

## University of the West of Scotland

## Module Descriptor

Session: 2024/25

<b>Title of Module: Independent Study</b>			
<b>Code: ENGG09018</b>	<b>SCQF Level: 9 (Scottish Credit and Qualifications Framework)</b>	<b>Credit Points: 20</b>	<b>ECTS: 10 (European Credit Transfer Scheme)</b>
<b>School:</b>	School of Computing Engineering and Physical Sciences		
<b>Module Co-ordinator:</b>	Dr Balaji Aresh		
<b>Summary of Module</b>			
<p>The subject of the engineering report will be agreed to ensure good alignment with the student's programme of study. The student will provide a topic selection proposal outlining the content of the report. Within the report, the student will be required to demonstrate that a critical review of the topic has been undertaken. Original research need not be undertaken. It is anticipated that students' final report will be based on literature review, observation, examination and analysis and development of the topic in some considerable depth. It may comprise an alternative design, alternative construction method, analysis of the health and safety implications of a project or design, or the development of a quality assurance system, etc. The report must not be purely descriptive; depth of understanding and technical content will be required. The report may include calculations, student developed designs, comparisons between different solutions etc.</p> <p>During the course of this module students will develop their UWS Graduate Attributes. Academic Universal and Work- ready attributes: Students will gain knowledge and understanding of academic writing as well as having the opportunity to develop a broad range of ICT, technical and transferable skills. This module has been reviewed and updated, taking cognisance of the University's Curriculum Framework principles. For example, active and engaging, module assessment which reflects use of academic referencing and corresponding referencing resources. Library drop-in sessions for exploring use of subject specific academic journals for undertaking a critical review will be facilitated.</p> <p>To provide students with an opportunity to prepare a significant written work. To allow students to develop skills to undertake a literature review</p> <p>To allow students to develop skills at referencing technical literature for inclusion in academic and engineering reports</p> <p>To allow students to demonstrate some engineering judgement and critical thinking.</p> <p>This module will support students to develop following UWS graduate attributes: Academic - critical and analytical thinking, inquiring, knowledgeable, innovative, and problem solving; Personal - ethically minded, creative, imaginative; Professional - research-minded and socially responsible..</p>			

Module Delivery Method					
Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
See Guidance Note for details.					

Campus(es) for Module Delivery						
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)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1		Term 2		Term 3	
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

Learning Outcomes: (maximum of 5 statements)	
At the end of this module the student will be able to:	
L1	To select and then study a topic relevant to the Engineering Discipline of the student to demonstrate good academic literature review techniques.
L2	To critically review the information collected.
L3	To produce a report that demonstrates skill in technical report writing and engineering judgement.

Employability Skills and Personal Development Planning (PDP) Skills	
<b>SCQF Headings</b>	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	<p><b>SCQF Level 9</b>            Demonstrate further knowledge and understanding of essential facts, concepts, theories and principles of civil engineering.</p> <p>Demonstrate further knowledge and understanding of essential facts, concepts, theories and principles of civil engineering.</p>

	Further develop the appreciation of the wider multidisciplinary engineering context and its underlying principles.	
Practice: Applied Knowledge and Understanding	<p>SCQF Level <b>9</b></p> <p>Possess knowledge, understanding and practical engineering skills acquired through individual project work.</p> <p>Use creativity and innovation.</p> <p>Further application of the use of technical literature and other information sources.</p> <p>The independent study module project will demonstrate the application of knowledge of engineering management principles, commercial context, project and change management, and relevant legal matters including intellectual property rights.</p>	
Generic Cognitive skills	<p>SCQF Level <b>9</b></p> <p>Be able to comprehend the broad picture and thus work with an appropriate level of detail.</p> <p>Investigate a civil engineering problem.</p>	
Communication, ICT and Numeracy Skills	<p>SCQF Level <b>9</b></p> <p>Possess practical engineering skills acquired through individual project.</p>	
Autonomy, Accountability and Working with others	<p>SCQF Level <b>9</b></p> <p>Further develop skills in planning self-learning and improving performance.</p>	
<b>Pre-requisites:</b>	Before undertaking this module the student should have undertaken the following:	
	<b>Module Code:</b>	<b>Module Title:</b>
	<b>Other:</b>	
<b>Co-requisites</b>	<b>Module Code:</b>	<b>Module Title:</b>

\*Indicates that module descriptor is not published.

### Learning and Teaching

This module is mainly directed by the student. The module coordinator will put in place materials that the student can use and will be available to provide advice and support as required.

<p><b>Learning Activities</b> During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:</p>	<p><b>Student Learning Hours</b> (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)</p>
Lecture/Core Content Delivery	6
Independent Study	194
	Hours Total 200
<p><b>**Indicative Resources: (eg. Core text, journals, internet access)</b></p>	
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</p> <p>The materials that the student consults is dependent on the topic that is being studied. Students are expected to use the resources of the UWS Library and the Internet.</p> <p>Materials covering the "mechanics" of the module (report requirements, submission details, etc.) will be provided via the University's VLE.</p> <p>Extension Resources: Consultation of the under noted resources is recommended and material from these resources may be of benefit to the student in the assessment process:</p> <p>The UWS library website and in particular the "UWS Referencing Guidelines." The Electronic Resources provided by the UWS library</p>	
<p>(**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)</p>	
<p><b>Attendance and Engagement Requirements</b></p>	
<p>In line with the <a href="#">Student Attendance and Engagement Procedure</a>: 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.</p>	
<p><b>Equality and Diversity</b></p>	
<p>The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: <a href="#">UWS Equality, Diversity and Human Rights Code</a>.</p>	
<p>(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)</p>	

## Supplemental Information

<b>Divisional Programme Board</b>	Engineering and Physical Sciences
<b>Assessment Results (Pass/Fail)</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>School Assessment Board</b>	Engineering
<b>Moderator</b>	Parag Vichare
<b>External Examiner</b>	M Ghaleeh
<b>Accreditation Details</b>	This module is part of the IMechE accredited programmes BEng/MEng (Hons) Aircraft and Mechanical Engineering.
<b>Changes/Version Number</b>	3.13 (was 3.12)  Module Coordinator changed to Dr Balaji Aresh. Module Delivery Changed to Face-To-Face from Hybrid C. Module moderator changed to Parag Vichare from Mohamed Abdel-Wahab

<b>Assessment: (also refer to Assessment Outcomes Grids below)</b>
Dissertation/ Project report/ Thesis
(N.B. (i) <b>Assessment Outcomes Grids</b> 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 <b>indicative schedule</b> 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)**

<b>Component 1</b>					
<b>Assessment Type (Footnote B.)</b>	<b>Learning Outcome (1)</b>	<b>Learning Outcome (2)</b>	<b>Learning Outcome (3)</b>	<b>Weighting (%) of Assessment Element</b>	<b>Timetabled Contact Hours</b>
Dissertation/ Project report/ Thesis	✓	✓	✓	10	0
<b>Combined Total for All Components</b>				<b>100%</b>	<b>0 hours</b>