

APPROVED



Institiúid Teicneolaíochta Chorcaí
Cork Institute of Technology

Awards					
BEng					
Programme Code:	CR_EMECN_7	Mode of Delivery:	Part Time	No. of Semesters:	6
NFQ Level:	7				
Embedded Award:	No	Programme Credits:	180		
programmeReviewDate:	March 2021				
Department:	MECHANICAL, BIOMEDICAL & MANUFACTURING ENGINEERING				
Field of Study:	Mechanical Engineering				

Programme Outcomes

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

PO1	Knowledge - Breadth
	(a) the ability to apply knowledge in the areas of mathematics, science, ICT, design and engineering practice relevant to the mechanical engineer.
PO2	Knowledge - Kind
	(a) the ability to identify and solve problems of mathematics, science, design and engineering technology to the solution of well-defined mechanical engineering technology problems and will demonstrate the ability to effectively communicate ideas, designs and calculations through a combination of oral, written and presentation skills.
PO3	Skill - Range
	(a) ability to use basic techniques, skills and modern computer-based engineering tools necessary to solve engineering technology problems in mechanical engineering.
PO4	Skill - Selectivity
	(a) 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 mechanical system.
PO5	Competence - Context
	(a) the ability select, design manufacture or diagnose a solution to common engineering technology problems in mechanical engineering.
PO6	Competence - Role
	(a) awareness, responsibility and good judgement in achieving personal and/or team goals in well-defined work settings.
PO7	Competence - Learning to Learn
	(a) initiative and identify areas of professional development to enhance his/hers competence/skills.
PO8	Competence - Insight
	(a) a view of the wider social, political, business and economic context within which mechanical engineering operates and the need for high ethical standards in the practice of engineering, including the responsibilities of the engineering profession towards people and the environment

Semester Schedules

Stage 1 / Semester 1

Group Elective 1	
Module Code	Module Title
MECH6011	Materials & Processes
MECH6008	Introductory CAD
CMOD6001	Creativity Innovation&Teamwork
MECH6019	Welding Technology
MECH6029	Mechanics
MECH6017	Pneumatics

Stage 1 / Semester 2

Group Elective 1	
Module Code	Module Title
MECH6040	Intro 3-D Parametric Modelling
COMP6014	ICT for Eng Techs
MECH6014	Mechanical Workshop Practice
MATH6014	Technological Mathematics 1
MECH6007	Thermofluids

Elective	
Module Code	Module Title
PHYS6007	Instrument Calibration
FREE6001	Free Choice Module

Stage 2 / Semester 1

Group Elective 1	
Module Code	Module Title
MECH6028	Mechanical Workshop Practice 2
MECH6031	Mechanics of Materials 2
MANU6012	Metrology & Quality Control
MECH6022	Mechanical CAD and Design
MATH6015	Technological Mathematics 2
Elective	
Module Code	Module Title
MECH6034	Electrotechnology and Control
MANU6005	Advanced Manufacturing Tech.
FREE6001	Free Choice Module

Stage 2 / Semester 2

Group Elective 1	
Module Code	Module Title
MATH6040	Technological Mathematics 201
MECH6021	3-D Mech Analysis & Design
MECH6033	Thermofluids 2
MECH6025	Material Science
MECH6030	Mechanics of Machines
MECH6032	Electro-Pneu. & M/C maint.

Stage 3 / Semester 1

Group Elective 1	
Module Code	Module Title
MECH7007	Manufacturing Technology
MANU7003	Engineering Management
MECH7016	Project Research & Design
MATH7020	Technological Mathematics 301
MECH7009	Materials/Structures Mechanics

Elective	
Module Code	Module Title
ELEC7007	Electrotechnology
FREE6001	Free Choice Module

Stage 3 / Semester 2

Group Elective 1	
Module Code	Module Title
MECH7014	Mechatronics 3 - PLC Control
STAT7003	Technological Mathematics 302
INTR7009	Thermofluids 3
MANU7003	Engineering Management
MECH7015	Project Realisation