Curriculum 2024.2025 Programme Code: MTEMP006 Master of Engineering Major Code: T166 ME Engineering with Business FT

Programme Directo		Pre-Requisite:							_		
	Semester 1, Year 1 (Sept 2024)	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 Mo	dules - all to be taken					Year 1: BUSINESS & ENGINEERING (ORE 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 Ghadim
						MEEN41100	Operations Management		5		Nikolaos Papakosta
	Year 1: Students MUST SELECT <u>ONE</u> of the following 5.0cr ENGINEER	ING CORE Option to be take	en from list bel	low			Year 1 CORE if not pr	eviously taken			
MEEN40790	Supply Chain Design and Analysis			5	Vincent Hargaden	MEEN30140	Professional Engineering (Finance) (must be taken here if	not already taken)		5	Pezhman Ghadim
MEEN40800	Engineering Project Management			5	Javad Zeinali						
MEEN41330	Data Analytics for Engineers			5	Di Nguyen						
Year 1: TECHN	ICAL OPTIONS ACCOUNTING FOR 15 CREDITS TO BE TAKEN FROM WITH	N THE ME GROUPS BELOV	N				Year 1: TWO TECHNICAL OPTIONS (10 CREDITS) TO BE (UNLESS MEEN 30140 Professional Engineering (Fina	TAKEN FROM WITHII	N THE ME G	ROUPS BEL	ow)
	Technical Module 1			5			Technical Module 4			5	ĺ
	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-or
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 Papakosta
						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		
	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WI	THIN THE FOUR TECHNICA PREREQUISITE CO	L OPTION GR	OUPS BEL	1: TECHNICAL OP OW. MODULES H E MADE IN CONJU	IGHLIGHTED IN YEI	LLOW BELOW ARE COMPULSORY AND MUST BE TAKEN. COURSE COORDINATOR.	SELECTION WILL BE	SUBJECT 1	O ACADEMI	C, TIMETABLING ANI
	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WI'NS: Civil & Structural Engineering (NVC1) Case Studies (C)	THIN THE FOUR TECHNICA PREREQUISITE CO	AL OPTION GR	OUPS BEL	OW. MODULES H	IGHLIGHTED IN YEI	E COURSE COORDINATOR.	SELECTION WILL BE	SUBJECT 1	O ACADEMI	C, TIMETABLING AND
TECHNICAL OPTIO	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WI'NS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following:	THIN THE FOUR TECHNICA PREREQUISITE CO	L OPTION GR NSTRAINTS AN	OUPS BEL ND MUST E	OW. MODULES H E MADE IN CONJU Abd Al Salam Al- Sabah	IGHLIGHTED IN YEI JNCTION WITH THE	Select THREE Option Modules from following:	SELECTION WILL BE	SUBJECT 1		
TECHNICAL OPTIO CVEN40760 CVEN40610	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WI'NS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials	THIN THE FOUR TECHNICA PREREQUISITE CO	AL OPTION GR	OUPS BEL ID MUST E	OW. MODULES H SE MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala-	GHLIGHTED IN YEI JNCTION WITH THE CVEN40050	Select THREE Option Modules from following: Design of Structures 3	SELECTION WILL BE	SUBJECT 1	O ACADEMII	Abd Al Salam Al-Sal
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WI'NS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems	THIN THE FOUR TECHNICA PREREQUISITE CO	AL OPTION GR	10 5 5	OW. MODULES H E MADE IN CONJI Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera	GHLIGHTED IN YEI JNCTION WITH THE CVEN40050 CVEN40060	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling		SUBJECT 1	5 5	Abd Al Salam Al-Sal Paraic Carroll
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3	THIN THE FOUR TECHNICA PREREQUISITE COI	LL OPTION GR	10 5 5 5	OW. MODULES H E MADE IN CONJI Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue	GHLIGHTED IN YEI JNCTION WITH THE CVEN40050 CVEN40060 CVEN40070	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes	CVEN40700	SUBJECT 1	5 5 5	Abd Al Salam Al-Sa Paraic Carroll Patrick Purcell
CVEN40610 CVEN40690 CVEN40720 CVEN40780	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WI NS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2	THIN THE FOUR TECHNICA PREREQUISITE CO	LL OPTION GR	10 5 5 5 5 5 5	OW. MODULES H IE MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design		SUBJECT T	5 5 5 5	Abd Al Salam Al-Sa Paraic Carroll Patrick Purcell Fiachra O Loughli
