

## Programme Regulations: 2024/25

### Programme Titles:

Degree of Master of Engineering with Honours in Civil Engineering - UCAS Code: H290

Degree of Master of Engineering with Honours in Civil Engineering with Year in Industry - Code: H295

Degree of Master of Engineering with Honours in Civil & Structural Engineering - UCAS Code: H242

Degree of Master of Engineering with Honours in Civil & Structural Engineering with Year in Industry – UCAS Code: H296

### Exit Award Titles:

Degree of Master of Engineering with Honours in Civil Engineering Science – Code 1658U\*\*

Degree of Master of Engineering with Honours in Civil Engineering Science with Year in Industry – Code TBC

### 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 coded 1658U is a non-accredited Honours degree title and is awarded where a candidate only meets the requirements of the University's Taught Programme Regulations and Examination Conventions.

## 1. Stage 1

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type
ENG1001	Engineering Mathematics 1	20	10	10	4	Core
ENG1003	Electric and Magnetic Systems	15	10	5	4	
ENG1004	Electronics and Sensors	10		10	4	
ENG1005	Thermofluid Mechanics	15	5	10	4	
ENG1006	Properties and behaviours of Engineering Materials	15	15		4	
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	

**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.

## 2. 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>
CEG2002	Statistics and Numerical Methods for Civil Engineers	10		10	5	
CEG2004	Design of Sustainable Engineering Systems 2	20	10	10	5	Core
CEG2005	Construction Management	10	10		5	Core
CEG2101	Water Treatment Engineering for the 21st Century	10		10	5	
CEG2102	Environmental Systems and Quantification	10	10		5	
CEG2201	Geotechnics	10	10		5	Core
CEG2302	Design of Building Elements	10	10		5	Core
CEG2401	Land Traffic and Highways	10	10		5	
CEG2502	Hydraulics	10		10	5	
CEG2711	Engineering Surveying Fieldcourse	10		10	5	
ENG2033	Engineering Mechanics: Statics	10	10		5	Core

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%.

**Year in Industry Only:** Students who are required to resit 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.

## 3. Year 3 (Intercalating) – Careers Placement Year

(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	Career Service Placement Year Module	120	60	60	6	

## 4. 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>
CEG2005	Construction Management	10	10		5	Core
CEG3001	Design of Sustainable Engineering Systems 3	20	20		6	
CEG3003	Engineering Ethics and Sustainability	10		10	6	

CEG3004	Sustainable Engineering Systems Design Project	20		20	6	
CEG3005	The Data-Centric Urban Environment	10		10	6	
CEG3203	Foundation Design	10	10		6	
CEG3301	Design of Building Systems	10	10		6	
CEG3708	Spatial Data Engineering and BIM	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>
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	
CEG3302	Structural Mechanics	10	10		6	

**5. 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>
CEG8003	Public Policy: Infrastructure and Climate Change	10	10		7		Block
CEG8006	Digital Engineering and Analytics	10	10		7		Block
CEG8011	Construction Project Management	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
CEG8010	Bridge to industry	20	5	15	7		Block
SPG8016	Design, Innovation and Entrepreneurship in Science and Engineering	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 and Resource Management	10	10		7		Block
CEG8107	Environmental Engineering in Low and Middle Income Countries	10		10	7		Block
CEG8112	Air Pollution	10	10		7		Block
CEG8115	Remediation Technologies for Contaminated Environments	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>
CEG8204	Ground Improvement Techniques	10		10	7		Block
CEG8205	Soil Modelling and Numerical Methods	10		10	7		Block
CEG8212	Assessment of slope stability; design of slopes and retaining structures	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
CEG8427	Behavioural models for individual choices	10	10		7		Block
CEG8431	Technologies for Future Mobility	10		10	7		Block

**WATER RESOURCES ENGINEERING** – 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>	<i>Mode</i>
CEG8526	Hydrosystems Modelling and Management	20	20		7		Block

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>
CEG8514	Climate Change: Vulnerability, Impacts and Adaptation	10		10	7		Block
CEG8517	Computational hydraulics	10		10	7		Block

CEG8523	Modelling and Forecasting of Floods	10		10	7		Block
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**(ii) Civil and Structural Engineering (H242/H296).**

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type	Mode
CEG8304	Structural Reliability	10	10		7		Block
CEG8306	Engineering Mechanics of Composites	10		10	7		Block
CEG8314	Seismic Resistant Design	10	10		7		Block
CEG8315	Advanced Structural Modelling	10		10	7		Block

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

**6. Assessment methods**

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

**7. Condonement and Compensation**

*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.*

**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.