

Programme Regulations: 2021/22

Programme Titles:

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

Degree of Master of Engineering in Chemical Engineering with Honours in Chemical Engineering with Placement Year (Year 3) - Code: 1553U*

Degree of Master of Engineering in Chemical Engineering with Honours in Chemical Engineering with Placement Year (Year 4) - Code: 1149U

Degree of Master of Engineering in Chemical Engineering with Honours in Process Control - UCAS Code: H830

Degree of Master of Engineering in Chemical Engineering with Honours in Process Control with Placement Year - Code: 1150U

Degree of Master of Engineering in Chemical Engineering with Honours in Bioprocess Engineering - UCAS Code: H831

Degree of Master of Engineering in Chemical Engineering with Honours in Bioprocess Engineering with Placement Year - Code: 1154U

Degree of Master of Engineering in Chemical Engineering with Honours in Sustainable Engineering - UCAS Code: HH82

Degree of Master of Engineering in Chemical Engineering with Honours in Sustainable Engineering with Placement Year - Code: 1156U

Degree of Master of Engineering in Chemical Engineering with Honours in Industry – UCAS Code: H815

(Foundation Year – UCAS Code: H816)

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 Tier 4 students may be restricted by current Tier 4 rules. Please refer to the Visa Team for advice.

(ix) *Programme 1553U Chemical Engineering with Honours in Chemical Engineering with Placement Year (Year 3) is only available to students undertaking Careers Placement in Year 3 in academic year 19/20.

See also:

Stage 0 (Foundation Year) for all Degrees of Bachelor of Engineering with Honours and Master of Engineering with Honours.

1. Stage 0

Candidates who do not meet the requirements for entry into Stage 1 may with approval of the Degree Programme Director commence this degree programme at Stage 0 and shall proceed under the regulations relating to Stage 0.

2. Stage 1

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level
CME1020	Chemistry	25	13	12	4
CME1021	Thermodynamics	10	10		4
CME1023	Transfer Processes	25	13	12	4
CME1025	Principles of Chemical Engineering	25	15	10	4
CME1026	Computing and Numerical Methods	10	5	5	4
CME1027	Data Analysis in Process Industries	5		5	4
ENG1001	Engineering Mathematics I	20	10	10	4

3. Stage 2

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

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level
CME2022	Separation Processes 1	20		20	5
CME2023	Transfer Processes 2	20	20		5
CME2024	Reactor Engineering	10	10		5
CME2027	Process Development Science and Analysis	10	10		5
CME2028	Thermodynamics 2	10	10		5
CME2029	Process Measurement, Dynamics and Control	10		10	5
CME2030	Chemical Engineering Laboratory I	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 60% and fail no module at the first attempt.

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. Year 3 (Placement Year) – Programme Code 1553U Only

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.

<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>Mode</i>
NCL3000	Career Service Placement Year Module	120	60	60	6	

5. Stage 3

(a) MEng in Chemical Engineering with Honours in Industry (H815)

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>
CME3028	Industrial Design Project	50	25	25	6
CME3037	Separation Processes 2 (Industry)	15	15		6
CME3041	Placement Log Book	5		5	6
CME8110	Chemical Engineering Knowledge (Industry)	50	25	25	7

(b) MEng in Chemical Engineering with Honours in Chemical Engineering (H813), Process Control (H830), Bioprocess Engineering (H831) and Sustainable Engineering (HH82)

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 2	10	10		6
CME3032	Process Design and Economics	15	10	5	6
CME3033	Separation Processes 2	15	15		6
CME3034	Design Process for 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 II	5		5	6

In order to progress on a Master of Engineering programme candidates must achieve an overall Stage 3 average of 60% and fail no module at the first attempt.

5. Year 4 (Placement Year)

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	Careers Service Placement Year Module	120	60	60	6

6. Stage 4

(a) MEng in Chemical Engineering with Honours in Industry (H815)

(i) 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>	<i>Type</i>	<i>Mode</i>
CME3008	Process Control 2	10	10		6		
CME3034	Design Process for Safety	10	10		6		
CME3035	Reactor Systems Engineering	15	15		6		
CME8107	Process Intensification	10	10		7		Block
CME8117	MEng Research Project	55	5	50	7		
CME8120	Advanced Design Project	20	20		7	Core	Block

(ii) Depending upon the nature of the experience gained in Stage 3 Industry, some of the compulsory modules listed above may be inappropriate. In this case, replacement modules may be selected with the approval of the Degree Programme Director.