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40830	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology	THIN THE FOUR TECHNICA PREREQUISITE CO	LL OPTION GR	10 5 5 5 5 5 5 5	OW. MODULES H LE MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra O'Loughlin	CVEN40050 CVEN40060 CVEN40070 CVEN4080 CVEN40120	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering	CVEN40700	SUBJECT 1	5 5 5 5	Abd Al Salam Al-Sal Paraic Carroll Patrick Purcell Fiachra O Loughli E. O'Brien
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40780	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WI NS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2	THIN THE FOUR TECHNICA PREREQUISITE CO	L OPTION GR	10 5 5 5 5 5 5	OW. MODULES H IE MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080 CVEN40120 CVEN40210	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4	CVEN40700	SUBJECT 1	5 5 5 5 5	Abd Al Salam Al-Sat Paraic Carroll Patrick Purcell Fiachra O Loughli E. O'Brien Shane Donohue
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40780	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology	THIN THE FOUR TECHNICA PREREQUISITE COI	L OPTION GR NSTRAINTS AN	10 5 5 5 5 5 5 5	OW. MODULES H LE MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra O'Loughlin	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080 CVEN40120 CVEN40210 CVEN40570	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling	CVEN40700	SUBJECT 1	5 5 5 5 5 5	Abd Al Salam Al-Sal Paraic Carroll Patrick Purcell Fiachra O Loughli E. O'Brien Shane Donohue
CVEN40780 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40780	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology	THIN THE FOUR TECHNICA PREREQUISITE COI	L OPTION GRAN	10 5 5 5 5 5 5 5	OW. MODULES H LE MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra O'Loughlin	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080 CVEN40120 CVEN40210	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4	CVEN40700	SUBJECT 1	5 5 5 5 5	Abd Al Salam Al-Sal Paraic Carroll Patrick Purcell Fiachra O Loughli E. O'Brien Shane Donohue
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40780 CVEN40830 MEEN40820 TECHNICAL OPTIO	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology Technical Communications (online)	PREREQUISITE COI	L OPTION GRAN	10 5 5 5 5 5 5 5	OW. MODULES H E MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra O'Loughlin Barry Brophy	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080 CVEN40120 CVEN40210 CVEN40570	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling Highway Engineering	CVEN40700	SUBJECT T	5 5 5 5 5 5	Abd Al Salam Al-Sat Paraic Carroll Patrick Purcell Fiachra O Loughlir E. O'Brien Shane Donohue Fiachra O Loughlir
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40780 CVEN40830 MEEN40820	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology Technical Communications (online)	THIN THE FOUR TECHNICA PREREQUISITE CO	L OPTION GRANTS AN	10 5 5 5 5 5 5 5	OW. MODULES H LE MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra O'Loughlin	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080 CVEN40120 CVEN40570 CVEN40570 CVEN40710	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling Highway Engineering	CVEN40700 CVEN30060	SUBJECT 1	5 5 5 5 5 5 5 5	Abd Al Salam Al-Sat Paraic Carroll Patrick Purcell Fiachra O Loughlir E. O'Brien Shane Donohue Fiachra O Loughlir Amanda Gibney
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40780 CVEN40830 MEEN40820	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology Technical Communications (online)	PREREQUISITE COI	LL OPTION GRAN	10 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OW. MODULES H E MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra O'Loughlin Barry Brophy	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080 CVEN40120 CVEN40210 CVEN40570	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling Highway Engineering	CVEN40700	SUBJECT 1	5 5 5 5 5 5	Abd Al Salam Al-Sat Paraic Carroll Patrick Purcell Fiachra O Loughlir E. O'Brien Shane Donohue Fiachra O Loughlir Amanda Gibney
