CE7C04: C4 – Façade Engineering [5 credits]

Module Co-ordinator(s): Assoc. Prof. Roger West (rwest@tcd.ie)

Lecturer(s): Prof. Brian Broderick

Module organisation
Department of Civil, Structural and Environmental Engineering

Module description, aims and contribution to programme
This module is focused on building façade engineering including design, construction and analysis of the building envelope. The project will be developed using BIM, and analysed using associated building simulation software.

Learning outcomes
The module will present students with:
1. An introduction to historical and present day building facades.
2. Façade design and retrofitting of façades for improved performance.
4. Façade structures, systems and construction.
5. Façade concepts, materials and components, and,
6. Façade design using BIM, and analysis using building energy software.

Module content
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Teaching strategies
Lectures, tutorials and project work. Including lectures given by industry partners; Techrete, Arup & Autodesk.

Timetable – 3 hours lectures per week.

Assessment
A formal written end-of-year three-hour examination accounts for 30% of this module’s assessment. The other 70% will be allocated for the student design project. A final project report is required (35%). Interim (10%) and final (25%) presentations will also form part of the evaluation.

Required textbook
Readings will be posted to the class blog. These will include articles from relevant journals and magazines and the following textbooks;


**Further information**
School of Engineering weblink.