

Programme Regulations: 2025/26

Programme Titles:

- **Degree of Master of Engineering with Honours in Chemical Engineering - UCAS Code: H813**

With specialisms in
 - **Chemical Engineering with Placement Year (Year 4) - Code: 1149U**
 - **Process Control - Code: 1632U**
 - **Process Control with Placement Year - Code: 1150U**
 - **Bioprocess Engineering - Code: 1631U**
 - **Bioprocess Engineering with Placement Year - Code: 1154U**
 - **Sustainable Engineering - Code: 1633U**
 - **Sustainable Engineering with Placement Year - Code: 1156U**
- **Degree of Master of Engineering with Honours in Chemical Engineering Science – Code 1622U***

Programme Titles available prior to 2022 Entry

- **Degree of Master of Engineering with Honours in Chemical Engineering with Process Control - UCAS Code: H830****
- **Degree of Master of Engineering with Honours in Chemical Engineering with Bioprocess Engineering - UCAS Code: H831****
- **Degree of Master of Engineering with Honours in Chemical Engineering with Sustainable Engineering - UCAS Code: HH82****

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) *Unless otherwise stated under 'Type', modules are not core.*
- (iv) *A compulsory module is a module which a student is required to study.*
- (v) *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.*
- (vi) *All modules are delivered in Linear mode unless stated otherwise as Block, eLearning or distance learning.*
- (vii) *If a candidate meets the requirements for the three-year Bachelor of Engineering degree Chemical Engineering (H810) they may transfer to that programme at any time before the start of Stage 3.*
- (viii) *Programme transfers for Student Visa students may be restricted. Please refer to the Visa Team for advice.*
- (ix) **Programme 1622U is a non-accredited exit award for candidates who do not meet the requirements for the accredited version of Degree of Master of Engineering with Honours in Chemical Engineering (H813)*
- (x) ***Programmes coded H830, H831 and HH82 are withdrawn from entry effective from September 2022*

1. Stage 1

All candidates shall take the following compulsory modules:

| <i>Code</i> | <i>Descriptive title</i> | <i>Total Credits</i> | <i>Credits Sem 1</i> | <i>Credits Sem 2</i> | <i>Level</i> |
|-------------|-------------------------------------|----------------------|----------------------|----------------------|--------------|
| CME1021 | Thermodynamics | 10 | 10 | | 4 |
| CME1023 | Transfer Processes | 25 | | 25 | 4 |
| CME1026 | Computing and Numerical Methods | 10 | 5 | 5 | 4 |
| CME1027 | Data Analysis in Process Industries | 5 | | 5 | 4 |
| CME1028 | Chemical Engineering Laboratory | 10 | 5 | 5 | 4 |
| CME1029 | Chemistry for Chemical Engineers | 20 | 20 | | 4 |
| CME1030 | Principles of Chemical Engineering | 20 | 10 | 10 | 4 |
| ENG1001 | Engineering Mathematics I | 20 | 10 | 10 | 4 |

3. Stage 2

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

| <i>Code</i> | <i>Descriptive title</i> | <i>Total Credits</i> | <i>Credits Sem 1</i> | <i>Credits Sem 2</i> | <i>Level</i> |
|-------------|--|----------------------|----------------------|----------------------|--------------|
| CME2022 | Separation Processes 1 | 20 | | 20 | 5 |
| CME2023 | Transfer Processes 2 | 20 | 20 | | 5 |
| CME2024 | Reactor Engineering | 10 | 10 | | 5 |
| CME2027 | Introduction to Bioprocessing and Chemical Process Development | 10 | 10 | | 5 |
| CME2028 | Thermodynamics 2 | 10 | 10 | | 5 |
| CME2029 | Process Measurement, Dynamics and Control | 10 | | 10 | 5 |
| CME2030 | Chemical Engineering Laboratory II | 10 | | 10 | 5 |
| CME2031 | Safety, Risk and Engineering Practice | 20 | | 20 | 5 |
| ENG2011 | Engineering Mathematics II | 10 | 10 | | 5 |

(b) In order to progress on a Master of Engineering programme candidates must achieve an overall Stage 2 average of 55%.

In order to progress on to the Master of Engineering in Chemical Engineering with Honours in Industry (H815) candidates must achieve an overall Stage 2 average of 65% and fail no module at the first attempt.

4. Stage 3

All candidates shall take the following compulsory modules:

| <i>Code</i> | <i>Descriptive title</i> | <i>Total Credits</i> | <i>Credits Sem 1</i> | <i>Credits Sem 2</i> | <i>Level</i> |
|-------------|-------------------------------------|----------------------|----------------------|----------------------|--------------|
| CME3008 | Process Control | 10 | 10 | | 6 |
| CME3032 | Process Design and Economics | 15 | 8 | 7 | 6 |
| CME3033 | Separation Processes 2 | 15 | 15 | | 6 |
| CME3034 | Design for Process Safety | 10 | 10 | | 6 |
| CME3035 | Reactor Systems Engineering | 15 | 15 | | 6 |
| CME3036 | Process and Product Engineering | 10 | | 10 | 6 |
| CME3039 | Plant Design | 40 | 5 | 35 | 6 |
| CME3040 | Chemical Engineering Laboratory III | 5 | | 5 | 6 |

In order to progress on a Master of Engineering programme candidates must achieve an overall Stage 3 average of 55%.