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40780 CVEN40830 MEEN40820 TECHNICAL OPTIO	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology Technical Communications (online) NS: Electronic Engineering (NEC1) Control Theory (C)	PREREQUISITE COI	LL OPTION GRAN	10 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OW. MODULES H E MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra O'Loughlin Barry Brophy	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080 CVEN40120 CVEN40570 CVEN40570 CVEN40570 CVEN40570 COMP40660	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling Highway Engineering Select at least two Option Modules from following: Advances in Wireless Networking	CVEN40700 CVEN30060 COMP 30040 Programming in a	SUBJECT 1	5 5 5 5 5 5 5 5 5	Abd Al Salam Al-Sab Paraic Carroll Patrick Purcell Fiachra O Loughlir E. O'Brien Shane Donohue
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40780 TECHNICAL OPTIO EEEN40010 COMP41670	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology Technical Communications (online) NS: Electronic Engineering (NEC1) Control Theory (C) Select TWO Option Modules from the following:	PREREQUISITE COI	LL OPTION GRANTS AN	10	OW. MODULES HE MADE IN CONJUNCTION OF INCOMING TO STATE OF THE MADE IN CONJUNCTION OF THE MADE IN CAPITAL OF THE MADE OF THE M	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080 CVEN40120 CVEN40120 CVEN40570 CVEN40710 COMP40660 COMP47670	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling Highway Engineering Select at least two Option Modules from following: Advances in Wireless Networking Data Science in Python (MD) (online)	CVEN40700 CVEN30060 COMP 30040 Programming in a	SUBJECT	5 5 5 5 5 5 5 5 5	Abd Al Salam Al-Sal Paraic Carroll Patrick Purcell Fiachra O Loughli E. O'Brien Shane Donohue Fiachra O Loughli Amanda Gibney Madhusanka Liyana
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40830 MEEN40820 TECHNICAL OPTIO EEEN40010 COMP41670	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology Technical Communications (online) NS: Electronic Engineering (NEC1) Control Theory (C) Select TWO Option Modules from the following: Software Engineering	PREREQUISITE COI	LL OPTION GRAN	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OW. MODULES HE MADE IN CONJUNCTION OF THE MADE I	GHLIGHTED IN YEI INCTION WITH THE CVEN40050 CVEN40060 CVEN40070 CVEN40080 CVEN40120 CVEN40570 CVEN40570 CVEN40710 COMP40660 COMP47670 EEEN40070	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling Highway Engineering Select at least two Option Modules from following: Advances in Wireless Networking Data Science in Python (MD) (online) Neural Engineering	CVEN40700 CVEN30060 COMP 30040 Programming in a high-level language	SUBJECT	5 5 5 5 5 5 5 5 5 5 5	Abd Al Salam Al-Sat Paraic Carroll Patrick Purcell Fiachra O Loughlir E. O'Brien Shane Donohue Fiachra O Loughlir Amanda Gibney Madhusanka Liyana Pádraig Cunningha Madeleine Lowery
TECHNICAL OPTIO CVEN40760 CVEN40600 CVEN40690 CVEN40720 CVEN40780 CVEN40830 MEEN40820 TECHNICAL OPTIO EEEN40010 COMP41670 EEEN40060 EEEN40010	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology Technical Communications (online) NS: Electronic Engineering (NEC1) Control Theory (C) Select TWO Option Modules from the following: Software Engineering Digital Communications	PREREQUISITE COL	LL OPTION GRAN	10 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OW. MODULES H E MADE IN CONJI Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra O'Loughlin Barry Brophy Paul Curran Chris Bleakley Mark Flanagan	CVEN40050 CVEN40060 CVEN40060 CVEN40080 CVEN40120 CVEN40570 CVEN40570 CVEN40570 CVEN40570 CVEN40570 COMP47670 EEEN40070 EEEN40280	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling Highway Engineering Select at least two Option Modules from following: Advances in Wireless Networking Data Science in Python (MD) (online) Neural Engineering Digital and Embedded Systems	CVEN40700 CVEN30060 COMP 30040 Programming in a high-level language	SUBJECT	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Abd Al Salam Al-Sat Paraic Carroll Patrick Purcell Fiachra O Loughlir E. O'Brien Shane Donohue Fiachra O Loughlir Amanda Gibney Madhusanka Liyana Pådraig Cunningha Madeleine Lowery
