Curriculum 2023/2024

ME Electronic & Computer Engineering Registration Guide

This page shows the programme plan with the long work placement, which is recommended. If you have gaps in your prior learning or other special requirements, you may need to take the short work placement (see page 2) - you should consult the Programme Director about this.

Version 1, March 2023

Modules are 5 credits unless marked otherwise. The normal workload is 30 credits per Trimester. The modules shown in Stage 2 (Year 2) are for guidance only - the modules available may change in 2024-25.

Long Work Placement - Students progressing from BSc or BE in UCD , or close equivalent

Stage 1 (Year 1)

Autumn Trimester		Spring Trimester		Summer Trimester
Required Modules		**Required Module**		
COMP41670	Software Engineering	EEEN40210	PWE (30 credits) January to August	
EEEN40050	Wireless Systems			
EEEN40060	Digital Communications			
	Choose 3 options from 8. The Programme Director may require that you take specific modules to fill gaps in your prior learning.		This work placement replaces all modules in the Spring Trimester. Work placements will be arranged by UCD. Details will be provided early in the Autumn Trimester.	
COMP30040	Networks and Internet Systems			
COMP30690	Information Theory			
COMP30940	Information Security			
EEEN40130	Advanced Signal Processing			
EEEN40150	RF Electronics			
EEEN40300	Entrepreneurship in Engineering			
EEEN40310	Power Electronics Technology			
EEEN40570	Analogue Integrated Circuits			

Stage 2 (Year 2)

Autumn Trimester		Spring Trimester		Summer Trimester
Required Modules		**Required Modules**		
EEEN40240	Project (25 credits). The project runs through both trimesters: Autumn 10 credits; Spring 15 credits. It includes a Research Skills component.			
EEEN40010	Control Theory			
EEEN40580	Optimisation Techniques for Engineers	MEEN40430	Professional Engineering (Mgt)	
	Choose 2 options from 7		**Choose 2 options from 8**	
ACM40290	Numerical Algorithms	COMP40660	Adv. in Wireless Networking	
EEEN40720	Machine Learning for Engineers	COMP47670	Data Science in Python (MD)	
EEEN40130	Advanced Signal Processing	EEEN40070	Neural Engineering	
EEEN40150	RF Electronics	EEEN40280	Digital & Embedded Systems	
EEEN40310	Power Electronics Technology	EEEN40600	Mixed-Signal Integrated Circuits	
EEEN40570	Analogue Integrated Circuits			
EEEN40680	Introduction to Quantum Computing	EEEN40690	Quantum Computing	
		MEEN30140	Professional Eng. (Finance)	

Option Rule: You must take 4 option modules in Stage 2 (Year 2), unless the Programme Director has agreed an alternative plan.

Alternative Option: During the 2-Stage (2-Year) programme, students are permitted to select one 5-credit option module that is not on the list of option modules above, but the selected module must be approved by the Programme Director in advance and formally approved by the Engineering Programme Board as a negotiated option.

Registration Notes

Stage 1 Autumn:

COMP30940	Information Security	clashes with EEEN40130 Advanced Signal Processing and EEEN40150 RF Electronics
COMP30690	Information Theory	clashes with EEEN40150 RF Electronics and EEEN40570 Analogue Integrated Circuits
COMP30040	Networks and Internet Systems	clashes with either EEEN40310 Power Electronics Technology
		OR with both COMP30690 Information Theory and EEEN40570 Analogue Integrated Circuits

Short Work Placement - Students who need more flexibility

Stage 1

Autumn Trimester		Spring Trimester		Summer Trimester	
Required Module				**Required Module**	
COMP41670	Software Engineering			EEEN40200	PWE (10 credits) June-August
	Choose 5 options from this list. The		**Choose at least 4 options** from this		
COMP30040	Networks and Internet Systems	COMP40660	Adv. in Wireless Networking		
COMP30690	Information Theory	COMP47670	Data Science in Python (MD)		
COMP30940	Information Security	EEEN30030	Electromagnetic Waves		
EEEN30110	Signals & Systems	EEEN30050	Signal Processing		
EEEN40050	Wireless Systems*	EEEN30060	Communication Theory		
EEEN40060	Digital Communications*	EEEN30120	Analogue Electroincs		
EEEN40130	Advanced Signal Processing	EEEN30150	Modelling and Simulation		
EEEN40150	RF Electronics	EEEN40070	Neural Engineering		
EEEN40300	Entrepreneurship in Engineering	EEEN40280	Digital & Embedded Systems		
EEEN40310	Power Electronics Technology	EEEN40600	Mixed-Signal Integrated Circuits		

EEEN40570	Analogue Integrated Circuits		
		MEEN30140	Professional Eng. (Finance)

Stage 2 (Year 2)

	Autumn Trimester		Spring Trimester		Summer Trimester
	Required Module		**Required Module**		
EEEN40240	Project (25 credits). The project runs through both trimesters: Autumn 10 credits; Spring 15 credits. It includes a Research Skills component.				
EEEN40010	Control Theory				
EEEN40580	Optimisation Techniques for Engineers		MEEN40430	Professional Engineering (Mgt)	
	Choose 2 options (with guidance)		**Choose 2 options (with guidance)**		
ACM40290	Numerical Algorithms		COMP40660	Adv. in Wireless Networking	
EEEN40720	Machine Learning for Engineers		COMP47670	Data Science in Python (MD)	
EEEN40050	Wireless Systems *		EEEN40070	Neural Engineering	
EEEN40060	Digital Communications*		EEEN40280	Digital & Embedded Systems	
EEEN40130	Advanced Signal Processing		EEEN40600	Mixed-Signal Integrated Circuits	
EEEN40150	RF Electronics				
EEEN40310	Power Electronics Technology		EEEN40690	Quantum Computing	
EEEN40570	Analogue Integrated Circuits		MEEN30140	Professional Eng. (Finance)	
EEEN40680	Introduction to Quantum Computing				

Option Rule: You must take 4 option modules in Stage 2. The 2 modules marked * must be taken if not already taken in Stage 1.

Alternative Option: During the 2-Stage (2-Year) programme, students are permitted to select one 5-credit option module that is not on the list of option modules above, but the selected module must be approved by the Programme Director in advance and formally approved by the Engineering Programme Board as a negotiated option.

Caution: The regulations for a taught master's programme require a minimum of 70 credits at level 4 or higher. If you take the short work placement, you will need at least 3 option modules at level 4 in order to meet this requirement.

Registration Notes

As there are so many option modules in each Trimester, you will find some timetable clashes between them - you may have to defer some modules to Stage 2 (Year 2). See the notes on page 1.

Some modules have pre-requisites, and you will not be able to choose them as options until you have taken and passed the pre-requisite modules. If you think that you already have equivalent prior learning, consult the Programme Director.