

Curriculum 2024.2025

Programme Code: MTEMP006 Master of Engineering

Major Code: T166 ME Engineering with Business FT

Programme Co-ordinator: Associate Professor Nikolaos Papakostas

	Semester 1, Year 1 (Sept 2024)	Pre-Requisite: UCD Module Code No.
Year 1: BUSINESS & ENGINEERING CORE Modules - all to be taken		
BMGT45710	Management and Organisational Behaviour	
MEEN41350	Introduction to Robotics	
Year 1: Students MUST SELECT <u>ONE</u> of the following 5.0cr ENGINEERING CORE Option to be taken		
MEEN40790	Supply Chain Design and Analysis	
MEEN40800	Engineering Project Management	
MEEN41330	Data Analytics for Engineers	
Year 1: TECHNICAL OPTIONS ACCOUNTING FOR 15 CREDITS TO BE TAKEN FROM WITHIN THE ME GROUPS BELOW		
	Technical Module 1	
	Technical Module 2	
	Technical Module 3	
	SEMESTER CREDIT TOTALS	
	Semester 1, Year 2 (Sept 2025)	Pre-Requisite: UCD Module Code No.
MEEN40930	Professional Work Placement (Autumn-Spring)	

MEEN41080	ME Eng. with Business Thesis (Autumn-Spring)	
	SEMESTER CREDIT TOTALS	
TECHNICAL OPTIONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WITHIN THE FOUR TECHNICAL PREREQUISITE CON		
TECHNICAL OPTIONS: Civil & Structural Engineering (NVC1)		
CVEN40760	Case Studies (C)	
Select ONE Option Modules from the following:		
CVEN40610	Advanced Materials	
CVEN40690	Civil Engineering Systems	
CVEN40720	Geotechnics 3	
CVEN40780	Design of Structures 2	
CVEN40830	Applied Hydrology	
MEEN40820	Technical Communications (online)	
TECHNICAL OPTIONS: Electronic Engineering (NEC1)		
EEEN40010	Control Theory (C)	EEEN30110

	Select TWO Option Modules from the following:	
COMP41670	Software Engineering	Object-oriented programming
EEEN40060	Digital Communications	EEEN30050, EEEN30060, EEEN30110
EEEN40130	Advanced Signal Processing	EEEN30050
EEEN40310	Power Electronics Technology	EEEN20070, EEEN30020, EEEN30120
EEEN40050	Wireless Systems	EEEN30030
TECHNICAL OPTIONS: Electrical Engineering (NEC2)		
EEEN40010	Control Theory (C)	
	Select TWO Option Modules from the following:	
EEEN40080	Power System Operation	EEEN20090
EEEN40100	Power Electronics and Drives	
EEEN40110	Renewable Energy Systems	
EEEN40550	Power Systems Dynamics and Control	EEEN30070, EEEN30090
TECHNICAL OPTIONS: Mechanical Engineering (WMC1)		
MEEN40010	Engineering Thermodynamics III (C)	
MEEN40030	Manufacturing Engineering II (C)	

MEEN41330	Data Analytics for Engineers	

Core Credits	Option Credits	Staff (Module Co-ord)		Semester 2, Year 1 (Jan 2025)
Year 1: BUSINESS & ENGINEERING C				
5		Dolores Smith Heffernan	BMGT30090	Entrepreneurship in Action
5		Nikolaos Papakostas	MEEN41090	Engineering Decision Support Systems
			MEEN41100	Operations Management
n from list below			Year 1 CORE if not pre	
	5	Vincent Hargaden	MEEN30140	Professional Engineering (Finance) (must be taken here if r
	5	Javad Zeinali		
	5	Di Nguyen		
Year 1: TWO TECHNICAL OPTIONS (10 CREDITS) TO BE (UNLESS MEEN 30140 Professional Engineering (Final				
	5			Technical Module 4
	5			Technical Module 5
	5			Technical Module 6
10	20			SEMESTER CREDIT TOTALS
Core Credits	Option Credits	Staff (Module Co-ord)		Semester 2, Year 2 (Jan 2025)
20		Kevin Roche	MEEN40430	Professional Engineering (Management)

