Module Descriptor

Title	MSc Masters Pathway Project		
Session	2025/26	**Status**	Published
Code	COMP11117	**SCQF Level**	11
Credit Points	60	**ECTS (European Credit Transfer Scheme)**	30
School	**Computing, Engineering and Physical Sciences**		
Module Co-ordinator	Bikrant Koirala		

Summary of Module

The MSc 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 information technology and the student's chosen specialist pathway. Either cloud computing, data analytics, financial technologies, healthcare technologies, information security, project management or web development. 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. During the module students are also introduced to general research principles, different approaches to undertaking and validating research (e.g. quantitative and qualitative research), and alternative methods of implementing these research approaches (e.g. experimentation, action research). In addition, the module also covers issues such as: planning a project, literature research, critiquing published research, reflection on research process and output, legal and ethical requirements, and constraints.

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 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.

- 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	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	demonstrate proficiency in applying systematic approaches and methodologies to effectively plan, structure, and conduct a research study whilst employing specific strategies for data collection and analysis to address a research question, thereby establishing a comprehensive framework for the study.
L2	critically review and evaluate arguments, research approaches, evidence, and conclusions in the academic and research literature (relevant to information technology and the student's chosen specialist pathway - either cloud computing, data analytics, financial technologies, healthcare technologies, information security, project management or web development - and of the underlying theoretical assumptions and concepts of such approaches
L3	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 problem in an area relevant to the information technology and the student's chosen specialist pathway - either cloud computing, data analytics, financial technologies, healthcare technologies, information security, project management or web development
L4	write a detailed, well-argued and coherent report of a sustained independent work of high quality that fulfils an agreed specification
L5	demonstrate a deep understanding of the research area, critically evaluating findings, and effectively defending methodological choices

Employability Skills and Personal Development Planning (PDP) Skills

[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

SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	**SCQF 11** 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 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 11** Research, Analysis, Reporting, Critical Evaluation and Reflection
Communication, ICT and Numeracy Skills	**SCQF 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 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 to the student's project. Able to conduct and report a piece of research following given ethical guidelines

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.	
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	2
Tutorial / Synchronous Support Activity	10
Independent Study	588
Please select	
Please select	

Please select	
TOTAL	600

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Oates, B. (2012) Researching Information Systems and Computing, Sage*

Cornford, T. and Smithson, S. (2006) Project Research in Information Systems: A Student's Guide. (2ndedition), Palgrave Macmillan, Basingstoke.*

Dawson, C., 2009 (2nd edition), Projects in Computing and Information Systems: A Student Guide, Addison-Wesley*

Howard, K., Sharp J.A., Peters J. (2002), The Management of a Student Research Project, The OpenUniversity Press*

Lazar, J., Feng, J.H., Hochheiser, H. (2009), Research Methods in Human Computer Interaction, Wiley andSons*

Pears, R., Shields G. (2016), Cite them right: the essential referencing guide, 9th ed, Palgrave MacMillan*

Robson, C. (2003), How to do a Research Project, Blackwell*

Saunders, M.N.K., Thornhill, A., Lewis, P. and McMillan, K. (2008) Research Methods for Business Students:AND "How to Write Dissertations and Project Reports, Prentice-Hall*

Weaver, P. (2003), Success in Your Project: A Guide to Student System Development Projects, Prentice-Hall.*

Wisker, G. (2008) The Postgraduate Research Handbook (2nd edition), Palgrave Macmillan, Basingstoke.*

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:

The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in, timetabled sessions. You will scan your attendance via the scanners each time you are on-campus and you will login to the VLE several times per week. Where you are unable to attend a timetabled learning session due to illness or other circumstance, you should notify the Programme Leader that you cannot attend. Across the School an 80% attendance threshold is set. If you fall below this, you will be referred to the Student Success Team to see how we can best support your 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. Specialist assistive equipment, support provision and adjustment to assessment practice 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	**Computing**
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	Business & Applied Computing
Moderator	TBC
External Examiner	A Malhi
Accreditation Details	
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	2.01

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Interim Report worth 20%
Assessment 2
Masters Dissertation worth 60%
Assessment 3
Oral Examination and Demonstration 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.)

Component 1

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Dissertation/Project report/Thesis	☒	☐	☐	☐	☐	20	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Dissertation/Project report/Thesis	☐	☒	☒	☒	☐	60	1

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Clinical/ Fieldwork/Practical skills assessment/Debate/ Interview/Viva voce/ Ora	☐	☐	☐	☐	☒	20	0
Combined total for all components						100%	1 hours

Change Control

What	When	Who
Attendance and Engagement Procedure and Equality and Diversity	21/1/2025	F.Valentine
Assessment Regime Revises	27/06/2025	Graeme McRobbie