

ME PATHWAY (ENERGY) ENGINEERING

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 I	10
Year 2 - Energy Engineering		
Students take 60 credits as follows:		
<i>Core Modules</i>		
EG2002	Numerical Methods and Programming	5
CE2001	Solid and Structural Mechanics I	5
CE2003	Fluids I	5
CE2004	Fluids II	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
NE2001	Primary Energy Engineering	5
ST1051	Introduction to Probability and Statistics	5
Year 3 - Energy Engineering		
Students take 60 credits as follows:		
<i>Core Modules</i>		
CE3006	Construction Project Management	5
CE3007	Hydraulics I	5
CE3009	Environmental Engineering	5
EE3011	Power Electronics & AC Machines and Systems	5
EE3012	Electric Vehicle Energy Systems	5
EE3016	Control Engineering I	5
ME3003	Mechanical Systems	5
ME3004	Applied Thermodynamics and Work Transfer	5
NE3002	Energy in Buildings	5
NE3003	Sustainable Energy	5
NE3004	Transportation and Energy	5
NE3005	Energy Systems Modelling	5
Year 4 - ME Pathway Energy 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:

Part A

Core Modules

EE4001	Energy Systems, Power Electronics and Drives	5
EE4002	Control Engineering II	5
EE4010	Electrical Power Systems	5
EE4014	Industrial Automation and Control	5
NE4002	Wind Energy	5
NE4008	Photovoltaic Systems	5

Part B

Core Modules

NE6060	ME Energy Placement	30
--------	---------------------	----

Year 5 - ME (Energy Engineering)

ME (Energy) Engineering (<https://ucc-ie-public.courseleaf.com/programmes/menrg/>)

Total Credits **240**

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*.