#### University of the West of Scotland

#### **Module Descriptor**

Session: 2024/25

Title of Module: GA - Group Project									
Code: GRLA09010	SCQF Level: 9 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)						
School:	School of Computing, Engineering and Physical Sciences								
Module Co-ordinator:	Ashwini Konanaha	Ashwini Konanahalli							

## **Summary of Module**

The aim of this module is to consolidate the students' technical knowledge and understanding of civil engineering and, apply it to a design process of a hypothetical project working in groups of 4 or 5. A specific design brief will be given to the students with emphasis is placed on understanding practicality of design, creativity, team work and appropriate use of technical know-how.

The students will develop this design brief to provide a procurement method for the design and construction of their proposal. In developing a design they will use a design methodology. The groups are given information on the site of the development. They must undertake an initial project evaluation which will include an evaluation of site access, availability of services, sustainability issues, the selection of a CDM coordinator, risk assessment for Health and Safety, etc.

Within the group, students will undertake the preliminary design of the structural engineering together with detailed evaluation of the project development. A final report will be submitted in which the group will be required to submit their engineering design and project evaluation.

All the groups will undertake a verbal presentation, giving an overview of their project and will both promote and defend their design in a question and answer session held by staff and class peers.

This module will support students to develop their UWS graduate attributes, namely: Academic (critical and analytical thinking, inquiring, knowledgeable, innovation, and problem solving); Personal (effective communicator, creative, imaginative); Professional (Collaborative, research-minded, and socially responsible).

- To undertake a design project working in a group
- To gain some understanding of the design process
- To apply learned skills in practical way in the areas of structural engineering, project management, architecture and/or BIM.

Module Delivery Method												
	e-To-	Blei	nded		Fully Online	Ну	bridC	Ну	/brid 0			Based ing
	$\boxtimes$	]										
See G	See Guidance Note for details.											
Camp	Campus(es) for Module Delivery											
Distar	The module will <b>normally</b> be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)											3
Paisle	ey:	Ayr:	Dumfri	es:	Lanarks	shire:	Londor	า:	Dista Lear	nce/Onlir ning:	ie	Other:
$\boxtimes$												Add name
	•											
Term	(s) fo	r Module	Deliver	У								
(Provi	ded v	/iable stud	ent num	ber	s permit)	).						
Term	1			Ter	m 2		$\boxtimes$		Term	3		
These appro	e sho priat	Outcomes ould take on the level for of this mo	cognisa r the mo	nce odu	of the S le.	CQF	level d	esc	ripto	rs and be	at	the
L1	To o	carry out ir	ntegrate	d de	esign in t	he co	ntext of	a s	imulat	ed semi-r	ura	al/urban
L2	To w	ork with o	thers in	a g	roup des	ign si	tuation.					
L3	To write an engineering type report to communicate the design and construction issues to a client.									onstruction		
L4	To make a presentation to communicate the main features of a proposed development to a client.											
Empl	Employability Skills and Personal Development Planning (PDP) Skills											
SCQF	SCQF Headings  During completion of this module, there will be an opportunity to achieve core skills in:								ortunity to			
	nowledge and Inderstanding (K SCQF Level 9											

	Demonstrate further knowledge and understanding of essential facts, concepts, theories and principles of civil engineering.  Further develop the appreciation of the wider multidisciplinary engineering context and its underlying principles.
	Appreciate the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgment.
Practice: Applied	SCQF Level 9
Knowledge and Understanding	Be able to comprehend the broad picture and thus work with an appropriate level of detail.
	Possess knowledge, understanding and practical engineering skills acquired through work carried out in laboratories, through individual and group project work, through design work and through supervised work experience.
	Use creativity and innovation in a practical context.
Generic Cognitive	SCQF Level 9
skills	Be able to demonstrate creative and innovative ability in the synthesis of solutions and apply appropriate quantitative science and engineering tools to the analysis of problems.
	Ability to apply a systems approach to engineering problems through know-how of the application of the relevant technologies.
	Be able to define a design problem, identify constraints and design solutions according to customer and user needs.
Communication,	SCQF Level 9
ICT and Numeracy Skills	Further develop practical engineering skills acquired through use of computer software in design, project management and drawing.

Autonomy, Accountability and Working with others	SCQF Level <b>9</b> Appreciate the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgment.  Work with others to develop engineering solutions.					
Pre-requisites:	Before undertaking this module the student should have undertaken the following:					
	Module Code: Module Title:					
	Other:					
Co-requisites	Module Code:	Module Title:				

<sup>\*</sup>Indicates that module descriptor is not published.

## **Learning and Teaching**

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	24
Tutorial/Synchronous Support Activity	4
Asynchronous Class Activity	8
Independent Study	164
	200 Hours Total

<sup>\*\*</sup>Indicative Resources: (eg. Core text, journals, internet access)

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Dependent on project but students will use the Metric Handbook available through Construction Information Service

Students will be provided with other materials relevant to this module via the University's VLE.

Please ensure the list is kept short and current. Essential resources should be included, broader resources should be kept for module handbooks / Aula VLE.

Resources should be listed in Right Harvard referencing style or agreed professional body deviation and in alphabetical order.

(\*\*N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk\*) to wait until the start of session for confirmation of the most up-to-date material)

### **Attendance and Engagement Requirements**

In line with the <u>Student Attendance and Engagement Procedure</u>: Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:

Attending all timetabled classes

Notifying the Module Coordinator of absence in advance

Engaging with all module assessments or submitting an ECS

#### **Equality and Diversity**

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: <u>UWS Equality, Diversity and Human Rights Code.</u>

Please ensure any specific requirements are detailed in this section. Module Coordinators should consider the accessibility of their module for groups with protected characteristics..

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

**Supplemental Information** 

Divisional Programme Board	Engineering & Physical Sciences
Assessment Results (Pass/Fail)	Yes □No ⊠
School Assessment Board	Civil Engineering and Quality Management
Moderator	Dr Stuart Tennant
External Examiner	Y Chen
Accreditation Details	This module is accredited by Joint Board of Moderators as part of GA-BEng (Hons) Civil Engineering
Changes/Version Number	1.07
Hamber	Module Moderator and JBM Accreditation updated.

# Assessment: (also refer to Assessment Outcomes Grids below)

Assessment 1 – Project Report (50%)

Assessment 2 – Presentation (40%)

Assessment 3 – Learning Log (10%)

- (N.B. (i) **Assessment Outcomes Grids** for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.
- (ii) An **indicative schedule** listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

# **Assessment Outcome Grids (See Guidance Note)**

Component 1									
Assessme nt Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours		
Dissertatio n/ Project report/ Thesis	<b>√</b>	<b>√</b>	<b>✓</b>			50%	0		

Component 2								
Assessme nt Type (Footnote B.)	Learning Outcome (1)	_	Learning Outcome (3)	Outcome	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
Presentatio n	✓	<b>√</b>		<b>√</b>		40%	6	

Component 3								
Assessme nt Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
Workbook/ Laboratory notebook/ Diary/ Training log/ Learning log		✓				10%	1	
Combined Total for All Components						100%	10 hours	