Module Descriptor

Title	GA WBL 4 – Applied Research Project		
Session	2026/27	**Status**	
Code	ENGG10042	**SCQF Level**	10
Credit Points	40	**ECTS (European Credit Transfer Scheme)**	20
School	**Computing, Engineering and Physical Sciences**		
Module Co-ordinator	A Earij		

Summary of Module

This module is designed to provide graduate apprentices/students (hereafter referred to as students) with an opportunity to gain experience of undertaking applied research project work at a strategic level within or for an organisation. The work must be of marked importance to the organisation and address a specific business challenge/problem. The project must be selected and arranged by, and agreed with, the company, university and student and supported by a tripartite agreement. The tripartite agreement will define specific learning and practice outcomes for the student and confirm required elements of support and commitment from all parties.

Supervision will be provided by a member of academic staff (normally the module coordinator or an appointed supervisor) and, although the work may be carried out for the student's employer or for an external client and involve site visits, the approval and supervision of the project is normally internal to the University. The students will have access to the University's Civil Engineering laboratory facilities for conducting experiments and testing where appropriate to support their applied research project.

Where required, the student's preparation for the project covers health and safety, legal and ethical issues, employability, goal setting, reflection and PDP. While undertaking the project the student will use various academic, technical, practical and transferable skills already learned through their academic programme of study.

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).

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	Critically identify, define, conceptualise and analyse complex professional problems and issues and negotiate appropriate learning objectives in conjunction with the University and, if appropriate, an external client.
L2	Execute a defined project of research, development or investigation and achieve agreed outputs and outcomes.
L3	Apply knowledge, skills and understanding of self-reflection, criticality, observation, evaluation, cooperation, autonomy and initiative to demonstrate and reflect upon own ability to develop learning, analysis, problem solving, interpersonal, social and other personal and professional skills in a workplace environment.
L4	Derive conclusions from the research conducted and formulate recommendations to industry and/or future researchers.
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 10** Demonstrate a broad and integrated knowledge and understanding of the scope, main areas and boundaries of working at a strategic level in a civil engineering (& related activities) workplace environment.
Practice: Applied Knowledge and Understanding	**SCQF 10** Apply knowledge, skills and understanding in using a wide range of the principal professional skills, techniques, practices and/or materials

[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

	associated with the work-based learning objectives defined for the project. Execute a defined project of research, development or investigation and identify and achieve relevant outputs and outcomes. Carry out forms of research for projects involving sustained independent enquiry; retrieve and generate information and evaluate sources, in carrying out research, including the ability to quote from and acknowledge written sources. Practice in a range of professional level contexts that include a degree of unpredictability and/or specialism.
Generic Cognitive skills	**SCQF 10** Critically identify, define, conceptualise and analyse complex professional problems and issues. Offer professional insights, interpretations and solutions to problems and issues. Make judgements where date/information is limited or comes from a range of sources.
Communication, ICT and Numeracy Skills	**SCQF 10** Present or convey, formally and informally, information about specialised topics to informed audiences. Communicate with peers, senior colleagues and specialists on a professional level. Interpret, use and evaluate a wide range of numerical and graphical data to set and achieve goals/targets.
Autonomy, Accountability and Working with Others	**SCQF 10** Exercise autonomy and initiative in professional activities. Work with others to bring about change, development and/or new thinking. Practice in ways that show awareness of own and others' roles and responsibilities. Manage complex ethical and professional issues in accordance with current professional and/or ethical codes or practices, recognising the limits of these codes and seeking guidance where appropriate.

Prerequisites	**Module Code**	**Module Title**
	Other	
Co-requisites	**Module Code**	**Module Title**

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. The learning and teaching delivery for this module includes lectures (10 hrs.), tutorials (10hrs.), work based learning (200hrs) and independent study (180hrs.). Independent study includes all learning and processing undertaken by a student outside the scheduled lectures and tutorials.

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	10
Tutorial / Synchronous Support Activity	10
Work-based Learning	200
Independent Study	180
TOTAL	400

Indicative Resources
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Trought, F., (2017) Brilliant Employability Skills, Pearson Business. Kirton, B., (2011) Brilliant Workplace Skills for Students & Graduates, Pearson Business. Scherer, A., (2011) Brilliant Intern, Pearson Business. Done, J. and Mulvey, R., (2016) Brilliant Graduate Career Handbook, Pearson Business. Cottrell, S., (2015) Skills for Success: Personal Development and Employability, Palgrave Macmillan, 3rd ed. Fellows, R. F. and Liu, A.M.M., (2015) Research Methods for Construction, 4th Ed. Blackwell Publishing.
(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, material 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 students 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	Wenzhong Zhu
External Examiner	Alison Robinson
Accreditation Details	This module is accredited by Joint Board of Moderators as part of GA-BEng (Hons) Civil Engineering.
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	V1.07: Updated MC 1.06 AY2526 no changes to module delivery / new programme included GA Business and Project Management

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Assessment 1 – Final Applied Research Report / Dissertation contributing 70% to the final mark
Assessment 2
Assessment 2 – Final Applied Research Presentation contributing 30% to the final mark
Assessment 3
(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**
Dissertation/ Project report/ Thesis	☒	☒	☒	☒	☐	70	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Dissertation/ Project Presentation	☒	☒	☒	☒	☐	30	2

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	2 hours

Change Control

What	**When**	**Who**
AY2425 - AY2526 - Changes: none anticipated / new cohort of students from GA Business and Project Management	AY2526	MC
Updated MC	March 2026	A Earij