Curriculum 2024.2025
Programme Code: MTEMP006 Master of Engineering
Major Code: T166 ME Engineering with Business FT
Programme Director: Dr Kevin Roche

	Semester 1, Year 1 (Sept 2024)	Pre-Requisite: UCD Module Code No.	Core Credits	Option Credits	Staff (Module Co-ord)		Semester 2, Year 1 (Jan 2025)	Pre-Requisite: UCD Module Code No.	Core Credits	Option Credits	Staff (Module Co-ord)
	Year 1: BUSINESS & ENGINEERING CORE Modules - all to be taken						Year 1: BUSINESS & ENGINEERING CORE Modules - all to be taken				
BMGT45710	Management and Organisational Behaviour			5	Dolores Smith Heffernan	BMGT30090	Entrepreneurship in Action			5	Orla Byrne
MEEN41350	Introduction to Robotics			5	Nikolaos Papakostas	MEEN41090	Engineering Decision Support Systems			5	Pezhman Ghadimi
						MEEN41100	Operations Management			5	Nikolaos Papakostas
	Year 1: Students MUST SELECT ONE of the following 5.0cr ENGINEERING CORE Option to be taken from list below						Year 1 CORE if not previously taken				
MEEN40790	Supply Chain Design and Analysis			5	Vincent Hargaden	MEEN30140	Professional Engineering (Finance) (must be taken here if not already taken)			5	Pezhman Ghadimi
MEEN40800	Engineering Project Management			5	Javad Zeinali						
MEEN41330	Data Analytics for Engineers			5	Di Nguyen						
	Year 1: TECHNICAL OPTIONS ACCOUNTING FOR 15 CREDITS TO BE TAKEN FROM WITHIN THE ME GROUPS BELOW						Year 1: TWO TECHNICAL OPTIONS (10 CREDITS) TO BE TAKEN FROM WITHIN THE ME GROUPS BELOW (UNLESS MEEN 30140 Professional Engineering (Finance) already taken, then THREE (15 CREDITS))				
	Technical Module 1			5			Technical Module 4			5	
	Technical Module 2			5			Technical Module 5			5	
	Technical Module 3			5			Technical Module 6			5	
	SEMESTER CREDIT TOTALS		10	20			SEMESTER CREDIT TOTALS		15	15	

	Semester 1, Year 2 (Sept 2025)	Pre-Requisite: UCD Module Code No.	Core Credits	Option Credits	Staff (Module Co-ord)		Semester 2, Year 2 (Jan 2026)	Pre-Requisite: UCD Module Code No.	Core Credits	Option Credits	Staff (Module Co-ord)
MEEN40930	Professional Work Placement (Autumn-Spring)		20		Kevin Roche	MEEN40430	Professional Engineering (Management)		5		Kevin Roche
MEEN41080	ME Eng. with Business Thesis (Autumn-Spring)		10		Nikolaos Papakostas	MEEN41080	ME Eng. with Business Thesis (Autumn-Spring)		10		Nikolaos Papakostas
						MIS40920	Business Information Systems Management ME/MEngSc		7.5		Clare Branigan
						MKT40970	Marketing Management ME (Business)		7.5		Aisling Roche
	SEMESTER CREDIT TOTALS		30				SEMESTER CREDIT TOTALS		30		

