University of the West of Scotland

Module Descriptor

Session:

Title of Module: MSc Dissertation			
Code: ENGG11054	**SCQF Level: 11 (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:	Cristina Rodriguez		

Summary of Module

On completion of your dissertation, you will gain the following Graduate Attributes:

- You will be a Critical thinker as you work on a research-minded project.
- You will be a Problem solving and effective communicator.
- Your research will be innovative and creative producing resilient solutions to the current sustainability challenges.

Students undertake a programme of practical research and study at an advanced level, dealing with a topic or issue relevant to sustainable technology. Topics are chosen either from an industrial situation, a relevant topic of interest to you or an initiative from an academic member of staff. On occasion, topics are available through contacts in local businesses where students can have an opportunity to prepare their dissertation whilst working with a company.

Dissertation guidelines are available at the beginning of the academic year and posted on the virtual learning environment.

- You will work independently under the supervision of an experienced academic. You will develop a deep and thorough knowledge of your chosen subject and your dissertation will show critical analysis, development of results and innovative and creative solutions to complex sustainability issues. On completion of your research topic, you will present your dissertation in written and oral formats.

Module Delivery Method

Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
☒	☐	☐	☐	☐	☐

See Guidance Note for details.

Campus(es) for Module Delivery						
The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
☒	☐	☐	☐	☒	☐	Add name

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	☒	Term 2	☒	Term 3	☒

Learning Outcomes: (maximum of 5 statements) **These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module.** At the end of this module the student will be able to:	
L1	Consolidate and integrate knowledge gained from the taught modules and carry out a programme of research in such a way as to apply effective strategies within sustainable technology.
L2	Demonstrate an advanced level of understanding of the application of research methods to the investigation of a problem or issue
L3	Critically review and interpret information, draw detailed conclusions and present results in concise written and oral formats.

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 Level **11** Gain a critical understanding of the research methods necessary for carrying out a substantive piece of research within a sustainable technology topic. Demonstrate a critical knowledge that covers and integrates the principles of sustainability and the circular economy and their application at an advanced level.
Practice: Applied Knowledge and Understanding	Using a range of skills and techniques, identify elements of sustainability that contribute to the MSc dissertation and that lead to original research. Define, plan and execute a significant project of research, investigation or development.

Generic Cognitive skills	SCQF Level **11** Undertake skilled, competent, safe, evaluative and reflective analytical practice. Develop critical thinking to critically assess information or data and make informed judgments. Develop and demonstrate original and creative thinking and responses in dealing with complex or novel problems and issues.	
Communication, ICT and Numeracy Skills	SCQF Level **11** Communicate, using appropriate methods, to a range of audiences with different levels of knowledge and/or expertise	
Autonomy, Accountability and Working with others	SCQF Level **11** Manage time, prioritise workloads and recognise and manage personal emotions and stress. Work independently to create innovative solutions to current sustainable engineering issues.	
Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code:	**Module Title:**
	Other:	
Co-requisites	**Module Code:**	**Module Title:**

*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)
Tutorial/Synchronous Support Activity	12
Independent Study	588
	600 Hours Total
****Indicative Resources: (eg. Core text, journals, internet access)**	

The following materials form essential underpinning for the module content and ultimately for the learning outcomes: MSc guidelines provided to students. Leedy, P. D. and J E Ormrod (2021) Practical Research: Planning & Design. 12th Edition. Boston: Pearson As each dissertation is a different topic, the resources necessary for each topic are discussed and found within literature searches 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 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: Attendance of all on-campus sessions (classes and tutorials), and submission of assessments.

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. Please ensure any specific requirements are detailed in this section. Module Co-ordinators 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	Engineering
Moderator	Li Sun
External Examiner	Adekunle Oke
Accreditation Details	Not accredited.
Changes/Version Number	1.3 Module Delivery: Changed to face-to-face from Blended. Divisional Programme Board: Updated to 'Engineering & Physical Sciences'

Assessment: (also refer to Assessment Outcomes Grids below)
Assessment 1 – Written thesis worth 80%
Assessment 2 – Oral presentation worth 20%
(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							
Assessment Type (Footnote B.)	**Learning Outcome (1)**	**Learning Outcome (2)**	**Learning Outcome (3)**	**Learning Outcome (4)**	**Learning Outcome (5)**	**Weighting (%) of Assessment Element**	**Timetabled Contact Hours**
Dissertation / Project Report / Thesis	X	X	X	N/A	N/A	80	0

Component 2							
Assessment Type (Footnote B.)	**Learning Outcome (1)**	**Learning Outcome (2)**	**Learning Outcome (3)**	**Learning Outcome (4)**	**Learning Outcome (5)**	**Weighting (%) of Assessment Element**	**Timetabled Contact Hours**
Presentation	X	X	X	N/A	N/A	20	1
					Combined Total for All Components	**100%**	**1**