(b) MEng in Chemical Engineering with Honours in Chemical Engineering (H813)

(i) All candidates shall take the following compulsory modules totalling 90 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>
CME8128	MEng Research Project	60		60	7		
CME8120	Advanced_Design Project	20	20		7	Core	Block
CME8127	Bioprocess Engineering	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>
BIO8009	Fundamentals of Cell and Molecular Biology	10	10		7	Block	
CME8038	Sustainable Industry	10	10		7	Block	

CME8104	Process Control – Design of Digital Control Algorithms	10	10		7	Block	
CME8118	Stability and Sustainability of Materials	10	10		7	Block	
CME8103	Process Control – Design of Robust Control Algorithms	10	10		7	Block	

(ii) All candidates shall take an optional module to the value of 10 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>
CME8107	Process Intensification	10	10		7	Block	
CME8119	Advanced Transport Processes	10	10		7	Block	

(c) MEng in Chemical Engineering with Honours in Bioprocess Engineering (H831)

(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>
BIO8009	Fundamentals of Cell and Molecular Biology	10	10		7		Block
CME8127	Bioprocess Engineering	10	10		7		Block
CME8128	MEng Research Project	60		60	7		
CME8120	Advanced_Design Project	20	20		7	Core	Block

(ii) All candidates shall take an optional module to the value of 10 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>
CME8104	Process Control – Design of Digital Control Algorithms	10	10		7		Block
CME8038	Sustainable Industry	10	10		7		Block
CME8103	Process Control – Design of Robust Control Algorithms	10	10		7		Block
CME8118	Stability and Sustainability of Materials	10	10		7		Block

(iii) All candidates shall take an optional module to the value of 10 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>
CME8107	Process Intensification	10	10		7		Block
CME8119	Advanced Transport Processes	10	10		7		Block

(d) MEng in Chemical Engineering with Honours in Process Control (H830)

(i) All candidates shall take the following compulsory modules totalling 110 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>
CME8128	MEng Research Project	60		60	7		

CME8120	Advanced_Design Project	20	20		7	Core	Block
CME8127	Bioprocess Engineering	10	10		7		Block
CME8103	Process Control – Design of Robust Control Algorithms	10	10		7		Block
CME8104	Process Control – Design of Digital Control Algorithms	10	10		7		Block

(ii) All candidates shall take an optional module to the value of 10 credits from the following list:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Mode
CME8107	Process Intensification	10	10		7		Block
CME8119	Advanced Transport Processes	10	10		7		Block

(e) MEng in Chemical Engineering with Honours in Sustainable Engineering (HH82)

(i) All candidates shall take the following compulsory modules totalling 110 credits:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Mode
CME8127	Bioprocess Engineering	10	10		7		Block
CME8128	MEng Research Project	60		60	7		
CME8120	Advanced Design Project	20	20		7	Core	
CME8038	Sustainable Industry	10	10		7		Block
CME8118	Stability and Sustainability of Materials	10	10		7		Block

(ii) All candidates shall take an optional module to the value of 10 credits from the following list:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Mode
CME8107	Process Intensification	10	10		7	Block	
CME8119	Advanced Transport Processes	10	10		7	Block	

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. 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 **with the exception of candidates on MEng Industry (H815) who commenced their studies prior to September 2015 for whom the weighting of the stages will be 1.5:1:2.5 for Stage 2, Stage 3 and Stage 4 respectively.***

9. Subject to University Confirmation: Compensation and Condonement (for students entering the programme in 2021/2022 onwards only)

The maximum number of modules that can be compensated in the whole programme is 30 credits and no modules in the final year can be compensated.

No condonement is allowed for core or optional modules that contribute to the delivery of AHEP learning outcomes. A maximum of 30 credits in an Integrated Masters degree programme can be compensated.

If, following a first attempt at the final stage, you have not been awarded an Honours degree (or an accredited Honours degree where applicable) under Regulation V.C.31 or by the use of discretion under Regulation V.C.35, the Board of Examiners may make you the award of the unaccredited degree MEng (Hons) Chemical Engineering Science.