

ME PATHWAY (ELECTRICAL AND ELECTRONIC) ENGINEERING

Overview

At the end of Third Year of the BE (Electrical and Electronic) Engineering Degree (<https://ucc-ie-public.courseleaf.com/programmes/beel/>) students may register for the BE (Hons) / ME Pathway (Electrical and Electronic). Students who choose not / are not eligible to register for the BE (Hons) / ME Pathway (Electrical and Electronic) will continue to Fourth Year of the BE (Hons) (Electrical and Electronic).

Entry to the ME in Electrical and Electronic Engineering

Entry to the ME in Electrical and Electronic Engineering (<https://ucc-ie-public.courseleaf.com/programmes/meel/>) is determined based on student performance during Third Year. Students who pass the Third University Examination in Electrical and Electronic Engineering, achieving at least a 2H2 will be eligible to register for Fourth Year of the ME Pathway (Electrical and Electronic) (p. 1). In the case of students that have completed one full semester or a full year of studies abroad during Third Year, performance during the Second Year is taken into consideration, with a minimum of 2H1 in the Second Year Examination required for eligibility, in addition to passing the Third Year examination. Students who are eligible to register for the BE (Hons) / ME Pathway (Electrical and Electronic), but choose not to, will continue to Fourth Year of the BE (Hons) (Electrical and Electronic). Students passing the Third University Examination in Electrical and Electronic Engineering who are ineligible to register for the BE (Hons) / ME Pathway (Electrical and Electronic) will continue to Fourth Year of the BE (Hons) (Electrical and Electronic).

Change of Registration to Fourth Year of the BE (Hons) (Electrical and Electronic)

A student may elect to change registration to Fourth Year of the BE (Hons) provided formal notification is received by the Student Records and Examinations Office (sreo@ucc.ie) before the end of Week 8 of Semester 1 of Fourth Year.

Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.

Programme Requirements

Code	Title	Credits
Year 1 - Engineering		
Students take 60 credits as follows:		
<i>Core Modules</i>		
CE1003	Introduction to Structural and Civil Engineering	5
CE1005	Engineering Computation and Problem Solving	5
CM1001	Chemistry for Engineers	5
EE1007	Introduction to Electrical and Electronic Engineering	5
MA1011	Mathematical Methods I	5
MA1012	Mathematical Methods II	5
ME1002	Engineering Thermodynamics	5

NE1001	Introduction to Energy Engineering	5
PE1003	Introduction to Process and Chemical Engineering	5
PY1006	Physics for Engineers II	5
PY1012	Physics for Engineers 1	10

Year 2 - Electrical and Electronic Engineering

Students take **60** credits as follows:

Core Modules

EG2002	Numerical Methods and Programming	5
CE2001	Solid and Structural Mechanics I	5
EE2011	Digital Electronics	5
EE2012	Linear Circuit Analysis	5
EE2013	Non-Linear Circuit Analysis	5
EE2014	Signals and Systems 1	5
EE2015	Signals and Systems 2	5
EE2016	Electrical Power Engineering I	5
EE2017	Electrical Power Engineering II	5
EE2020	Semiconductor Devices	5
MA2013	Mathematics for Engineering	5
ST1051	Introduction to Probability and Statistics	5

Year 3 - Electrical and Electronic Engineering

Students take **60** credits as follows:

Core Modules

EE3011	Power Electronics & AC Machines and Systems	5
EE3012	Electric Vehicle Energy Systems	5
EE3013	Electromagnetic Fields for Engineers	5
EE3014	Signal Processing	5
EE3015	Telecommunications I	5
EE3016	Control Engineering I	5
EE3018	Analogue Integrated Circuits	5
EE3019	Digital Integrated Circuits	5
EE3020	Engineering Applications of Machine Learning	5
EE3022	Electronic Circuit Design	5
EE3023	Electronic Embedded Systems	5
ME3003	Mechanical Systems	5

Year 4 - ME Pathway Electrical and Electronic Engineering

Students take **60** credits as follows - all listed core modules (**30** credits) in Part A and a Placement module (**30** credits) in Part B:

Core Modules

Part A

EE4002	Control Engineering II	5
EE4010	Electrical Power Systems	5
EE4014	Industrial Automation and Control	5
EE4016	Transmission Lines	5
EE4019	Photonic Signals and Systems Application	5
EE4022	Analogue IC Design	5

Part B

Core Modules

EE6060	Electrical and Electronic Engineering Work Placement	30
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Year 5 - ME (Electrical and Electronic) Engineering

ME (Electrical and Electronic) Engineering (<https://ucc-ie-public.courseleaf.com/programmes/meel/>)

Total Credits

240

Examinations

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