University of the West of Scotland

Module Descriptor

Session: 2024/25

Title of Module: Masters Project							
Code: COMP11024	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:	Daune West						

Summary of Module

The Masters project is designed to enable students to demonstrate their ability to present sustained rational arguments and independent conclusions based on a body of personal research. The content and output of the project must relate to the student's Programme of Study. Projects exploring a solution to a 'live' business opportunity/problem are welcomed. However, all projects must be supported by a clear academic underpinning which can be demonstrated in the literature review.

In the case of software specifications or designs, the arguments used are likely to relate to the critical evaluation of the requirements and in the assessment of alternative tools, methods and solutions that could be employed, and the conclusions will concern the justification for the particular choices made. Alternatively, the project may be primarily concerned with the evaluation of some existing tool or technique or software system, and the arguments shall be concerned with the development and application of criteria in performing such an assessment. Additionally, projects may require the gathering of empirical evidence by directly testing such tools or systems, and/or by seeking information from those who use (or would use in the case of a system to be developed) the system about aspects of its use. In such cases the student will need to present arguments to justify the approach taken in obtaining such evidence and to present it in such a way as to support the conclusions that can be drawn (or not drawn) from it. All projects must contain a clear, practical computing component as their primary research.

•Undertaking this module will provide the student with the opportunity to develop the following UWS graduate attributes: Universal: critical thinker, analytical, inquiring, ethically minded, research-minded; Work-ready: knowledgeable, problem-solver, effective communicator, motivated, potential leader, enterprising; Successful: Autonomous, innovative, creative resilient, driven, transformational.

Module Delivery Method								
Face-To- Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning			
\boxtimes	\boxtimes							
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) Distance/Online Paisley: Dumfries: Lanarkshire: Other: Ayr: London: Learning: \boxtimes \boxtimes \boxtimes XAdd name Term(s) for Module Delivery (Provided viable student numbers permit). \boxtimes Term 2 Term 3 Term 1 X \boxtimes **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: produce a MSc level project specification (relevant to the domain of the student's specific L₁ degree programme) demonstrate a systematic and critical understanding of the approaches available to address problems and create knowledge and useful artifacts (relevant to the domain of the student's L2 specific degree programme), and of the underlying theoretical assumptions and concepts of such approaches demonstrate an ability to select and apply in a critical and reflective fashion, appropriate research and/or development techniques in producing a solution or solutions to a practical L3 problem (in an area relevant to the student's specific degree programme) critically and reflectively plan and execute a project to develop an artifact that is fit for purpose in addressing a stated problem (relevant to the domain of the student's specific L4 degree programme) present a detailed, well-arqued and coherent report of a sustained independent work of high quality that fulfils an agreed specification in both written (report) and verbal format L5 (viva/demo). **Employability Skills and Personal Development Planning (PDP) Skills** During completion of this module, there will be an opportunity to **SCQF Headings** achieve core skills in: Knowledge and SCQF Level 11 Understanding (K and U) Research Specification, Literature reviews, Research Methodologies, Data Collection and Analysis, Reporting, in-depth knowledge of their chosen

research area

Practice: Applied Knowledge and Understanding	SCQF Level 11 Conducting a literature search, identifying appropriate research methodologies and techniques, gathering and making sense of data; writing a research report, developing a technical artifact where relevant					
Generic Cognitive skills	SCQF Level 11 Research, Analysis, Rep	SCQF Level 11 Research, Analysis, Reporting, Critical Evaluation and Reflection				
Communication, ICT and Numeracy Skills	developing artefacts or c	SCQF Level 11 Use of appropriate ICT in achieving the research objectives e.g. in developing artefacts or data collection/analysis; presenting the results of the project in an appropriate, academic format.				
Autonomy, Accountability and Working with others	SCQF Level 11 Taking on responsibility for the selection of the research topic and ownership of the research process including integrity in the use of sources. Understanding the application of ethical principles in research; managing and respecting potential research collaborators, 'users', 'clients', and any others who may contribute tot eh student's project. Able to conduct and report a piece of research following given ethical guidelines.					
Pre-requisites:	Before undertaking this module the student should have undertaken the following:					
	Module Code: COMP11017 Module Title: Research Design & Methods					
	Other: COMP09092 Research Methods in Computing					
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)
Lecture/Core Content Delivery	2
Tutorial/Synchronous Support Activity	10

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:

Mbanaso, U.M., Abrahams, L and Okafor, K.C. (2023) Research Techniques for Computer Science, Information Systems and Cybersecurity, Springer Cham

Oates, B., Griffiths, M. and McLean, R. (2022) Researching Information Systems and Computing, Sage

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 <u>Student Attendance and Engagement Procedure</u>: 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:

Attending both scheduled classes, meeting with supervisor on a regular basis (either in person or online as required by the supervisor), submitting all required documents on time (specification, interim report and final report), attending the viva/demo.

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 Coordinators 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	Computing
Assessment Results (Pass/Fail)	Yes □No ⊠
School Assessment Board	Computing
Moderator	Santiago Matalonga
External Examiner	C. Luo
Accreditation Details	Contact School for current details
Changes/Version Number	2.13

Assessment: (also refer to Assessment Outcomes Grids below)

The module has 3 separate components of assessment: report, process and viva/demo

Report (60%):

The module offers 2 choices of written assessment output. Students can either submit (a) a 'traditional' written report (maximum 18000 words) or (b) an output in the form of a paper suitable for a peer reviewed journal publication (no submission or acceptance by the selected journal is necessary for the MSc Project). Choice of the latter output should be agreed with the supervisor (who will advise on a suitable journal) and the module co-ordinator. Guidelines as to the type of project appropriate for the journal paper output will be provided by individual supervisors.

Regardless of chosen final output the module requires:

Production and approval of a formal project specification which outlines the research topic, initial sources of information, suggests a suitable research methodology and an appropriate marking scheme. 0% (formative assessment only)

Production of an interim report approximately half way through the body of work to allow formal feedback from supervisor and moderator (maximum of 8000 words). 0% (formative but mandatory assessment only)

A final written report/paper detailing the work of the Masters Project (maximum 18000 words or limit set by the chosen journal) worth 60% of the module mark

Process (20%):

A project process mark worth 20% of the module mark (awarded by the supervisor).

Viva/demo (20%)

A viva/demo which is to take place after submission of the final report/paper ('defence' of the work submitted) worth 20% of the module mark

All of the elements are compulsory. A minimum overall mark of 50% is required to achieve a pass in this module and 40% in each of the 3 components (report, process, viva/demo)

Project duration: full-time = 15 weeks; part-time = 30 weeks

The project is marked by both supervisor and moderator independently and a mark agreed. If a mark cannot be agreed, then a third marker is sought. A discussion will then take place between the 3 markers and an agreement of a mark between at least two of the markers will be taken as the final mark.

Assessment 1 – Report

Assessment 2 - Process documentation

Assessment 3 - Viva demo

- (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								
Assessme nt Type (Footnote B.)	Learning Outcome (1)	_	Learning Outcome (3)		Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
Report	✓	✓	✓	✓	✓	60	0	

Component 2								
Assessme nt Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	_	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
Process documenta tion		✓	✓	✓		20	0	

Component 3								
Assessme nt Type (Footnote B.)	Learning Outcome (1)	_	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
Viva/demo		✓	✓		✓	20	1	
Combined Total for All Components					100%	XX hours		