

CE7J04: J4 – Energy Policy and Building Energy Demand [5 credits]

Module Co-Ordinator(s): Dr Brian Caulfield (brian.caulfield@tcd.ie)

Lecturer(s): Dr Brian Caulfield
Dr Patrick Shiel (Adjunct Professor)
Dr Sarah McCormack
Michael O'Connor

Module organisation

Department of Civil, Structural and Environmental Engineering

Module description, aims and contribution to programme

To develop knowledge of energy policy, building physics and energy engineering controls and systems in buildings.

Learning outcomes

Upon successful completion of the module, students should be able to:

1. Develop and discuss the main areas of energy policy
2. Evaluation of energy projects using economic analysis tools
3. Planning for renewable energy projects and legislation
4. How have building physics (the constraints) and occupant comfort (the requirements) shaped building energy policy in the UK and Ireland
5. LEED/Zero Energy and Net Passive buildings
6. Commercial building Energy Analysis

Teaching strategies

A combination of lectures. Tutorials and Laboratories.

Assessment

Examination 75%; Continuous Assessment 25%.

Required textbook

Sustainable energy systems engineering; P Gevorkian (2007)

Further information

School of Engineering weblink.