



Institiúid Teicneolaíochta Chorcaí
Cork Institute of Technology

APPROVED

Awards			
BEng (Hons)			
Programme Code:	CR_EBESY_8	Mode of Delivery:	Full Time
No. of Semesters:	2		
NFQ Level:	8		
Embedded Award:	No		
programmeReviewDate:			
Department:	PROCESS, ENERGY & TRANSPORT ENGINEERING		

Programme Outcomes

Upon successful completion of this programme the graduate will be able to demonstrate... :

PO1	Knowledge - Breadth	
	(a)	A broad based knowledge and understanding of mathematics, the physical sciences, Information and Communications Technology, design processes and methodologies and industrial practices relevant to building energy systems.
PO2	Knowledge - Kind	
	(a)	A detailed knowledge and understanding of the application of mathematical and scientific methods to the solution and management of building energy system problems, whilst recognising any inherent limitations.
PO3	Skill - Range	
	(a)	The ability to use complex techniques, skills and modern engineering tools to solve complex building energy systems problems and to communicate effectively with the engineering community and society in general.
PO4	Skill - Selectivity	
	(a)	The ability to apply, manipulate and develop the design of a system, component or process to meet specified needs and to contribute to the assessment of the technical performance of a system in complex and unfamiliar situations.
PO5	Competence - Context	
	(a)	An understanding of the diverse nature and the social context of building energy systems; appreciate the impact of engineering solutions in a global, commercial and environmental context; whilst having the confidence and independence to apply existing knowledge to new and unfamiliar problems.
PO6	Competence - Role	
	(a)	An ability to act in teams and in a multi-disciplinary fashion, set and implement work objectives and priorities, to take a leadership role where required; recognise, interpret and apply appropriate regulations.
PO7	Competence - Learning to Learn	
	(a)	An awareness of the current boundaries of the various specialist areas in building energy systems and to have sufficient academic training, confidence and discipline to broaden and deepen own knowledge base through further study, research and professional development.
PO8	Competence - Insight	
	(a)	A recognition of their obligations to society, the profession and the environment by being familiar with the expectations and standards inherent in professional codes of conduct, and by realising the interconnectivity between technology and global sustainability.

Semester Schedules

Stage 1 / Semester 1

Mandatory	
Module Code	Module Title
BULD8021	Building Thermal Dynamic Analysis
MANU8005	Project - Initial Research
ENVI8002	Psychrometric Design
MATH8005	Maths for Control and Quality
MECH8003	Energy Systems Control
Elective	
Module Code	Module Title
MECH8026	Building Energy Compliance

Stage 1 / Semester 2

Mandatory	
Module Code	Module Title
MANU8006	Project - realisation
MECH8022	Energy Power Systems
MANU8003	Maintenance and Reliability
MECH8027	Degree Day Analysis
MECH8025	Energy Efficient Design