



Institiúid Teicneolaíochta Chorcaí
Cork Institute of Technology

APPROVED

Awards
PGDip in Eng

Programme Code:	CR_CENVE_9
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Mode of Delivery:	Full Time, Part Time, Distance Learning, ACCS, Open
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No. of Semesters:	2
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NFQ Level:	9
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Embedded Award:	No
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programmeReviewDate:	
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Department:	CIVIL, STRUCTURAL & ENVIRONMENTAL ENGINEERING
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Programme Outcomes

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

PO1	Knowledge - Breadth	
	(a)	a wide and systematic knowledge of scientific principles and the design process in Environmental and Energy Engineering; an understanding of the key parameters and the technical, economic, environmental and social issues pertaining to these disciplines
PO2	Knowledge - Kind	
	(a)	a critical awareness of current issues in Environmental and Energy Engineering, a knowledge of the latest mathematical, scientific, and ICT and modelling techniques and their limitations in their practical application to ill defined complex problems of Environmental and Energy Engineering
PO3	Skill - Range	
	(a)	an advanced knowledge of a range of specialist research and design tools and methods of investigation and analysis in the field of Environmental and Energy Engineering; the ability to use engineering principles to design and develop new solutions to complex Environmental and Energy Engineering problems
PO4	Skill - Selectivity	
	(a)	the ability to select appropriate advanced skills and use new methods required for novel situations and the ability to develop new skills in emerging techniques as required in Environmental and Energy Engineering design and analysis; the ability to undertake analysis of a design and justify decisions throughout a particular design process
PO5	Competence - Context	
	(a)	the ability to act at a variety of professional levels, particularly in the initiation, development and promotion of design solutions in Environmental and Energy Engineering; the ability to identify and critically appraise potential projects and opportunities and to undertake the design and development of solutions to complex engineering problems
PO6	Competence - Role	
	(a)	that they have the technical competence necessary to take significant responsibility for the work of individuals and groups, lead and initiate activity in Environmental and Energy Engineering practice
PO7	Competence - Learning to Learn	
	(a)	the ability to evaluate their own learning, identify knowledge gaps, and take responsibility for the pursuit of academic professional development pathways
PO8	Competence - Insight	
	(a)	an awareness of the impacts of Environmental and Energy Engineering infrastructure on society and the ability to critically evaluate the technical, economic, environmental and social implications of appropriate Engineering solutions.

Semester Schedules

Stage 1 / Semester 1

Mandatory	
Module Code	Module Title
INTR9005	Sustainability in Engineering
ELEC9001	Energy Source Analysis
CIVL9008	Advanced Hydro & Flood Control
INTR9006	Engineering Research Skills
MECH8015	Ocean Energy Conversion
Elective	
Module Code	Module Title
CIVL9001	Adv Geotechnical Engineering
MECH9001	Computational Solid Modelling
BULD9002	Contract Admin/Dispute Resolve
MGMT8017	Strategic Business Management

Stage 1 / Semester 2

Mandatory	
Module Code	Module Title
CIVL9009	Env and Energy Eng Infrastr
CIVL9006	Biofuel and Biomass Technology
CIVL9010	Adv Wastewater Eng. Design
CIVL9011	Advanced Water Engineering
Elective	
Module Code	Module Title
INTR9003	Project Development
INTR9017	Infrastructure Asset Mgmt
INTR9007	Eng. Project Management
CHEP8008	Environmental Management
MGMT9003	Managing Innovation
MGMT9024	Leadership & Change Management
MECH9002	Computational Fluid Dynamics