Integrated Design (CEGE0048)

Description

Students work in project teams on the DESIGN of a major civil engineering PROJECT from September to June. Students take individual responsibility for developing a different but INTEGRATED part of the technical design in more detail from January to March.

The project is particularly effective in teaching engineering design, because students are working on real projects in an environment that simulates that of an engineering design practice. Students gain confidence in tackling large engineering problems, with many unknowns, through applying skills and tools learnt in lectures and elsewhere to a real project, with support from experts from industry. The structure and sequence of the project is mapped to RIBA and ACE work stages to familiarise students with design terminology used in industry. Holistically the project presents generates excellent collateral to support job finding.

On completion of the Integrated Design Project, students should be able to:

1) To exercise design skills on a civil engineering project to provide creative, original, and feasible solutions.
2) To identify a client’s needs and objectives, business case, possible project constraints, and incorporate them into a project brief through discussion with the client.
3) To assess feasibility of a project to enable the client to decide whether to proceed.
4) To prepare concept designs which meet the key requirements and constraints, assess these options, and recommend a scheme to the client.
5) To develop a scheme design to a level of detail which allows for preliminary costing, and includes an outline specification.

Key information

Year 2019/20
Credit value 60 (600 study hours)
Delivery PGT L7, Campus-based
Reading List [View on UCL website]
Tutor Dr Tristan Robinson
Term Terms 1 and 2
Timetable [View on UCL website]

Assessment

- Group coursework: 10%
- Group coursework: 15%
- Individual project: 30%
- Group coursework: 25%
- Coursework: 20%

Find out more

For more information about the department, programmes, relevant open days and to browse other modules, visit [ucl.ac.uk](http://ucl.ac.uk)
6) To use a variety of design tools to prove solutions, and know about the appropriate use of these tools.

7) To make balanced design decisions and justify those decisions.

8) To apply prior knowledge and understanding from education, personal and professional experience to solve a design problem on a civil engineering project.

9) To identify and acquire new knowledge and understanding required for design, and subsequently apply it to a civil engineering project.

10) To effectively communicate a design to a variety of audiences using visual, written and oral presentation techniques.

11) To operate effectively in a team environment, and practice project management skills in a design environment, to coordinate work and integrate solutions.
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Disclaimer: All information correct as of August 2019. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.
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