Programme Regulations: 2024/25

Programme Titles:

Degree of Bachelor of Engineering with Honours in Mechanical Engineering - UCAS Code H300

Degree of Bachelor of Engineering with Honours in Mechanical Engineering with Placement Year- Code 1170U

Degree of Bachelor of Engineering with Honours in Mechanical Engineering Science – Code 1643U*

Degree of Bachelor of Engineering with Honours in Mechanical Engineering with International Study Year

– Code: 1846U

Notes

- (i) These programme regulations should be read in conjunction with the University's Taught Programme Regulations.
- (ii) Unless otherwise stated under 'Type', modules are not core.
- (iii) A compulsory module is a module which a student is required to study.
- (iv) A core module is a module which a student must pass, and in which a fail mark may neither be carried nor compensated; such modules are designated by the board of studies as essential for progression to a further stage of the programme or for study in a further module.
- (v) If a candidate meets the requirements for one of the Master of Engineering degrees in Mechanical Engineering they may transfer to that programme at any time before the start of the Semester 2 examination period in Stage 3.
- (vi) A student who has a Stage 2 average of at least 55%, and an equally-weighted combined Stage 2 and Stage 3 average of at least 60%, may be considered under the progression regulations from Stage 3 to Stage 4 of the appropriate MEng programme. Note that even if these conditions are satisfied it may still be necessary for the candidate to clear module failures in order to progress. Candidates who wish to be considered for such a transfer must inform the Degree Programme Director in writing before the start of the Stage 3 Semester 2 examination period.
- (vii) Programme transfers for Tier 4 students may be restricted by current Tier 4 rules. Please refer to the Visa Team for advice.
- (viii) All modules are delivered in Linear mode unless stated otherwise as Block, eLearning or distance learning.
- (ix) Programme coded 1643U is a non-accredited Honours degree title and is awarded where a candidate only meets the requirements of the University's Taught Programme Regulations.

1. Stage 1

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2		
ENG1001	Engineering Mathematics I	20	10	10	4	Core
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	15	15		4	
	Engineering Materials					
ENG1007	Mechanics I	15	5	10	4	
ENG1008	Introduction to Programming Languages (C, Matlab and Python)	15	7	8	4	
ENG1009	Sustainable Design, Creativity and Professionalism	15	7	8	4	

2. Stage 2

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2		
ENG2011	Engineering Mathematics II	10	10		5	
ENG2022	Materials Science II	10	10		5	
ENG2023	Thermal Engineering	10		10	5	
ENG2027	Applications of Engineering Fluid	10	10		5	
	Mechanics II					
ENG2029	AC Electrical Power and Conversion	10		10	5	
ENG2031	Mathematical Modelling & Statistical	10		10	5	
	Methods for Engineering					
ENG2032	Business and Law for Engineers	10	5	5	5	
ENG2033	Engineering Mechanics: Statics	10	10		5	
ENG2034	Engineering Mechanics: Dynamics	10		10	5	
MEC2007	Design and Manufacturing II	20	10	10	5	
MEC2008	Mechanical Engineering Professional Skills	10	5	5	5	
	II					

3. Year 3 – Intercalating Year

(a) <u>Careers Placement (1170U)</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 2 assessment must delay the start of their placement until they have done so. Students who fail Stage 2 may not complete a placement year.

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

(b) <u>International Study Year (1846U)</u>

On completion of Stage 2 and before entering Stage 3, candidates may spend the equivalent of one academic 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 year abroad until they have done so. Students who fail Stage 2 may not complete a year abroad.

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Mode
ISY3000	International Study Year Module	120	60	60	6	

4. Stage 3

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2		
MEC3028	Computational Heat and Fluid Flow	10	10		6	
MEC3029	Advanced Mechanics & Structural Optimisation	20	10	10	6	
MEC3030	Digital Manufacturing Processes and Systems	20		20	6	
MEC3031	Introduction to Biomedical Engineering	10	10		6	
MEC3032	Advanced Thermofluid Dynamics	10	10		6	
MEC3033	Introduction to Mechatronics Design	20	20		6	
MEC3098	Mechanical Engineering Project	30	5	25	6	Core

5. Assessment methods

Details of the assessment pattern for each module are explained in the module outline.

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.

7. Degree classification

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