

MODULE DESCRIPTOR

Module Title

Capstone Project

Reference	CM4134	Version	1
Created	September 2023	SCQF Level	SCQF 10
Approved	April 2024	SCQF Points	60
Amended		ECTS Points	30

Aims of Module

To enable the student to undertake a substantial professional computing focused project utilising competences developed during their degree. Students are expected to apply practical and analytical skills to design, implement and critically evaluate a solution to a problem that meets a real need. Students will demonstrate in-depth design, technical, and problem-solving skills, entrepreneurial knowledge, innovation and creativity. Students will have to conform to the appropriate university codes of practice and ethical requirements.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Critique relevant literature identified during a comprehensive review of the project topic area, including consideration of relevant legal, social, ethical, professional and security issues.
- 2 Devise a feasible project plan, using requirements gathering methods to draw out reasonable objectives for the project and the given timescale.
- 3 Develop an appropriate project solution/artefact following a suitable development lifecycle. This will typically include using appropriate analysis, design, implementation and testing techniques in order to manage the project to completion.
- 4 Critically examine the project achievement, reflecting on the significance and potential impact of the developed solution/artefacts
- 5 Communicate, using written, graphical and/or oral methods as appropriate, the main aspects of the project in a professional manner.

Indicative Module Content

There is no formal syllabus for this module. Students may be allocated to a project area (guided by their course content). The topics may arise from a collaboration with industry or from existing research and development activities within the University. Students may also propose their own project topics; in such cases, the project supervisor(s) will assess the proposed project to ensure that it is at the appropriate level and that the necessary resources are available. Project supervisor(s) will support students throughout their project with design, planning, and delivery.

Module Delivery

Lectures at key points throughout the project, complimented by individual supervision from project supervisors on a regular basis to direct the student as needed and provide feedback on work submitted as the project progresses. The student is able to call on expert guidance throughout the project development lifecycle. There will be an oral presentation of the project, designed to allow the student to practice their presentation skills. The student will produce a summary poster and a final project report.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	20	N/A
Non-Contact Hours	580	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	600	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type: Coursework Weighting: 100% Outcomes Assessed: 1, 2, 3, 4, 5

Description: Individual honours project consisting of a project proposal, report and demonstration

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The calculation of the overall grade for this module is based on 100% weighting of C1. An overall minimum grade D is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
A	The student needs to achieve an A in C1
B	The student needs to achieve a B in C1
C	The student needs to achieve a C in C1
D	The student needs to achieve a D in C1
E	The student needs to achieve an E in C1
F	The student needs to achieve an F in C1
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module

None.

Corequisites for module

None.

Precluded Modules

None.

INDICATIVE BIBLIOGRAPHY

- 1 Harris, David J. Literature review and research design : a guide to effective research practice. Routledge. 2019
- 2 DAWSON, C., 2015. Projects in Computing and Information Systems: A Student's Guide. 3rd ed. Pearson Education.
- 3 ZOBEL, J., 2015. Writing for Computer Science. 3rd ed. Springer.