10		Nikolaos Papakostas	MEEN41080	ME Eng. with Business Thesis (Autumn-Spring)
			MIS40920	Business Information Systems Management ME/MEngSc
			MKT40970	Marketing Management ME (Business)
30				SEMESTER CREDIT TOTALS
Year 1: TECHNICAL OPTIONS				
OPTION GROUPS BELOW. MODULES HIGHLIGHTED IN YELLOW BELOW ARE COMPULSORY AND MUST BE TAKEN. CONSTRAINTS AND MUST BE MADE IN CONJUNCTION WITH THE COURSE COORDINATOR.				
	10	Abd Al Salam Al-Sabah		
			Select THREE Option Modules from following:	
	5	Ciaran McNally	CVEN40050	Design of Structures 3
	5	David Ayala-Cabrera	CVEN40060	Transport Modelling
	5	Shane Donohue	CVEN40070	Water and Wastewater Treatment Processes
	5	Eugene O Brien	CVEN40080	Hydraulic Engineering Design
	5	Fiachra O'Loughlin	CVEN40120	Bridge Engineering
	5	Barry Brophy	CVEN40210	Geotechnics 4
			CVEN40570	Water, Waste & Environmental modelling
			CVEN40710	Highway Engineering
	5	Paul Curran		Select at least two Option Modules from following:
			COMP40660	Advances in Wireless Networking

			COMP47670	Data Science in Python (MD) (online)
	5	Chris Bleakley	EEEN40070	Neural Engineering
	5	Mark Flanagan	EEEN40280	Digital and Embedded Systems
	5	Le-Nam Tran	MEEN40670	Technical Communications
	5	Terence O Donnell	MEEN41440	Robotic Applications
	5	Barry Cardiff		
	5	Paul Curran		Select at least two Option Modules from following:
			COMP47670	Data Science in Python MD (online)
	5	Damian Flynn	ECON42360	Energy Economics & Policy
	5	Paul Cuffe	EEEN30070	Power System Engineering
	5	Georgios Tzounas	EEEN40090	Power System Design
	5	Federico Milano	EEEN40120	Applications of Power Electronics
	5	Donal Finn	CHEN40560	Process Control (C)
	5	David McManus		Select at least one Option Module from following:

	5	Di Nguyen	MEEN40110	Advanced Polymer Engineering
			MEEN40670	Technical Communications
			MEEN41150	Advanced Metals Processing
			MEEN41440	Robotic Applications

Pre-Requisite: UCD Module Code No.	Core Credits	Option Credits	Staff (Module Co-ord)
ORE Modules - all to be taken			
	5		Orla Byrne
	5		Pezhman Ghadimi
	5		Nikolaos Papakostas
Previously taken			
(not already taken)		5	Pezhman Ghadimi
TAKEN FROM WITHIN THE ME GROUPS BELOW (once) already taken, then THREE (15 CREDITS))			
		5	
		5	
		5	
	15	15	
Pre-Requisite: UCD Module Code No.	Core Credits	Option Credits	Staff (Module Co-ord)
	5		Kevin Roche

	10		Nikolaos Papakostas
	7.5		Clare Branigan
	7.5		Aisling Roche
	30		
SELECTION WILL BE SUBJECT TO ACADEMIC, TIMETABLING AND			
		5	Abd Al Salam Al-Sabah
		5	Paraic Carroll
CVEN40700		5	Patrick Purcell
CVEN30060		5	Fiachra O Loughlin
		5	E. O'Brien
		5	Shane Donohue
		5	Fiachra O Loughlin
		5	Amanda Gibney
COMP 30040		5	Madhusanka Liyanage

Programming in a high-level language		5	Pádraig Cunningham
		5	Madeleine Lowery
EEEN30190		5	TBD
		5	Barry Brophy
		5	Nikolaos Papakostas
		5	Pádraig Cunningham
		5	Lisa Ryan
ELEN20010 & EEEN20020		5	Damian Flynn
EEEN30070		5	Georgios Tzounas
[EEEN30090 & EEEN40100 & EEEN30070] (co-requisite) & EEEN20090 & EEEN20020		5	Hamed Heydari-Doostabad
		5	Niall English

		5	Nan Zhang
		5	Barry Brophy
		5	David Browne
		5	Nikolaos Papakostas

