

Module specification

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Module Code	COM752
Module Title	Dissertation Project
Level	7
Credit value	60
Faculty	FAST
HECoS Code	100358
Cost Code	GACP
Pre-requisite module	N/A

Programmes in which module to be offered

Programme title	Core/Optional/Standalone
MSc Computer Science	Core
MSc Computer Science (with Advanced Practice)	Core
MSc Cyber Security	Core
MSc Cyber Security (with Advanced Practice)	Core
MSc Big Data and Data Analytics	Core
MSc Big Data and Data Analytics (with Advanced Practice)	Core
MSc Artificial Intelligence	Core
MSc Computing for Business	Core

Breakdown of module hours

Learning and teaching hours	12 hrs
Placement tutor support hours	0 hrs
Supervised learning hours e.g. practical classes, workshops	0 hrs
Project supervision hours	6 hrs
Active learning and teaching hours total	18 hrs
Placement hours	0 hrs
Guided independent study hours	582 hrs
Module duration (Total hours)	600 hrs

Module aims

This module will support and aid students in carrying out an independent research project based within their area of study. The aims of the Dissertation Project are:

- Allow the student to demonstrate a mastery of a specific area of the subject.
- Undertake a concentrated review of literature in a chosen subject area.
- Apply knowledge and expertise gained during the taught element of the programme.
- Facilitate the exhibition of deep research and technical skills.

Module Learning Outcomes

At the end of this module, students will be able to:

1	Critically evaluate the use of research methodologies in the wider context of computing.
2	Compose an independent plan of study that demonstrates research and professionalism in the application of digital technology.
3	Synthesise and disseminate a range of complex information from a variety of sources to reinforce subject specialist practice.
4	Devise and create a data generating artefact as part of a structured research project.
5	Assemble a comprehensive written dissertation that concludes on primary research and relates it to contemporary professional, legal, ethical and social issues.

Assessment

The assessment is split into two major areas.

Firstly, students must complete a formal proposal submission (formative assessment). This will be structured in a formal manner and require students to complete elements such as a literature review, formal research project plan, select an appropriate methodology and provide rationale along with an analysis of related legal ethical issues. Students will be given the opportunity to submit an initial interim proposal for feedback and topic validation.

Once the proposal is completed, students will progress to the main dissertation project phase. This will require the development of a formal research artefact, and it is expected that students will generate their own research data for analysis as part of the project. Emphasis will be placed on methodological rigour of the work provided along with the quality of the results reported and/or product developed compared with the original aims, objectives and hypothesis testing stated in proposal.

Indicative word count for research project proposal is 3,000 words (Formative assessment)

Indicative word count for dissertation is 15-20,000 words (Summative assessment)



Assessment number	Learning Outcomes to be met	Type of assessment	Duration/Word Count	Weighting (%)	Alternative assessment, if applicable
1	1,2,3,4,5	Dissertation/Project	15000 - 20000 or Equivalent	100%	

Derogations

None

Learning and Teaching Strategies

The module will be delivered in two distinct phases. Initially, the module will start with a heavier reliance on didactic elements to ensure that the students are taught the structure and procedural elements that form a dissertation and guided in the formation of their proposal. As the proposal phase progresses, this will shift to more tutorial-based sessions with informal support.

The main dissertation phase of the project will be student led and will consist of regular meetings with their dissertation project supervisor. Additional formal support sessions may be offered at periodic intervals to ensure progression and provide a platform for group discussion and problem solving.

In line with the Active Learning Framework, this module will be blended digitally with both a VLE and online community. Content will be available for students to access synchronously and asynchronously and may indicatively include first and third-party tutorials and videos, supporting files, online activities and any additional content that supports their learning.

Welsh Elements

This module is designed to support Welsh-speaking students in line with the Welsh Language Standards. While the primary delivery will be in English, students will have the opportunity to submit assessments, including coursework and projects, in Welsh if preferred. Relevant module materials, such as reading lists, key texts, and guidance, will be available bilingually upon request, ensuring accessibility for all students. Additionally, where possible, guest speakers, case studies, or examples may include references to the Welsh business context, especially in areas such as data use in local industries and Welsh public sector organisations.

The department encourages students to develop bilingual digital skills by incorporating Welsh-language datasets, tools, and resources where appropriate, offering an inclusive learning environment. We also support the development of bilingual visualisation techniques, enabling students to create digital outputs that reflect the Welsh language, should they wish to do so.

Indicative Syllabus Outline

The focus of the syllabus is on developing knowledge of research process and dissertation structure:

- Dissertation proposal
 - Hypothesis and research question formulation
 - Research methodology
 - Ethical considerations and assess your project

Dissertation thesis

- Structure and assessment methods
- Avoiding plagiarism

- Data analysis methods
 - Qualitative/Quantitative/mixed studies
 - Data gathering techniques
 - Data preparation
 - Data analysis for qualitative studies
- Project planning, tools and techniques
 - JIRA and cloud management tools
 - Data tracking and analysis
- Legal, ethical and professional analyses

Indicative Bibliography

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads:

Oates, B. J., Griffiths, M., McLean, R. (2022), *Researching Information Systems and Computing*, Second Edition, California: Sage Publication Ltd.

Other indicative reading:

Carlo Lauro, N., Amaturro, E., Grassia, M. G., Aragona, B., Marino, M. (2017), *Data Science and Social Research: Epistemology, Methods, Technology and Applications*, Berlin: Springer.

Lankoski, P., Bjork, S. (2015) *Game Research Methods: An Overview*, North Carolina: Lulu Press.



Lazar, J. (2017), *Research Methods in Human-Computer Interaction*, Second Edition, Massachusetts: Morgan Kaufmann

Paarsch, H. K. (2016), *A Gentle Introduction to Effective Computing in Quantitative Research: What Every Research Assistant Should Know*, Massachusetts: MIT Press.

Squire, K. (2010), *Real-Time Research: Improvisation Game Scholarship*, North Carolina: Lulu Publishing.

Administrative Information

For office use only	
Initial approval date	10/05/2023
With effect from date	September 2026
Date and details of revision	04/12/2024 APSC approval to change assessment to 100% portfolio March 2026 addition of MSc Artificial Intelligence and MSc Computing for Business programme titles
Version number	3

