



Urban Railway System Integration (CEGE0107)

Description

The course will focus on integration within components of urban railway systems as well as between railway and external systems. The urban railway systems are complex systems and the importance of system integration is paramount regardless of career paths students would choose within the industry. The students will learn skills and knowledge of system integration especially in railway contexts. The topics include a) Introduction to System Thinking b) System Safety and Risk Management c) Engineering Management d) Requirements e) System Interface and Stakeholder Management f) Compliance and Assurance g) Migration (bringing into use and asset life) h) Cross discipline enablers (Human Factor; Electromagnetic Compatibility & Sustainability/Environment; Reliability, Availability & Maintainability)

Aims and Learning Outcomes:

At the end of the course, the students should be able to:

- Capture the requirements and design interfaces between different components within urban railway projects.
- Manage the solution Design of an urban railway system as an integrated whole in consideration with safety, environmental and mitigation issues
- Understand the relationship of the Stakeholder, the level of impact they may have on the success of the project and the need to manage their expectations.
- The requirements of assurance and compliance and how to achieve on a risk basis.

Key information

Year	2019/20
Credit value	15 (150 study hours)
Delivery	PGT L7, Campus-based
Reading List	View on UCL website
Tutor	Mr Robert Hutchison
Term	Term 2
Timetable	View on UCL website

Assessment

- Individual project: 100%

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