

Module Code	CE7J04
Module Name	J4: Energy Policy and Building Energy Demand
ECTS Weighting¹	5 ECTS
Semester taught	Semester 1
Module Coordinator/s	Assoc. Prof. Sarah McCormack Lecturer(s): Assoc. Prof. Sarah McCormack Assoc. Prof. Brian Caulfield Adjunct Prof. Patrick Shiel Asst. Prof. John Gallagher
<u>Module Learning Outcomes</u> with reference to the <u>Graduate Attributes</u> and how they are developed in discipline	<p>On successful completion of this module, students should be able to:</p> <p>LO1. Develop and discuss the main areas of energy policy. LO2. Evaluate of energy projects using economic analysis tools. LO3. How to have building physics (the constraints) and occupant comfort (the requirements) shaped building energy policy in the UK and Ireland. LO4. Understand requirements for LEED/Zero Energy and Net Passive buildings. LO5. Undertake Life Cycle Assessment and understand circular economy aspects for Energy</p> <p>Graduate Attributes: levels of attainment To act responsibly - Introduced To think independently - Attained To develop continuously - Enhanced To communicate effectively - Enhanced</p>

Module Content	This module is an optional module which runs in the first semester. The module will develop knowledge of energy policy, building physics and energy engineering controls and systems in buildings. It will include topics in energy economics, policy, embodied energy and life cycle analysis and energy markets will be addressed.							
Teaching and Learning Methods	Core content via lectures Individual assignments							
Assessment Details² Please include the following: <ul style="list-style-type: none"> • Assessment Component • Assessment description • Learning Outcome(s) addressed • % of total • Assessment due date 	Assessment Component	Assessment Description	LO Addressed	% of total	Week due			
	Online Examination	3 hour examination	ALL	75%	N/a			
	Continuous Assessment	Life Cycle Assessment	LO5	25%	12			
Reassessment Requirements	100% Examination (3 hours), weighted at 50% to pass.							
Contact Hours and Indicative Student Workload²	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td data-bbox="662 1388 1495 1472">Contact hours: 30 hours</td> </tr> <tr> <td data-bbox="662 1472 1495 1591">Independent Study (preparation for course and review of materials): 20 hours</td> </tr> <tr> <td data-bbox="662 1591 1495 1759">Independent Study (preparation for assessment, incl. completion of assessment): 75 hours</td> </tr> </table>					Contact hours: 30 hours	Independent Study (preparation for course and review of materials): 20 hours	Independent Study (preparation for assessment, incl. completion of assessment): 75 hours
Contact hours: 30 hours								
Independent Study (preparation for course and review of materials): 20 hours								
Independent Study (preparation for assessment, incl. completion of assessment): 75 hours								
Recommended Reading List	Sustainable energy systems engineering; P Gevorkian (2007)							

Module Pre-requisite	None
Module Co-requisite	None
Module Website	https://www.tcd.ie/courses/postgraduate/az/course.php?id=DPTEG-ENSE-1F09
Are other Schools/Departments involved in the delivery of this module? If yes, please provide details.	No
Module Approval Date	
Approved by	
Academic Start Year	13 th September 2021
Academic Year of Date	2021/2022