ME Electrical Power Engineering

Code

EEEN40190

ECON42360

COMP47670

MEEN30140

Curriculum 2024/2025

T335 ME Electrical Power Engineering

Structure for 2025/2026

Spring - Summer Trimester

ME Electrical Power PWE Long

Module

(30 credits)

Programme plan shown separately for long and short work placement options.

Stage 1:

Long Work Placement			
	Autumn Trimester		
Code	Module		
EEEN40010	Control Theory		
EEEN40080	Power System Operation		
EEEN40110	Renewable Energy Systems		
EEEN40550	Power System Dynamics and Control		
	2 options from		
	•		
EEEN40300	Entrepreneurship in Engineering		
EEEN40300 EEEN40310	Entrepreneurship in Engineering Power Electronics Technology		
EEEN40310	Power Electronics Technology Optimisation Techniques for Engineers		
EEEN40310 EEEN40580	Power Electronics Technology Optimisation Techniques for Engineers Fossil Fuels, Carbon Capture and Storage		
EEEN40310 EEEN40580 GEOL40310	Power Electronics Technology Optimisation Techniques for Engineers Fossil Fuels, Carbon Capture and Storage Engineering Thermodynamics II		

Stage 2

Stage 2:			
	Autumn Trimester		Spring Trimester
Code	Module	Code	Module
EEEN40260	ME Electrical Project	EEEN40260	ME Electrical Project
	25 (10 in Aut, 15 in Spr)		25 (10 in Aut, 15 in Spr)
EEEN40100	Power Electronics and Drives	EEEN40120	Applications of Power Electronics
		MEEN40430	Professional Engineering (Mgt)
		EEEN40090	Power System Design

2 or 1 options fromACM40290Numerical AlgorithmsEEEN40300Entrepreneurship in EngineeringEEEN40310Power Electronics TechnologyEEEN40580Optimisation Techniques for EngineersEEEN40720Machine Learning for EngineersGEOL40310Fossil Fuels, Carbon Capture and Storage

Autumn Trimester

Electrical Machines

Power System Operation

Renewable Energy Systems

Power System Dynamics and Control

Optimisation Techniques for Engineers

Fossil Fuels, Carbon Capture and Storage

Entrepreneurship in Engineering

Power Electronics Technology

Engineering Thermodynamics II

Energy Systems & Climate Change

Control Theory

1 option from

Module

Stage 1:

EEEN30090

EEEN40010

EEEN40080

EEEN40110

EEEN40550

EEEN40300

EEEN40310

EEEN40580

GEOL40310

MEEN30100

Code

Short Work Placement

Spring - Summer Trimester Code Module EEEN40180 ME Electrical Power PWE Short (10 credits) - Summer Trimester EEEN30070 Power System Engineering MEEN40430 Professional Engineering (Mgt)

1 or 2 options from

Energy Economics and Policy

Data Science in Python (MD)

Professional Engineering (Finance)

Spring Trimester offering of this module.

Students wishing to take COMP47670 must select the

2 options from

COMP47670	Data Science in Python (MD)
ECON42360	Energy Economics and Policy
EEEN30050	Signal Processing
MEEN30010	Applied Dynamics II
MEEN30140	Professional Engineering (Finance)

Spring Trimester

ME Electrical Project

Power System Design
2 OR 1 options from

Applications of Power Electronics

Energy Economics and Policy

Data Science in Python (MD)

Professional Engineering (Finance)

Students wishing to take COMP47670 must select the Spring Trimester offering of this module.

Module

MEEN40090
Stage 2:

	Autumn Trimester			
Code	Module			
EEEN40260	ME Electrical Project			
EEEN40100	Power Electronics and Drives			
	2 OR 3 options from			
ACM40290	Numerical Algorithms			
EEEN40300	Entrepreneurship in Engineering			
	Entrepreneurship in Engineering			
EEEN40310	Power Electronics Technology			
EEEN40310 EEEN40580				
	Power Electronics Technology			

Registration Guidance for 2-Year ME Programme

You need to satisfactorily complete 120 module credits in order to achieve an ME degree. A taught masters programme in UCD must have at least 70 credits at Level 4.

In each year of the programme you need to obtain 60 credits, normally consisting of 30 credits in each trimester.

All 'Core' modules MUST be selected, with the remaining module credits achieved by selecting an appropriate number of 'Option' modules from the defined lists. You may need to register yourself for some of the Core modules - this does not happen automatically. You also need to register for your chosen Option modules. Selection of the long or short Professional Work Experience options, and other module options, will require the approval of the Programme Director. The Programme Director (Terence O'Donnell) can be contacted by email at terence.odonnell@ucd.ie (Office located at Room 148, Engineering and Materials Science Centre).

Code

EEEN40260

EEEN40120

EEEN40090

ECON42360

COMP47670

MEEN30140
