#### Programme Regulations: 2021/2022

#### **Programme Titles:**

# 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 – UCAS Code: H271

#### 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	Туре
		Creuits	Semi	Sem 2		
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	10		10	4	
	Applications					
CEG1706	Principles of Remote Sensing	10		10	4	
CEG1713	Data Science 1	10	10		4	
CEG1711	Tutorial Study Skills for Geospatial	10	10		4	Core
	Engineering					
CEG1716	Geospatial Mathematics and Statistics	30	20	10	5	

## 2. Stage 2

Code	Descriptive title	Total	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2		
CEG2704	Geographic Information Systems:	10		10	5	
	Theory and Application					
CEG2707	Map Projections and Geodetic	10		10	5	
	Datums					
CEG2726	Photogrammetry and Laser	20		20	5	
	Scanning					
CEG2720	Geomatics Practice and Research	10	5	5	5	
CEG2721	Spatial Data Modelling and BIM	10	10		5	
CEG2722	Data Science 2	10	5	5	5	
CEG2723	Digital Data Acquisition	20	20		5	
CEG2727	Geospatial Data Analysis 1	10	10			

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

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

#### Option 1

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

#### Option 2

Code	Descriptive title	Total	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2		
CSC1033	Information Storage and Retrieval	20	10	10	5	

#### 3. Intercalating Year – H249 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 H270.
- (b) All candidates shall take the following compulsory module:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Туре
NCL3000	Careers Service Placement Year Module	120	60	60	6	

#### 4. Stage 3

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Туре
6563703				Selli Z	6	
CEG3703	Professional Practice	10	10		6	
CEG2726	Photogrammetry & Laser scanning	20		20	6	
CEG3707	Geohazards and Deformation of the	10		10	6	
	Earth					
CEG3710	Offshore Surveying	10		10	6	
CEG3716	Geospatial Informatics	10	10		6	
CEG3717	Applied Geospatial Data Handling	10		10	6	

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

(b) All candidates who chose option 1 at Stage 2 (CEG2705 and CEG2710) shall take the following compulsory module:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Туре
CEG3702	Advanced 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:

Code	Descriptive title	Total	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2		
CEG2401	Land Traffic and Highways	10	10		5	
CEG3401	Design of Transport Infrastructure	10		10	6	
CSC1033	Information Storage and Retrieval	20	10	10	4	
NCL3007	Career Development for Final Year	20	10	10	6	
	Students					
SUG3500	Creativity, Innovation and Market	10	10		6	
	Research in Science and Engineering					

## (d) All candidates who chose option 2 (CSC1033) at Stage 2 shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2		
CEG3701	Advanced 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;

Code	Descriptive title	Total	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2		
CEG2401	Land Traffic and Highways	10	10		5	
CEG3401	Design of Transport Infrastructure	10		10	6	
CSC1033	Information Storage and Retrieval	20	10	10	4	
NCL3007	Career Development for Final Year	20	10	10	6	
	Students					
SUG3500	Creativity, Innovation and Market	10	10		6	
	Research in Science and Engineering					

#### 5. Stage 4

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

Code	Descriptive title	Total	Credits	Credits	Level	Туре
		Credits	Sem 1	Sem 2		
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):

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level	Туре
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	20	20		7	Block
	Management					
CEG8514	Climate Change: Vulnerability, Impacts	10		10	7	Block
	and Adaptation					
CSC8101	Big Data Analytics	10		10	7	Block
CSC8110	Cloud Computing	10	10		7	Block
SPG8016	Design, Innovation and	20	10	10	7	Block
	Entrepreneurship in Science and					
	Engineering					

#### 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.