

University of the West of Scotland

Module Descriptor

Session: 2022/23

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Status: Published

Title of Module: MSc Dissertation (Civil Eng/Const Mgt)			
Code: ENGG11029	SCQF Level: 11 (Scottish Credit and Qualifications Framework)	Credit Points: 60	ECTS: 30 (European Credit Transfer Scheme)
School:	School of Computing, Engineering and Physical Sciences		
Module Co-ordinator:	Stuart Tennant		
Summary of Module			
<p>This module requires the student to conduct research into an agreed topic within than area of relevance to Civil Engineering/Construction Management.</p> <p>This will involve a review of academic literature, including books, journals and articles related to the area of study and will allow the student to set their project objectives in the context of the wider body of academic knowledge relating to the subject being researched. The student will then develop the initial research to a level commensurate to the award of a Master's degree.</p> <p>Throughout the module the student will be supported by a member of academic staff who will advise on matters relating to the topic of research and completion of the written dissertation. There will also be a small number of support lectures which will assist the student in achieving the requirements of the module. The module will also include a variation of themes within civil engineering/construction management and will be either desk-based or involve laboratory or field work in relation to the acquisition of data.</p> <p>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).</p>			

Module Delivery Method					
Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning
✓	✓	✓			

Face-To-Face

Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.

Blended

A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered “blended” if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations

Fully Online

Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.

HybridC

Online with mandatory face-to-face learning on Campus

HybridO

Online with optional face-to-face learning on Campus

Work-based Learning

Learning activities where the main location for the learning experience is in the workplace.

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)

Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
✓					✓	

Term(s) for Module Delivery

(Provided viable student numbers permit).

Term 1	Term 2	Term 3
		✓

Learning Outcomes: (maximum of 5 statements)

On successful completion of this module the student will be able to:

L1. Execute and successfully complete a substantial piece of advanced independent work relative to the theories, practical issues and problems in an area of Civil Engineering/Construction Management:

L2. Develop the ability to critically review and consolidate knowledge in a number of areas of study relating to Civil Engineering/Construction Management;

L3. Critically assess and evaluate the relevant empirical evidence to refine or refute any current theories relating to the problem or issue under investigation;

L4. Communicate the findings of the investigation in an orderly, reasoned and analytical manner.

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)	<p>SCQF Level 11.</p> <p>Develop extensive, detailed and critical knowledge and understanding in one or more of the specialisms of Civil Engineering/Construction Management which is informed by current research and development within each specialism.</p>
Practice: Applied Knowledge and Understanding	<p>SCQF Level 11.</p> <p>Define, plan and execute a research project within the area of Civil Engineering/Construction Management</p> <p>Planning and executing a significant project of Civil Engineering/Construction Management research, investigation or development.</p> <p>Develop expertise in a range of specialised Civil Engineering/Construction Management skills, techniques, practices and associated materials that are at the forefront of, and are informed by recent developments/research.</p>
Generic Cognitive skills	<p>SCQF Level 11.</p> <p>Critically review and consolidate knowledge, skills, practices and thinking involving Civil Engineering/Construction Management.</p> <p>Assessing critical information or data and making informed judgments.</p> <p>Critically review information and existing theories/practices from a variety of sources and applying it as part of a research investigation.</p>
Communication, ICT and Numeracy Skills	<p>SCQF Level 11.</p> <p>Ability to perform, interpret and evaluate relevant Civil Engineering/Construction Management data in problem solving.</p> <p>Communicate effectively, orally and in writing with peers and superiors using data analysis where appropriate.</p> <p>Use a wide range of computer software and associated ICT equipment to enhance methods of communication.</p> <p>Effectively demonstrate the application of civil engineering/Construction Management software to improve the performance of the engineering function.</p>

Autonomy, Accountability and Working with others	SCQF Level 11. Identifying and addressing their own learning needs in support of research activity. Identifying solutions and strategies in solving research problems. Demonstrate high motivational skills when working individually. Display appropriate time management skills when undertaking research activities.
Pre-requisites:	Before undertaking this module the student should have undertaken the following:
	Module Code:
	Module Title:
	Other:
	COMP 11017 Research Design and Methods
Co-requisites	Module Code:
	Module Title:

* Indicates that module descriptor is not published.

