



MODULE SPECIFICATION

Part 1: Information			
Module Title	Civil Engineering Technology and Design		
Module Code	UBGMKD-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 Engineering [Jan][FT][Northshore][4yrs] MEng 2018-19 Civil and Environmental Engineering [Sep][PT][Frenchay][7yrs] MEng 2018-19 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][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	River and Coastal Science for Engineering 2017-18		
Co- requisites	None		
Module Entry requirements	None		

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Part 2: Description

Educational Aims: In addition to the Learning Outcomes, the educational experience may explore, develop, and practise but not formally discretely assess the following:
Ability to communicate design information in the form of calculations, drawings and reports.
Ability to demonstrate a commitment to the safety of themselves and others during site visits and field work.

Outline Syllabus: Hard Systems:

Geotechnical – eg. earthworks; retaining walls; foundations and sub-structures, including basements and ground stabilisation.

Infrastructure – eg. drainage; water supply; gas and electricity.

Buildings – eg. multi-storey and single storey; stability and disproportionate collapse; prefabrication.

Civil Structures – eg. bridges; tunnels; dams; flood defences.

Transport Systems – eg. road; rail; cycle.

Soft Systems:

Process of development.

Project management.

Cost modelling.

Sustainability.

Construction health & safety risk management.

Teaching and Learning Methods: Students will receive – on average – 3 hours contact time per week. This will be in a range of formats, including weekly keynote lectures, tutorial or computer-based sessions, guided practicals, fieldwork, and case-studies, with virtual discussion groups and support via e-mail.

Worksheets will be provided, with subsequent tutorial sessions allowing formative feedback on the work.

The amount of time spent on activities in this module is shown below:

Contact time: 36 hours

Assimilation and development of knowledge: 70 hours

Exam preparation: 20 hours

Coursework preparation: 24 hours

Total study time: 150 hours

Part 3: Assessment

The module will be assessed by a combination of an examination and a portfolio of case studies.

Component A - Examination. Learning outcomes 1 - 3.

The examination will require students to demonstrate the solution to an engineering design problem.

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Component B – Case study portfolio. Learning outcomes 4 and 5.
 The coursework will require each student to develop a portfolio reflecting on key components of the modulus syllabus. This will, where appropriate, incorporate information from site visits, industry speakers, published papers and, for students in relevant employment, their own work experience. Students will build up this a portfolio of these throughout the module and will be encouraged to share some of them with the cohort including a group presentation for peer review. Lecturer led formative feedback will be given to help them develop a portfolio of case-studies for summative assessment.

First Sit Components	Final Assessment	Element weighting	Description
Portfolio - Component B		50 %	Case-study portfolio (equivalent to 2000 words)
Examination - Component A	✓	50 %	Design examination (2 hours)
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Part 4: Teaching and Learning Methods																			
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Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p>https://uwe.rl.talis.com/modules/ubgmkd-15-1.html</p>																		