicators.
- 3. Assess the impact of project management decisions against a project's feasibility, constructability, and sustainability characteristics.
- 4. Propose strategies for managing a building project, considering controllable and uncontrollable design factors.

## Measurable Outcomes

- 1. Demonstrate comprehension of project management theory though literature review and case study of built precedents.
- 2. Apply technical, econometric, environmental assessments and communication techniques to extract and present project management metrics.
- **3.** Synthesize costs and benefits and develop decision support matrices outlining design trade-offs and feasible design regions.
- 4. Create and present a design proposal for a green building project, while optimizing critical project management criteria.







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Risk	Negligible	Minor	Moderate	Significant	Severe
Very Likely					
Likely					
Possible					
Unlikely					
Very Unlikely					