TECHNICAL OPTIO CVEN40760 CVEN40600 CVEN40690 CVEN40720 CVEN40780 CVEN40830 MEEN40820 TECHNICAL OPTIO EEEN40010 COMP41670 EEEN40060 EEEN40010	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology Technical Communications (online) NS: Electronic Engineering (NEC1) Control Theory (C) Select TWO Option Modules from the following: Software Engineering Digital Communications Advanced Signal Processing	PREREQUISITE COI	L OPTION GRANTS AN	10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	OW. MODULES H E MADE IN CONJU Abd Al Salam Al- Sabah Ciaran McNally David Ayala- Cabrera Shane Donohue Eugene O Brien Fiachra O'Loughlin Barry Brophy Paul Curran Chris Bleakley Mark Fianagan Le-Nam Tran Terence O	CVEN40050 CVEN40060 CVEN40060 CVEN40070 CVEN40070 CVEN40210 CVEN40210 CVEN40710 COMP40660 COMP47670 EEEN40070 EEEN40070	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling Highway Engineering Select at least two Option Modules from following: Advances in Wireless Networking Data Science in Python (MD) (online) Neural Engineering Digital and Embedded Systems Technical Communications	CVEN40700 CVEN30060 COMP 30040 Programming in a high-level language	SUBJECT	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Abd Al Salam Al-Sat Paraic Carroll Patrick Purcell Fiachra O Loughlir E. O'Brien Shane Donohue Fiachra O Loughlir Amanda Gibney Madhusanka Liyana Pádraig Cunningha Madeleine Lowery TBD Barry Brophy
TECHNICAL OPTIO CVEN40760 CVEN40610 CVEN40690 CVEN40720 CVEN40780 CVEN40780 CVEN40830 MEEN40820 TECHNICAL OPTIO	IONS (CONCENTRATIONS): MINIMUM 30 CREDITS TO BE TAKEN FROM WINS: Civil & Structural Engineering (NVC1) Case Studies (C) Select ONE Option Modules from the following: Advanced Materials Civil Engineering Systems Geotechnics 3 Design of Structures 2 Applied Hydrology Technical Communications (online) NS: Electronic Engineering (NEC1) Control Theory (C) Select TWO Option Modules from the following: Software Engineering Digital Communications Advanced Signal Processing Power Electronics Technology	Dipect-oriented programming EEEN30010 EEEN30050, EEEN30060, EEEN3000, EEEN30060, EEEN30000, EEEN3000, EEEN3000, EEEN3000, EEEN3000, EEEN3000, EEEN3000, E	LL OPTION GRANTS AN	10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	OW. MODULES HE MADE IN CONJUNCTION OF INCOMPLY AND ALL SABAN ALL S	CVEN40050 CVEN40060 CVEN40060 CVEN40070 CVEN40070 CVEN40210 CVEN40210 CVEN40710 COMP40660 COMP47670 EEEN40070 EEEN40070	Select THREE Option Modules from following: Design of Structures 3 Transport Modelling Water and Wastewater Treatment Processes Hydraulic Engineering Design Bridge Engineering Geotechnics 4 Water, Waste & Environmental modelling Highway Engineering Select at least two Option Modules from following: Advances in Wireless Networking Data Science in Python (MD) (online) Neural Engineering Digital and Embedded Systems Technical Communications	CVEN40700 CVEN30060 COMP 30040 Programming in a high-level language	SUBJECT	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Abd Al Salam Al-Sal Paraic Carroll Patrick Purcell Fiachra O Loughli E. O'Brien Shane Donohue Fiachra O Loughli Amanda Gibney Madhusanka Liyana Pádraig Cunningha Madeleine Lowen TBD Barry Brophy

TECHNICAL OPTIO	NS: Electrical Engineering (NEC2)										
EEEN40010	Control Theory (C)		5	Paul Curran		Select at least two Option Modules from following:					
	Select TWO Option Modules from the following:				COMP47670	Data Science in Python MD (online)		5	Pádraig Cunningham		
EEEN40080	Power System Operation	EEEN20090	5	Damian Flynn	ECON42360	Energy Economics & Policy		5	Lisa Ryan		
EEEN40100	Power Electronics and Drives		5	Paul Cuffe	EEEN30070	Power System Engineering	ELEN20010 & EEEN20020	5	Damian Flynn		
EEEN40110	Renewable Energy Systems		5	Georgios Tzounas	EEEN40090	Power System Design	EEEN30070	5	Georgios Tzounas		
EEEN40550	Power Systems Dynamics and Control	EEEN30070, EEEN30090	5	Federico Milano	EEEN40120	Applications of Power Electronics	[EEEN30090 & EEEN40100 & EEEN30070] (co- requisite) & EEEN20090 & EEEN20020	5	Hamed Heydari- Doostabad		
TECHNICAL OPTIO	NS: Mechanical Engineering (WMC1)										
MEEN40010	Engineering Thermodynamics III (C)		5	Donal Finn	CHEN40560	Process Control (C)		5	Niall English		
MEEN40030	Manufacturing Engineering II (C)		5	David McManus		Select at least one Option Module from following:					
MEEN41330	Data Analytics for Engineers		5	Di Nguyen	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		