Module Descriptor

Title	Group Project - Interact		
Session	2025/26	**Status**	Published
Code	ENGG09017	**SCQF Level**	9
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10 (European Credit Transfer Scheme)
School	**Computing, Engineering and Physical Sciences**		
Module Co-ordinator	A Wrzesien		

Summary of Module

The group project is specifically developed for integrated design with students working in groups. The student works as part of an interdisciplinary team of a student architect, a student civil engineer, and possibly also a student quantity surveyor. The student keeps a diary of interactions between team members as well as recording their own contribution to the team solution.

Several introductory lectures are delivered, which provide relevant background and deal with any unusual Group Project work in the design brief. Students of different disciplines are required to support each other through design iterations by conducting independent research. Teams' progress is monitored via weekly meetings with project tutors and frequent review meetings. The review meetings are chaired by an industry panel consisting of structural engineers, quantity surveyors and architects.

- The civil engineering students are given information on the site of the development. They must undertake an initial evaluation, which includes an evaluation of site access, a desk study of ground conditions, sustainability issues, potential Health and Safety risks that can be avoided/mitigated through appropriate design, etc.

- Each team is required to propose structural engineering solutions with approximate member sizing and the analysis model in the general structural analysis software. For the preferred scheme, each team is also required to prepare layout drawings with typical working details. A written appraisal of the problem and the solutions is presented.

- All the interdisciplinary teams will undertake a verbal presentation, to last approximately 10 minutes. Teams must give an overview of their project and both promote and defend their design in a question-and-answer session held by a multi-disciplinary review panel consisting of industry practitioners.

- This module will work to develop a number of the following key 'I am UWS' graduate attributes: Critical thinker, Analytical, Inquiring, Collaborative, Research-minded, Knowledgeable, Effective communicator, Autonomous, Problem solver, Innovative and Driven.

Module Delivery Method	On-Campus[1] ☒	Hybrid[2] ☐	Online[3] ☐	Work -Based Learning[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☐ Lanarkshire ☐ London ☒ Paisley	☐ Online / Distance Learning ☐ Other (specify)	

Terms for Module Delivery	Term 1	☐	Term 2	☒	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	To carry out a design, classify and describe a performance of a structural system using qualitative or quantitative analytical methods, and modelling techniques.
L2	To conceive, critically analyse and synthesise a creative solution to the structural design of a building as a part multi-disciplinary team.
L3	To write an engineering-type report summarising appraisal of different design options reflecting public perception, aesthetics, Health & Safety and sustainable goals to a Civil Engineering client.
L4	To prepare and deliver a presentation to communicate the main features of a proposed development to a client.
L5	

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 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.

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

	Appreciate the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgment.
Practice: Applied Knowledge and Understanding	**SCQF 9** 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 skills	**SCQF 9** 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 the 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. Ability to use appropriate design codes of practice and industry standards and ensure fitness for purpose for a design.
Communication, ICT and Numeracy Skills	**SCQF 9** Further develop practical engineering skills acquired through the use of computer software in design, project management and drawing.
Autonomy, Accountability and Working with Others	**SCQF 9** Appreciate the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgment. Work with others to develop engineering solutions.

Prerequisites	**Module Code**	**Module Title**
	Other	
Co-requisites	**Module Code** ENGG09004	**Module Title** Project Management

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 (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	12
Tutorial / Synchronous Support Activity	12
Laboratory / Practical Demonstration / Workshop	24
Independent Study	152
n/a	0
n/a	0
TOTAL	200 Hours

Indicative Resources

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

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SOFTWARE: Robot Structural Analysis Professional, by Autodesk.

Health & Safety Reading List:

PENDLEBURY, M., BRACE, C., GIBB, A., GYI, D. & GILBERTSON, A. L. 2008. C670 Site health handbook. . Second ed. London: CIRIA.

BIELBY, S. & GILBERTSON, A. L. 2008. C669 Site health handbook. . Fourth ed. London: CIRIA.

HEALTH AND SAFETY EXECUTIVE 2006. HSG 150, Health and safety in construction. Third ed. London: Crown.

GILBERTSON, A. L. 2015. C755 CDM 2015 – construction work sector guidance for designers,. Fourth ed. London: CIRIA.

THE INSTITUTION OF STRUCTURAL ENGINEERS 2013. Risk in structural engineering,. Fourth ed. London: IStructE.

HEALTH AND SAFETY EXECUTIVE 2015. Managing health and safety in construction. Construction (Design and Management) Regulations 2015. London: Crown.

ANDREW ORTON 1998, The Way We Build Now, E & FN Spon.

(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 Student Attendance and Engagement Procedure, 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:
The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in timetabled sessions. Students will scan their attendance via the attendance scanners each time they are on-campus. Students will have attendance recorded in class and they will be expected to login to the VLE several times per week. Students who are unable to attend a timetabled learning session, due to illness or other circumstance, should notify their Programme Leader. Across the School, an 80% attendance threshold is set. Students, who fall below this, will be referred to the Student Success Team to see how they can be best supported in their studies.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. Aligned with the University's commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, materials will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with University regulations and guidance on inclusive learning and teaching practice. This module has lab-based teaching and as such you are advised to speak to the Module Co-ordinator to ensure that specialist assistive equipment, support provision and adjustment to assessment practice can be put in place, in accordance with the University's policies and regulations.
(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**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Civil Engineering and Quality Management
Moderator	A. Earij
External Examiner	M. Bock
Accreditation Details	This module is accredited by Joint Board of Moderators as part of BEng (Hons) Civil Engineering
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	V. 3.12 Updated Equality and Diversity; Attendance and Engagement Requirments; assesment 3 timetabled contact hours chnaged, External Examiner updated to M. Bock.

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Individual Notebook & Diary (50%)

Assessment 2
Team Report (40%)
Assessment 3
Team Presentation (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.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Individual Notebook & Diary	☒	☒	☒	☐	☐	50	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Team Report	☒	☒	☒	☐	☐	40	0

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Presentation	☒	☒	☐	☒	☐	10	3
Combined total for all components						100%	3 hours

Change Control

What	**When**	**Who**
V. 3.11 Covid 19 references removed. Moderator changed to A. Earij. Accreditation details adjusted. Assessment divided into 3 components	10/04/2024	A Wrzesien
V. 3.12 Updated Equality and Diversity; Attendance and Engagement Requirments; assesment 3 timetabled contact hours chnaged, External Examiner updated to M. Bock.	20/03/2025	A Wrzesien