Learning and Teaching	
<p>This module is based on a student-centred learning process involving a small number of formal lectures/tutorials and may also include the utilisation of computer application studies, laboratory work or may be based on directed study. Each student is under the supervision of a staff member and he/she must arrange to consult with the supervisor at regular intervals and maintain a diary of all such engagements. Additional staff members will be assigned as second assessors and their role will be one of general interest in the progress of the study along with participation in the assessment process. The supervisor's role is to guide the student through the project and approve the methods of research and/or laboratory investigations and in the analysis of data. Agreed records of all sessions should be maintained at all times.</p>	
<p>Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:</p>	<p>Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)</p>
Lecture/Core Content Delivery	4
Tutorial/Synchronous Support Activity	2
Independent Study	594
	600 Hours Total
**Indicative Resources: (eg. Core text, journals, internet access)	
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</p>	

Design Research: Methods and Perspectives, Edited by Brenda Laurel, Cambridge: MIT Press, (2003).

Leady, PD (2004) Practical Research: Planning & Design (8th Edition). Prentice Hall.

Mitchell, M. Jolly, J. (2010) Research Design explained. (7th Edition) Thompson.

Also: Civil, Structural and Transportation Journals.

(**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)

Engagement Requirements

In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: [Academic engagement procedure](#)

Supplemental Information

Programme Board	Engineering
Assessment Results (Pass/Fail)	No
Subject Panel	Civil Engineering and Quality Management
Moderator	Andrzej Wrzesien
External Examiner	J Oti
Accreditation Details	Accredited by the Joint Board of Moderators as a Technical MSc and meeting Further Learning requirements for a Chartered Engineer (CEng)
Changes/Version Number	2.08 Unable to update in PSMD. Amended title to include '/Construction Management'. Where Civil Engineering mentioned in the text, replaced with 'Civil Engineering/Construction Management' throughout. In Summary included mention of technical requirement for the Civil Engineering aspects. In Learning and teaching Lecture core content hours reduced to 5, independant study hours increased to 585 hours v.0 20/21 - Change module coordinator (Dr. Stuart Tennant) v.1 20/21 - Include Distance learning for Module Delivery. v.0 22/23 - Adjust Lecture/Core content delivery 4hrs (previously 5hrs) and adjust Tutorial activity 2hrs (previously 10 hrs). Independent study is adjusted to

594hrs (previously 585hrs) Total remains unadjusted re: 600hrs.

Assessment: (also refer to Assessment Outcomes Grids below)

Assessment Category 1: Dissertation 100%

The module will be assessed by way of a dissertation. The final mark will be awarded based the sum of four distinct elements. These are as follows:-

Continuous assessment mark from supervisor:- 10%

Presentation of the written dissertation:- 15%

Technical content:- 60%

Oral presentation and defence:- 15%

A minimum overall grade of 50% is required to achieve a pass in this module.

(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 Handbook.)

Assessment Outcome Grids (Footnote A.)

Component 1						
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Dissertation/ Project report/ Thesis	✓		✓		85	0
Presentation		✓		✓	15	0
Combined Total For All Components					100%	0 hours

Footnotes

A. Referred to within Assessment Section above

B. Identified in the Learning Outcome Section above

Note(s):

1. More than one assessment method can be used to assess individual learning outcomes.
2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note). This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

Equality and Diversity

The programme leaders have considered how the programme meets the requirements of potential students from minority groups, including students from ethnic minorities, disabled students, students of different ages and students from under-represented groups. Students with special needs (including additional learning needs) would be assessed/accommodated and any identified barriers to particular groups of students discussed with the Enabling Support Unit.

[UWS Equality and Diversity Policy](#)

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