

Programme Regulations: 2022/2023

Programme Title:

Degree of Master of Science with Honours in Mapping and Geospatial Data Science - UCAS Code: H270

Degree of Master of Science with Honours in Mapping and Geospatial Data Science with Year in Industry – Code 1635U

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 as Linear mode unless stated otherwise as Block*
- (vii) *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 compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type
CEG1701	Mapping Fieldcourse	20		20	4	Core
CEG1702	Geographic Information Systems	10	10		4	Core
CEG1703	Surveying	20	10	10	4	Core
CEG1705	An Introduction to GNSS and its Applications	10		10	4	
CEG1706	Principles of Remote Sensing	10	10		4	
CEG1713	Data Science 1	10		10	4	
CEG1711	Tutorial Study Skills for Geospatial Engineering	10	10		4	Core
CEG1716	Geospatial Mathematics and Statistics	30	20	10	5	

2. Stage 2

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

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type
CEG2704	Geographic Information Systems: Theory and Application	10		10	5	

CEG2707	Map Projections and Geodetic Datums	10		10	5	
CEG2726	Photogrammetry and Laser Scanning #	20		20	5	
CEG2720	Geospatial Engineering Practice and Research	10	5	5	5	
CEG2700	Professional Practise	10	10		5	
CEG2722	Data Science 2	10		10	5	
LAW2053	Law and Land Use *	10	10		6	
CEG2709	Applied Remote Sensing and Image Processing*	10		10	5	
CEG2723	Digital Data Acquisition	20	20		5	
CEG2727	Geospatial Data Analysis I	10	10		5	

Modules marked * will be given in 2022-23 and are expected to be available every second year thereafter; modules marked # will be given in 2023-24 and are expected to be available in alternate years thereafter.

(b) All candidates shall select one of the options below

Option 1

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type
CEG2728	Geospatial Data Analysis 2	10		10	5	
CEG2710	GNSS Theory and Practice	10	10		5	

Option 2

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type
CSC1033	Foundations of Data Science	20	10	10	4	

3. Intercalating Year (1634U Only)

(a) Upon successful completion of Stage 2 (with an overall pass of at least 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 remain on Stage 3 of F862.

(b) All candidates shall take the following compulsory module:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Type
NCL3000	Career Service Placement Year	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>
CEG2700	Professional Practice	10	10		5	
CEG2726	Photogrammetry and Laser Scanning #	20		20	5	
CEG3707	Geohazards and Deformation of the Earth	10	10		6	
CEG3710	Offshore Surveying	10		10	6	
CEG3716	Geospatial Informatics	10	10		6	
CEG3717	Applied Geospatial Data Handling	10		10	6	
LAW2053	Law and Land Use *	10	10		6	
CEG2709	Applied Remote Sensing and Image Processing*	10		10	5	

Modules marked * will be given in 2022-23 and are expected to be available every second year thereafter; modules marked # will be given in 2023-24 and are expected to be available in alternate years thereafter.

(b) All candidates who chose option 1 at Stage 2 (CEG2705 and CEG2710) 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>
CEG3702	Survey Fieldcourse	20	20		6	

(c) All candidates who chose option 1 at Stage 2 (CEG2705 and CEG2710) at Stage 2 shall choose 30 credits of optional modules 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>
CEG2401	Land Traffic and Highways	10	10		5	
CEG3401	Design of Transport Infrastructure	10		10	6	
CSC1033	Foundations of Data Science	20	10	10	4	
NCL3007	Career Development for Final Year Students	20	10	10	6	
SUG3500	Creativity, Innovation and Market Research in Science and Engineering UG	10	10		6	

(d) All candidates who chose option 2 (CSC1033) at Stage 2 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>
CEG3701	GIS Fieldcourse	20	20		6	
CEG2710	GNSS Theory and Practice	10	10		5	

(e) All candidates shall choose 20 credits of optional modules from the following;

<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>
CEG2401	Land Traffic and Highways	10	10		5	
CEG3401	Design of Transport Infrastructure	10		10	6	
CSC1033	Foundations of Data Science	20	10	10	4	
NCL3007	Career Development for Final Year Students	20	10	10	6	
SUG3500	Creativity, Innovation and Market Research in Science and Engineering UG	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>
CEG8712	Advanced Geodesy	20	20		7	Block
CEG8607	The Environment Business	10	10		7	Block
CEG8711	City Analytics	20	20		7	Block
CEG8790	Individual MSci Project	40	10	30	7	

(b) All candidates shall choose 30 credits of optional modules 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>
CEG8431	Technologies for Future Mobility	10		10	7	Block
CEG8422	Intelligent Transport Systems	10	10		7	Block
CEG8112	Air Pollution	10	10		7	Block
CEG8526	Hydrosystems Modelling and Management	20	20		7	Block
CEG8514	Climate Change: Vulnerability, Impacts and Adaptation	10		10	7	Block
CSC8101	Engineering for AI	10		10	7	Block
CSC8110	Cloud Computing	10	10		7	Block
SPG8016	Design, Innovation and Entrepreneurship in Science and Engineering	20		20	7	Block

6. Assessment methods

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

7. Degree classification

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