Programme Regulations: 2024/25

Programme Titles:

Degree of Bachelor of Engineering with Honours in Electrical and Electronic Engineering - UCAS Code: H607

Degree of Bachelor of Engineering with Honours in Electrical and Electronic Engineering with Placement Year - Code: 1182U

Degree of Bachelor of Engineering with Honours in Electrical and Electronic Engineering with International Study Year – Code 1857U

Degree of Bachelor of Engineering with Honours in Electrical Engineering Science – Code: 1623U*

Notes

- (i) These programme regulations should be read in conjunction with the University's Taught Programme Regulations.
- (ii) All optional modules are offered subject to the constraints of the timetable and to any restrictions on the number of students who may be taught on a particular module. Not all modules may be offered in all years and they are listed subject to availability.
- (iii) A compulsory module is a module which a student is required to study.
- (iv) All modules are delivered in Linear mode unless stated otherwise as Block, eLearning or distance learning.
- (v) If a candidate meets the requirements for the four year degree, MEng with Honours in Electrical and Electronic Engineering (H605) they may transfer to that programme at any time before the start of Stage 3.
- (vi) Programme transfers for Tier 4 students may be restricted by current Tier 4 rules. Please refer to the Visa Team for advice.
- (vii) Programme coded 1623U is a non-accredited Honours degree title and is awarded where a candidate only meets the requirements of the University's Taught Programme Regulations and Examination Conventions.

1. Stage 1

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
ENG1001	Engineering Mathematics I	20	10	10	4
ENG1003	Electrical and Magnetic Systems	15	10	5	4
ENG1004	Electronics & Sensors	10		10	4
ENG1005	Thermofluid Mechanics	15	5	10	4
ENG1006	Properties and Behaviour of Engineering	15	15		4
	Materials				
ENG1007	Mechanics I	15	5	10	4
ENG1008	Introduction to Programming Languages (C,	15	7	8	4
	Matlab and Python)				
ENG1009	Sustainable Design, Creativity and	15	7	8	4
	Professionalism				

2. Stage 2

(a) All candidates shall take the following compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level
EEE2008	Project and Professional Issues	20		20	5

EEE2009	Signals and Communications	20	20		5
EEE2014	Semiconductor Devices and Analogue	20	20		5
	Electronics				
EEE2021	Computer Programming and Organisation	20	10	10	5
ENG2025	Digital Electronics	10		10	5
ENG2026	Automatic Control Systems	10		10	5
ENG2029	AC Electrical Power and Conversion	10		10	5
ENG2031	Mathematical Modelling and Statistical Methods for Engineering	10		10	5

3. Year 3 (Placement Year)

(i) <u>Careers Placement</u>

On completion of Stage 2 and before entering Stage 3, candidates may as part of their studies for the degree spend a year in a placement with an approved organisation. Permission to undertake a placement is subject to the approval of the Degree Programme Director. Students who are required to re-sit their Stage 3 assessment must delay the start of their placement until they have done so. Students who fail Stage 3 may not complete a placement year.

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level
NCL3000	Careers Service Placement Year Module	120	60	60	6

(ii) International Study Year

On completion of Stage 2 and before entering Stage 3, candidates may as part of their studies for the degree spend a year abroad at an appropriate exchange partner institution. Permission to undertake a year abroad is subject to the approval of the Degree Programme Director. Students who are required to re-sit their Stage 2 assessment must delay the start of their placement until they have done so. Students who fail Stage 2 may not complete a year abroad.

Code	Descriptive title			Credits Sem 2	Credits Sem 3	Level	Туре	Mode
ISY3000	International Study Year	120	60	60	0	6		

4. Stage 3

(a) All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
EEE3094	Individual Project and Technical Report	30	10	20	6
ENG2032	Business and Law for Engineers	10	5	5	5

(b) All candidates shall take optional modules normally selected from the following list so that the total number of credits is 120:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
EEE3023	Digital Communication Systems	20	10	10	6
EEE3024	Industrial Automation & Control Systems	20	10	10	6
EEE3025	Power Electronics – Design & Applications	20	10	10	6
EEE3026	Electronic Devices and Semiconductor	20	10	10	6
	Technology				
EEE3027	Integrated Circuit Design and Embedded	20	10	10	6
	Systems				
EEE3028	Electrical Machines and Drives	20	10	10	6
EEE3029	Net-Zero Energy Networks	20	10	10	6
EEE3030	Signal Processing and Machine Learning	20	10	10	6

With the approval of the Degree Programme Director alternative optional modules to those listed above may be selected.

5. Assessment Methods

Details of the assessment pattern in each module are explained in the module outline. To satisfy IET accreditation requirements, a module comprising two assessment modes (coursework and examination) that assess different learning outcomes and each mode contributes more than 30% to the overall module mark, can only be passed if neither assessment mode is awarded a mark that is no more than 10% below the normal module pass mark.

6. Compensation and Condonement

For students entering the programme* in 2021/22 onwards, the Engineering Council's policy on compensation and condonement will apply to marks awarded for modules at all stages, to satisfy accreditation requirements. To be awarded an accredited honours degree, only a maximum of 30 credits can be compensated over the duration of the degree programme, where the final mark is up to 5 percentage points below the pass mark**. Core modules cannot be compensated. Individual projects and group projects worth more than 20 credits cannot be compensated.

There is no condonement of modules delivering Accreditation of Higher Education Programmes (AHEP) learning outcomes.

Any student not satisfying the accreditation requirements, but satisfying the University's Degree and Assessment regulations, will have the opportunity to be awarded a non-accredited honours degree with its classification based on the overall final stage averages beyond stage one.

*Note that for Electrical & Electronic Engineering programmes, the above text on compensation and condonement has been applicable for students who started stage one from 2018/19.

**Note that for IET-accredited Electrical and Electronic Engineering degree programmes, a module comprising assessed components worth at least 30% of the overall module mark can only be passed if the overall module mark achieved is at least the pass mark and none of those assessed components have a mark that is more than 10 marks below the pass mark.

7. Degree classification

Candidates will be assessed for the degree classification on the basis of all the modules taken at Stages 2, 3 and 4 with the weightings of the stages being 1:3:3 for Stage 2, Stage 3 and Stage 4 respectively.