TECHNOLOGICAL INNOVATION

Team: Paolo Tombesi

Duration: Fall Semester 2018-2019

Content: *Technological Innovation* has three aims. It seeks to: a) examine how new products and processes are developed specifically in or for the building sector, b) discuss the elements constraining their dissemination, and c) lay out a theory of how success can be determined.

By looking at technical change as the result of specific industrial dynamics, the class will clarify how technological innovation in building takes on different meanings depending on context, markets and economic cycles. This type of understanding should inform building actors’ strategies and government policy.

The objectives embedded in the program can be described as follows:

1. Introduce students to product substitution processes and their logics in the construction industry.
2. Articulate the impact of ‘non-building’ factors over introduction and dissemination of change in building.
3. Clarify the extent to which the construction industry operates in conjunction with manufacturing, real estate and policy sectors.
4. Enable students identify the conditions allowing technological transformations to take place.

Organisation: Content will be delivered through lectures and amplified through seminar discussion and case-study development. Assessment revolves around three components:

- Class participation, or the display of one’s ability to discuss how project operations are structured against technological alternatives, risk allocation and definable constraints.
- Gathering of discussion-specific data, showing one’s ability to research and collate information about relevant technological options in given industrial contexts /situations.
- Essay due at the end of the term, demonstrating one’s ability to think strategically and creatively in addressing key construction issues and/or planning construction project activities, as well as evaluating building output.

Resources: General references provided by the instructor in the course of the semester.

Language: English