Programme Regulations: 2024/25

Programme Title:

Degree of Bachelor of Engineering with Honours in Mechanical Engineering with International Year One - 1827U

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) All modules are delivered in Linear mode unless stated otherwise as Block, eLearning or distance learning.
- (vi) 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.
- (vii) A student who has a Stage 2 average of at least 55% at the first attempt, 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.
- (viii) Programme transfers for Tier 4 students may be restricted by current Tier 4 rules. Please refer to the Visa Team for advice.

1. Stage 1

(a) All candidates shall take the following modules, all of which are compulsory:

| Code | Descriptive title | Total | Credits | Credits | Level | Туре |
|---------|---|---------|---------|---------|-------|------|
| | | Credits | Sem 1 | Sem 2 | | |
| INU1101 | English for Academic Purposes | 20 | 10 | 10 | 4 | |
| | (International Year One) | | | | | |
| INU1121 | Engineering Mathematics for | 20 | 10 | 10 | 4 | |
| | International Year One Engineering | | | | | |
| INU1123 | Electrical and Magnetic Systems for | 15 | 10 | 5 | 4 | |
| | International Year | | | | | |
| | One Engineering | | | | | |
| INU1124 | Electronics and Sensors for | 10 | 0 | 10 | 4 | |
| | International Year One Engineering | | | | | |
| INU1125 | Thermofluid Mechanics for | 15 | 5 | 10 | 4 | |
| | International Year One | | | | | |
| | Engineering | | | | | |
| INU1126 | Engineering Materials for International | 15 | 15 | 0 | 4 | |
| | Year One Engineering | | | | | |
| INU1127 | Mechanics for International Year One | 15 | 5 | 10 | 4 | |
| | Engineering | | | | | |
| INU1128 | Introduction to Programming | 15 | 7 | 8 | 4 | |
| | Languages for International Year One | | | | | |

| | Engineering | | | | | |
|---------|--|----|---|---|---|--|
| INU1129 | Sustainable Design, Creativity and | 15 | 7 | 8 | 4 | |
| | Professionalism for International Year | | | | | |
| | One Engineering | | | | | |

(b) Re-sit assessment

For the English for Academic Purposes module, the following will apply:

The required pass mark for the module is 60. The required competence level (as determined by UKVI regulations) in each of the four subskills (reading, listening, writing and speaking) is 55. A student will be granted one resit opportunity in either of the following cases:

If a student fails to achieve the required pass mark (60) for the module. In this case, the student will only be required to resit those subskills where they have failed to achieve a subskill pass mark of 60. The result achieved in the resit for the subskill in this case will be uncapped, but the overall module result following the resit will be capped at the pass mark of 60.

If a student has achieved a module mark of 60 or more but has one or more subskill mark of less than 55, then in line with Programme Regulations the student has not passed the module. In this case, the student will be required to resit those subskills where they have failed to achieve the competence level of 55. The result achieved will be uncapped but the overall module result following the resit will be capped at the pass mark of 60.

In both cases, marks of over 60 achieved in any subskill at a first attempt will need to be capped to ensure overall module marks following either resit case do not exceed 60. University selectors may be provided with uncapped marks so that a decision can be made based on the student's actual English language competence level.

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 | |
| ENG2033 | Engineering Mechanics: Statics | 10 | 10 | | 5 | |
| ENG2034 | Engineering Mechanics: Dynamics | 10 | | 10 | 5 | |
| ENG2022 | Materials Science II | 10 | 10 | | 5 | |
| ENG2023 | Thermal Engineering | 10 | | 10 | 5 | |
| ENG2027 | Applications of Engineering Fluid Mechanics II | 10 | 10 | | 5 | |
| ENG2029 | AC Electrical Power and Conversion | 10 | | 10 | 5 | |
| ENG2031 | Mathematical Modelling & Statistical Methods for Engineering | 10 | | 10 | 5 | |
| ENG2032 | Business and Law for Engineers | 10 | 5 | 5 | 5 | |
| MEC2007 | Design and Manufacturing II | 20 | 10 | 10 | 5 | |
| MEC2008 | Mechanical Engineering Professional Skills II | 10 | 5 | 5 | 5 | |

3. Stage 3

All candidates shall take the following compulsory modules:

| Code | Descriptive title | Total | Credits | Credits | Level | Туре |
|---------|--|---------|---------|---------|-------|------|
| | | Credits | Sem 1 | Sem 2 | | |
| MEC3033 | Introduction to Mechatronics Design | 20 | 20 | | 6 | |
| 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 | |
| MEC3098 | Mechanical Engineering Project | 30 | 5 | 25 | 6 | Core |

4. Assessment methods

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

5. 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.