

Programme Regulations: 2021/2022

Programme Titles:

Degree of Master of Engineering with Honours in Civil Engineering - UCAS Code: H290 (with Foundation Year – UCAS Code: H291)

Degree of Master of Engineering with Honours in Civil Engineering with Year in Industry - Code: H295 (with Foundation Year – UCAS Code: H291)

Degree of Master of Engineering with Honours in Civil Engineering with Year in Industry - UCAS Code: 1742U*

Programme Title: Degree of Master of Engineering with Honours in Civil & Structural Engineering - UCAS Code: H242 (with Foundation Year - UCAS Code: H291)

Degree of Master of Engineering with Honours in Civil & Structural Engineering with Year in Industry – UCAS Code: H296 (with Foundation Year - UCAS Code: H291)

Degree of Master of Engineering with Honours in Civil & Structural Engineering with Year in Industry –Code: 1743U*

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) *Candidates with a Stage 2 average mark of below 55% must normally transfer to the equivalent BEng programme.*
- (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 codes 1742U and 1743U is only available for students undertaking an approved inverted placement in the 2021/22 academic year as a result of the Covid-19 situation.*

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:

<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>
ENG1001	Engineering Mathematics 1	20	10	10	4	Core
ENG1002	Sustainable Design, Creativity, and Professionalism	30	10	20	4	
ENG1003	Electric and Magnetic Systems	15		15	4	
ENG1004	Electronics and Sensors	10	10		4	
ENG1005	Thermofluids Mechanics	15	8	7	4	
ENG1006	Properties and behaviours of Engineering Materials	15	15		4	
ENG1007	Mechanics	15	5	10	4	

H295 and H296 Year in Industry Only: In order to progress the intercalating year candidates are required to obtain an overall pass of at least 50% at the end of Stage 1.

3. Stage 2

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>
CEG2004	Design of Sustainable Engineering Systems 2	20	10	10	5	Core
CEG2002	Statistics and Numerical Methods for Civil Engineers	10		10	5	
CEG2101	Treatment of Water and Wastewater	10		10	5	
ENG2016	Geotechnics	10	10		5	Core
ENG2015	Mechanics II	20	10	10	5	Core
ENG2018	Design of Building Elements	10	10		5	Core
CEG2102	Environmental System and Quantification	10	10			
CEG2401	Land Traffic and Highways	10	10		5	
ENG2017	Hydraulics	10		10	5	
ENG2019	Engineering Surveying	10		10	5	

To progress to Stage 3 of this programme, candidates are required to obtain an overall average over all modules taken at Stage 2 of at least 55%.

4. Intercalating Year – H295/H296 only

- (a) Upon successful completion of Stage 2 (with an overall pass threshold of 50% at the end of Stage 1) and before entering Stage 3, candidates shall spend the equivalent of one academic year in an approved placement. If a candidate is not successful in securing an approved placement, or fails the assessment of the placement year, then the candidate will be required to transfer to Stage 3 of the equivalent programme without Year in Industry.
- (b) All candidates shall take the following compulsory module:

<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>
NCL3000	Careers Service Placement Year Module	120	60	60	6	

5. Stage 3

- (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>	<i>Type</i>
CEG3001	Design of Sustainable Engineering Systems 3	20	20		6	
CEG3002	Construction Management	10	10		6	
CEG3003	Engineering Ethics and Sustainability	10		10	6	
CEG3004	Sustainable Engineering Systems Design Project	20		20	6	
CEG3203	Foundation Design	10	10		6	
CEG3305	Computational Engineering Analysis	20	10	10	6	

- (b) All candidates for Master of Engineering with Honours shall follow one of the streams (i) to (ii) below, for which they are registered.
- (i) Civil Engineering (H290/H295)

<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>
CEG2721	Spatial Data Modelling and BIM	10	10		5	
CEG3401	Design of Transport Infrastructure	10		10	6	
CEG3503	Hydrosystems Engineering	10	10		6	

- (ii) Civil and Structural Engineering (H242/H296)

<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>
ARC3020	Introduction to Architecture	10		10	6	
CEG3301	Design of Building Systems	10	10		6	
CEG3302	Structural Analysis 2	10	10		6	

6. Stage 4

(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>	<i>Type</i>	<i>Mode</i>
CEG8011	Construction Project Management	10	10		7		Block
CEG8003	Public Policy: Infrastructure and Climate Change	10	10		7		Block
CEG8006	Digital Engineering and Analytics	10	10		7		Block
CEG8099	Investigative Research Project	30	10	20	7		

(b) All candidates shall take 20 credits of optional modules normally selected from the following list (subject to timetabling):

<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>
CEG8005	Global Engineering – An International Design and Build Challenge	20	5	15	7		Block
SPG8016	Business Enterprise in Science and Engineering	20		20	7		Block
CEG8010	Bridge to industry	20		20	7		Block

(i) Civil Engineering (H290/H295).

All candidates shall take technical optional modules with a total value of 40 credits from one of the subject areas below:

ENVIRONMENTAL ENGINEERING

<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>
CEG8105	Solid Waste Management	10	10		7		Block
CEG8107	Environmental Engineering for Developing Countries	10		10	7		Block
CEG8112	Air Pollution	10	10		7		Block
CEG8608	Remediating Contaminated Land	10		10	7		Block

GEOTECHNICAL ENGINEERING

<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>
CEG8212	Assessment of Slope Stability; Design of Cuttings, Fills, Reinforced Slopes and Tailing Dams	20	20		7		Block
CEG8214	Soil Modelling and Numerical Methods	20		20	7		Block

TRANSPORT ENGINEERING

<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>
CEG8410	Road Safety	10		10	7		Block
CEG8422	Intelligent Transport Systems	10	10		7		Block
CEG8431	Technologies for Future Mobility	10		10	7		Block
CEG8427	Behavioural model for individual choices	10		10	7		Block

WATER RESOURCES ENGINEERING – All candidates Shall take the following compulsory module;

CEG8526	Hydrosystems Modelling and Management	20	20		7		Block
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Candidates shall take a further 20 credits of technical optional modules selected from the following list (subject to timetabling):

<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>
CEG8517	Computational hydraulics	10		10	7		Block
CEG8514	Climate Change: Vulnerability, Impacts and Adaptation	10		10	7		Block
CEG8523	Modelling and Forecasting of Floods	10		10	7		Block

(ii) Civil and Structural Engineering (H242/H296).

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>
CEG8304	Structural Reliability	10	10		7		Block
CEG8306	Engineering Mechanics of Composites	10		10	7		Block
CEG8315	Advanced Structural Modelling	10	10		7		Block
CEG8314	Seismic Resistant Design	10		10			Block

Up to 20 credits of alternative optional modules may be selected subject to the approval of the Degree Programme Director.

7. Assessment methods

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

8. Subject to University Confirmation: Condonement and Compensation

For the purpose of professional accreditation, the University's Education Committee has approved a variation in Undergraduate Examination Conventions to the effect, to be awarded an accredited honours degree;

- the maximum number of credits that may be compensated over the degree programme is not to exceed 30.
- Core modules, Individual and group projects worth 20 credits or more cannot be compensated
- No modules in your final year can be condoned.

Any student not satisfying the accreditation requirements, but satisfying 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.

8. Degree classification

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