



Institiúid Teicneolaíochta Chorcaí
Cork Institute of Technology

Awards					
BEng					
Programme Code:	CR_EMANF_7	Mode of Delivery:	Full Time, Part Time, ACCS	No. of Semesters:	6
NFQ Level:	7				
Embedded Award:	No	Programme Credits:	180		
programmeReviewDate:	March 2021				
Department:	MECHANICAL, BIOMEDICAL & MANUFACTURING ENGINEERING				
Field of Study:	Manufacturing 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 manufacturing engineering 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) the ability to use basic techniques, skills and modern computer-based engineering tools necessary to solve engineering technology problems in manufacturing engineering
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 mechanical system
PO5	Competence - Context
	(a) the ability to select, design manufacture or diagnose a solution to common engineering technology problems in manufacturing 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

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

Stage 1 / Semester 2

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

Elective	
Module Code	Module Title
AUTO6026	Intro to Auto Engines
PHYS6007	Instrument Calibration
FREE6001	Free Choice Module

Stage 2 / Semester 1

Mandatory	
Module Code	Module Title
MATH6015	Technological Mathematics 2
MECH6028	Mechanical Workshop Practice 2
MECH6022	Mechanical CAD and Design
MANU6012	Metrology & Quality Control
MECH6031	Mechanics of Materials 2
Elective	
Module Code	Module Title
AUTO6027	Intro to Auto Chassis Systems
MECH6034	Electrotechnology and Control
MANU6005	Advanced Manufacturing Tech.
FREE6001	Free Choice Module

Stage 2 / Semester 2

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

Stage 3 / Semester 1

Mandatory	
Module Code	Module Title
MANU7005	Mechanical Technology
MATH7020	Technological Mathematics 301
MECH7014	Mechatronics 3 - PLC Control
MECH7016	Project Research & Design
Elective	
Module Code	Module Title
FREE6001	Free Choice Module
ELEC7007	Electrotechnology

Stage 3 / Semester 2

Mandatory	
Module Code	Module Title
STAT7003	Technological Mathematics 302
MECH7015	Project Realisation
MECH7007	Manufacturing Technology
MANU7003	Engineering Management
MANU7004	Manufacturing Design