



## MODULE SPECIFICATION

Part 1: Information			
Module Title	Engineering Communication		
Module Code	UBGMSQ-15-1	Level	Level 4
For implementation from	2018-19		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Environment & Technology	Field	Geography and Environmental Management
Department	FET Dept of Geography & Environmental Mgmt		
Contributes towards	Civil and Environmental Engineering [Sep][SW][Frenchay][4yrs] BEng (Hons) 2018-19 Civil and Environmental Engineering [Sep][FT][Frenchay][4yrs] MEng 2018-19 Civil and Environmental Engineering [Sep][PT][Frenchay][7yrs] MEng 2018-19 Civil and Environmental Engineering [Sep][SW][Frenchay][5yrs] MEng 2018-19 Civil and Environmental Engineering [Sep][PT][Frenchay][5yrs] BEng (Hons) 2018-19 Civil and Environmental Engineering [Sep][FT][Frenchay][3yrs] BEng (Hons) 2018-19 Civil and Environmental Engineering {Apprenticeship} [Sep][PT][Frenchay][5yrs] BEng (Hons) 2018-19		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

## Part 2: Description

**Overview:** This module will introduce you to a range of fundamental engineering communication methods.

**Educational Aims:** See Learning Outcomes

## STUDENT AND ACADEMIC SERVICES

**Outline Syllabus:** Oral presentation skills.

Engineering sketching including:

Freehand and observational sketching.

Perspective, plan, elevation and section views.

Scale, shading and use of lineweight.

Elements of design (line, colour, value, form, space texture, balance, rhythm, emphasis, proportion and unity).

Technical engineering drawing including:

Annotations.

Dimensions.

1st and 3rd angle projections.

Computer aided design including:

Conventions and standards.

Use of model and paper space.

Building information modelling.

3D CAD for simple structures.

Principles of building information modelling for civil engineering.

Geographical information systems including:

Data structures.

Analytical methods.

Data visualisation.

Effective cartography.

Practical applications via exercises.

**Teaching and Learning Methods:** The module will be taught using a combination of lectures, in class activities and computer practicals. Independent learning is supported by tasks set in class and online learning resources are used for specific software adopted in the module.

### Part 3: Assessment

The assessment strategy covers oral, and graphical communication of engineering information.

Component A – Individual presentation. Learning outcomes 1 and 8.

The geographical information systems work will be assessed by a poster presentation of the problem solving task completed. Presentation skills are developed through the module in in class formative critique exercises.

The poster presentation will be followed by 5 minutes of critical questioning of the poster contents and related work.

Component B – Portfolio. Learning outcomes 2 to 7.

The sketching, drawing, computer aided design and building information modelling topics are assessed via a portfolio compiled as the students undertake weekly exercises where they develop materials based on individual subjects and case studies. The portfolio will be equivalent to 2000 words.

In the computer and drawing practicals, students can develop their understanding through interaction with peers and teaching staff from whom they will receive formative feedback. The portfolio assessment provides an opportunity to learn through the assessment process and feedback given.

Resit strategy:

The resit assessment is the same as the first sit assessment. The individual tasks of the portfolio will be adjusted to account for the short timescale for preparation of resit submissions.

## STUDENT AND ACADEMIC SERVICES

First Sit Components	Final Assessment	Element weighting	Description
Portfolio - Component B		75 %	Portfolio - equivalent to 2000 words
Presentation - Component A	✓	25 %	Individual presentation - 10 mins
Resit Components	Final Assessment	Element weighting	Description
Portfolio - Component B		75 %	Portfolio - equivalent to 2000 words
Presentation - Component A	✓	25 %	Individual presentation - 10 mins

Part 4: Teaching and Learning Methods																			
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STUDENT AND ACADEMIC SERVICES

	<b>Hours to be allocated</b>	150
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Reading List	<i>The reading list for this module can be accessed via the following link:</i> <a href="https://uwe.rl.talis.com/modules/ubgmsq-15-1.html">https://uwe.rl.talis.com/modules/ubgmsq-15-1.html</a>	