	Year 1: TECHNICAL OPTIONS										
TECHNICAL OPTIONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WITHIN THE FOUR TECHNICAL OPTION GROUPS BELOW. MODULES HIGHLIGHTED IN YELLOW BELOW ARE COMPULSORY AND MUST BE TAKEN. SELECTION WILL BE SUBJECT TO ACADEMIC, TIMETABLING AND PREREQUISITE CONSTRAINTS AND MUST BE MADE IN CONJUNCTION WITH THE COURSE COORDINATOR.										
	TECHNICAL OPTIONS: Civil & Structural Engineering (NVC1)										
CVEN40760	Case Studies (C)			10	Abd Al Salam Al-Sabah						
	Select ONE Option Modules from the following:						Select THREE Option Modules from following:				
CVEN40610	Advanced Materials			5	Ciaran McNally	CVEN40050	Design of Structures 3			5	Abd Al Salam Al-Sabah
CVEN40690	Civil Engineering Systems			5	David Ayala-Cabrera	CVEN40060	Transport Modelling			5	Paraic Carroll
CVEN40720	Geotechnics 3			5	Shane Donohue	CVEN40070	Water and Wastewater Treatment Processes	CVEN40700		5	Patrick Purcell
CVEN40780	Design of Structures 2			5	Eugene O Brien	CVEN40080	Hydraulic Engineering Design	CVEN30060		5	Fiachra O Loughlin
CVEN40830	Applied Hydrology			5	Fiachra O'Loughlin	CVEN40120	Bridge Engineering			5	E. O'Brien
MEEN40820	Technical Communications (online)			5	Barry Brophy	CVEN40210	Geotechnics 4			5	Shane Donohue
						CVEN40570	Water, Waste & Environmental modelling			5	Fiachra O Loughlin
						CVEN40710	Highway Engineering			5	Amanda Gibney
	TECHNICAL OPTIONS: Electronic Engineering (NEC1)										
EEEN40010	Control Theory (C)	EEEN30110		5	Paul Curran		Select at least two Option Modules from following:				
						COMP40660	Advances in Wireless Networking	COMP 30040		5	Madhusanka Liyanage
	Select TWO Option Modules from the following:					COMP47670	Data Science in Python (MD) (online)	Programming in a high-level language		5	Pádraig Cunningham
COMP41670	Software Engineering	Object-oriented programming		5	Chris Bleakley	EEEN40070	Neural Engineering			5	Madeleine Lowery
EEEN40060	Digital Communications	EEEN30050, EEEN30060, EEEN30110		5	Mark Flanagan	EEEN40280	Digital and Embedded Systems	EEEN30190		5	TBD
EEEN40130	Advanced Signal Processing	EEEN30050		5	Le-Nam Tran	MEEN40670	Technical Communications			5	Barry Brophy
EEEN40310	Power Electronics Technology	EEEN20070, EEEN30020, EEEN30120		5	Terence O Donnell	MEEN41440	Robotic Applications			5	Nikolaos Papakostas
EEEN40050	Wireless Systems	EEEN30030		5	Barry Cardiff						

TECHNICAL OPTIONS: Electrical Engineering (NEC2)

Code	Module	Prerequisite	Credits	Coordinator
EEEN40010	Control Theory (C)		5	Paul Curran
	Select **TWO** Option Modules from the following:			
EEEN40080	Power System Operation	EEEN20090	5	Damian Flynn
EEEN40100	Power Electronics and Drives		5	Paul Cuffe
EEEN40110	Renewable Energy Systems		5	Georgios Tzounas
EEEN40550	Power Systems Dynamics and Control	EEEN30070, EEEN30090	5	Federico Milano

Code	Module	Prerequisite	Credits	Coordinator
	Select **at least two** Option Modules from following:			
COMP47670	Data Science in Python MD (online)		5	Pádraig Cunningham
ECON42360	Energy Economics & Policy		5	Lisa Ryan
EEEN30070	Power System Engineering	ELEN20010 & EEEN20020	5	Damian Flynn
EEEN40090	Power System Design	EEEN30070	5	Georgios Tzounas
EEEN40120	Applications of Power Electronics	[EEEN30090 & EEEN40100 & EEEN30070] (co-requisite) & EEEN20090 & EEEN20020	5	Hamed Heydari-Doostabad

TECHNICAL OPTIONS: Mechanical Engineering (WMC1)

Code	Module	Prerequisite	Credits	Coordinator
MEEN40010	Engineering Thermodynamics III (C)		5	Donal Finn
MEEN40030	Manufacturing Engineering II (C)		5	David McManus
MEEN41330	Data Analytics for Engineers		5	Di Nguyen

Code	Module	Prerequisite	Credits	Coordinator
CHEN40560	Process Control (C)		5	Niall English
	Select **at least one** Option Module from following:			
MEEN40110	Advanced Polymer Engineering		5	Nan Zhang
MEEN40670	Technical Communications		5	Barry Brophy
MEEN41150	Advanced Metals Processing		5	David Browne
MEEN41440	Robotic Applications		5	Nikolaos Papakostas