

## MODULE SPECIFICATION

Part 1: Information						
Module Title	Grou	Group Civil and Environmental Engineering Project				
Module Code	UBGMVA-30-M		Level	Level 7		
For implementation from	2021	-22				
UWE Credit Rating	30		ECTS Credit Rating	15		
Faculty	Faculty of Environment & Technology		Field	Geography and Environmental Management		
Department	FET I	ET Dept of Geography & Envrnmental Mgmt				
Module Type:	Proje	oject				
Pre-requisites	None					
Excluded Combinations		None				
Co-requisites		None				
Module Entry Requirements		None				
PSRB Requirements		None				

#### Part 2: Description

**Educational Aims:** The engineering problems will allow you to develop your skills in critical analysis and managing ambiguity. The solution will need to address stakeholder requirements and project risks. Through the design process you will have an opportunity to apply creativity, innovation and technical knowledge to produce design concepts and develop a design solution. The solution should meet current and future needs and consider both current and emerging technologies.

**Outline Syllabus:** In this module you will work in groups to produce a design solution for a selected engineering problem, which fully considers issues in connection with sustainability. The engineering problem allocated to each group will be selected to allow collaborative working across different civil engineering disciplines.

**Teaching and Learning Methods:** Throughout the project you will need to continually monitor, review and adapt your personal and group programme of work. This will require personal initiative and sharing of responsibilities within the group. The outputs of the projects are in presentation and written form, requiring you to be able to succinctly and professionally present the solution and design reasoning.

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In order to develop your designs you will need to apply research skills for information search and retrieval using industry best practice documents, standards, codes of practice and academic resources.

#### Part 3: Assessment

The assessment strategy is designed to support students in their independent study, providing feedback so that each group is aware of their progress as they work towards the submission of their group report.

The assessment of the group work will follow the departmental and faculty group work procedures and guidance where appropriate.

#### Element A1: Progress presentation (20 minutes)

A mid-project group progress presentation is used to check progress and identify any issues that may affect a successful completion of the project. Each group must present their initial work and alternative design concepts/solutions in the form of a client presentation, demonstrating professionalism and the ability to communicate with both technical and non-technical audiences.

#### Element A2: Final client presentation (20 minutes)

The final client presentation will require the groups to present the final solution and provide a design defence. In defending the design solution, an element of the marking will be based on the professionalism of the group under questioning. As part of this final presentation, the groups will be asked to articulate health and safety and ethical issues associated with the project.

Element A3: Design report (5000 words)

The output of the project will be a 5000 word group design report which will be assessed on the holistic nature of the solution provided, and project wide considerations.

As an appendix to the report each group member must provide an individual portfolio of work and 500 word reflection on how they exercised and developed initiative and responsibility as a member of the group.

Element A4: Individual contribution to the design report and reflection (500 words) Each student in a group will be required to contribute a section to this report for the area of the design they were responsible for. This will be assessed separate to the group work element of the design report along with their individual reflection in the report appendix.

The individual contribution will be assessed on the quality of the professional reporting and communication skills, technical aspects, research findings, methodology/approach and data analysis.

Referred assessment

The referred assessment will require the student to develop the design for a component or intervention in a larger scheme. Where the student participated in the first sit assessment, the scheme will be the original engineering problem, allowing students to take into account feedback provided from the first assessment. Where a student was not part of the first sit assessment a simulated case study will be provided.

The referred assessment will comprise of:

A 2000 word written individual report considering a design element within a larger scheme.

A 10 minute individual presentation, in the form of a client presentation, where the design is presented and defended.

First Sit Components	Final Assessment	Element weighting	Description
Presentation - Component A		20 %	Concept design group presentation (20 mins) with associated documentation

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Presentation - Component A	✓	20 %	Scheme design group presentation (20 minutes) with associated documentation
Report - Component A		35 %	Team design report (5000 words plus appendices)
Portfolio - Component A		25 %	Individual Design Report and Reflection (3000 words plus appendices)
Resit Components	Final Assessment	Element weighting	Description
Presentation - Component A		40 %	Individual presentation (10 minutes)
Report - Component A	<ul> <li>✓</li> </ul>	60 %	Individual written report (2000 words plus

	Part 4: Teaching and Learning Methods				
Learning Outcomes	On successful completion of this module students will achieve the follo	wing learning	outcomes:		
	Module Learning Outcomes		Reference		
	Monitor and adjust the programme of work on an on-going basis	MO1			
	Apply project and change management principles in the development solution	MO2			
	Identify and address environmental, economic and social (including c stakeholder and end users) constraints and requirements	lient,	MO3		
	Identify project and commercial risks, and mitigate them by using the experimentation	ory or	MO4		
	Critically analyse current practice and its limitations	MO5			
	Critically analyse an unfamiliar design problem to identify pertinent da identify and manage ambiguity	ata, and	MO6		
	Identify limitations of approaches used to develop the design solution				
	Identify and evaluate likely future developments and new and emerging technologies in the context of an engineering design problem				
	Develop an innovative design to an engineering design problem that a current and future needs	MO9			
	Exercise personal initiative and responsibility as a member of a group				
Contact Hours	Independent Study Hours:				
	Independent study/self-guided study	22	28		
	Total Independent Study Hours:	2:	28		
	Scheduled Learning and Teaching Hours:				
	Face-to-face learning	7	2		
	Total Scheduled Learning and Teaching Hours:	7	2		

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	Hours to be allocated	300
	Allocated Hours	300
Reading List	The reading list for this module can be accessed via the following link:	
	https://uwe.rl.talis.com/modules/ubgmva-30-m.html	

### Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Civil and Environmental Engineering [Sep][FT][Frenchay][4yrs] MEng 2018-19