Before entering Stage 4 candidates will choose to either continue on the general Chemical Engineering programme or specialise in Bioprocess Engineering, Process Control or Sustainable Engineering.

5. Year 4 (Placement Year Only - 1149U, 1150U, 1154U & 1156U)

On completion of Stage 3 and before entering Stage 4, 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.

| <i>Code</i> | <i>Descriptive title</i> | <i>Total Credits</i> | <i>Credits Sem 1</i> | <i>Credits Sem 2</i> | <i>Level</i> |
|-------------|--------------------------------------|----------------------|----------------------|----------------------|--------------|
| NCL3000 | Career Service Placement Year Module | 120 | 60 | 60 | 6 |

6. Stage 4

(a) Chemical Engineering (H813)

(i) All candidates shall take the following compulsory modules totalling 100 credits:

| <i>Code</i> | <i>Descriptive title</i> | <i>Total Credits</i> | <i>Credits Sem 1</i> | <i>Credits Sem 2</i> | <i>Level</i> | <i>Type</i> | <i>Mode</i> |
|-------------|--------------------------|----------------------|----------------------|----------------------|--------------|-------------|-------------|
| CME8107 | Process Intensification | 10 | 10 | | 7 | | Block |
| CME8120 | Advanced Design Project | 20 | 20 | | 7 | Core | Block |
| CME8128 | MEng Research Project | 60 | | 60 | 7 | | |
| CME8130 | Formulated Products | 10 | 10 | | 7 | | Block |

(ii) All candidates shall take optional modules to the value of 20 credits from the following list:

| <i>Code</i> | <i>Descriptive title</i> | <i>Total Credits</i> | <i>Credits Sem 1</i> | <i>Credits Sem 2</i> | <i>Level</i> | <i>Type</i> | <i>Mode</i> |
|-------------|--|----------------------|----------------------|----------------------|--------------|-------------|-------------|
| CME8124 | Big Data Analytics in the Process Industries | 10 | 10 | | 7 | | Block |
| CME8127 | Bioprocess Engineering | 10 | 10 | | 7 | | Block |
| CME8132 | Sustainable Industry I: Assessment, Assurance and Strategy | 20 | 20 | | 7 | | Block |
| CME8133 | Advanced Process Control | 20 | 20 | | 7 | | Block |

(b) Bioprocess Engineering (1631U & 1154U (Placement Year))

(i) All candidates shall take the following compulsory modules totalling 120 credits:

| <i>Code</i> | <i>Descriptive title</i> | <i>Total Credits</i> | <i>Credits Sem 1</i> | <i>Credits Sem 2</i> | <i>Level</i> | <i>Type</i> | <i>Mode</i> |
|-------------|--------------------------|----------------------|----------------------|----------------------|--------------|-------------|-------------|
| CME8107 | Process Intensification | 10 | 10 | | 7 | | Block |
| CME8120 | Advanced Design Project | 20 | 20 | | 7 | Core | Block |

| | | | | | | | |
|---------|--|----|----|----|---|--|-------|
| CME8124 | Big Data Analytics in the Process Industries | 10 | 10 | | 7 | | Block |
| CME8127 | Bioprocess Engineering | 10 | 10 | | 7 | | Block |
| CME8128 | MEng Research Project | 60 | | 60 | 7 | | |
| CME8130 | Formulated Products | 10 | 10 | | 7 | | Block |

The topic of the Project for CME8128 must be a topic in line with the specialism chosen by the student.

(c) Process Control (1632U & 1150U (Placement Year))

(i) All candidates shall take the following compulsory modules totalling 120 credits:

| <i>Code</i> | <i>Descriptive title</i> | <i>Total Credits</i> | <i>Credits Sem 1</i> | <i>Credits Sem 2</i> | <i>Level</i> | <i>Type</i> | <i>Mode</i> |
|-------------|--------------------------|----------------------|----------------------|----------------------|--------------|-------------|-------------|
| CME8107 | Process Intensification | 10 | 10 | | 7 | | Block |
| CME8120 | Advanced_Design Project | 20 | 20 | | 7 | Core | Block |
| CME8128 | MEng Research Project | 60 | | 60 | 7 | | |
| CME8130 | Formulated Products | 10 | 10 | | 7 | | Block |
| CME8133 | Advanced Process Control | 20 | 20 | | 7 | | Block |

The topic of the Project for CME8128 must be a topic in line with the specialism chosen by the student.

(d) Sustainable Engineering (1633U & 1156U (Placement Year))

(i) All candidates shall take the following compulsory modules totalling 120 credits:

| <i>Code</i> | <i>Descriptive title</i> | <i>Total Credits</i> | <i>Credits Sem 1</i> | <i>Credits Sem 2</i> | <i>Level</i> | <i>Type</i> | <i>Mode</i> |
|-------------|--|----------------------|----------------------|----------------------|--------------|-------------|-------------|
| CME8107 | Process Intensification | 10 | 10 | | 7 | | Block |
| CME8120 | Advanced Design Project | 20 | 20 | | 7 | Core | Block |
| CME8128 | MEng Research Project | 60 | | 60 | 7 | | |
| CME8130 | Formulated Products | 10 | 10 | | 7 | | Block |
| CME8132 | Sustainable Industry I: Assessment, Assurance and Strategy | 20 | 20 | | 7 | | Block |

The topic of the Project for CME8128 must be a topic in line with the specialism chosen by the student.

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

7. Assessment methods

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

8. 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.

9. Degree classification

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