

MODULE DESCRIPTOR

Module Title

MSci Capstone Project

Reference	CMM303	Version	1
Created	January 2024	SCQF Level	SCQF 11
Approved	April 2019	SCQF Points	60
Amended	March 2021	ECTS Points	30

Aims of Module

To enable the student to undertake a substantial professional computing science project. 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 research, technical, problem-solving, innovation and creativity skills. Students will have to conform to the appropriate university and BCS codes of practice and ethical requirements.

Learning Outcomes for Module

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

- 1 Appraise relevant literature identified during a comprehensive review of the project topic area, including consideration of relevant legal, social, ethical, professional and security issues.
- 2 Produce a feasible project plan, using requirements gathering methods to draw out reasonable objectives for the project and the given timescale.
- 3 Create 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 Evaluate the project achievement, reflecting on the significance and potential impact of the developed solution/artefacts
- 5 Take responsibility for communicating, using written, graphical and/or oral methods as appropriate, the main aspects of the project in a professional manner to project stakeholders and supervisor.

Indicative Module Content

There is no formal syllabus for this module. Students may be allocated to a project area (guided by their preferences). The topics may arise from a collaboration with industry or from existing research and development activities within the School. Students may also propose their own project topics; in such cases, the project supervisor will assess the proposed project to ensure that it is at the appropriate level and that the necessary resources are available. Students will develop their project specification and plan their project in conjunction with their project supervisor.

Module Delivery

An initial lecture session followed 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:	The coursework for this module is the creation of the Masters Project report and presentation that demonstrates the whole project process (research, design, implementation and evaluation) of a substantial research artefact. Full details of this assessment are available in the MSci Project Handbook.				

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

The calculation of the overall grade for this module is based on 100% weighting of a single coursework. 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 the coursework.
B	The student needs to achieve a B in the coursework.
C	The student needs to achieve a C in the coursework.
D	The student needs to achieve a D in the coursework.
E	The student needs to achieve an E in the coursework.
F	The student needs to achieve an F in the coursework.
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 "BCS Code of Conduct" obtained from <http://www.bcs.org/category/6030> [accessed 13/3/2017].
- 2 DAWSON, C., 2015. Projects in Computing and Information Systems: A Student's Guide. 3rd ed. Pearson Education.
- 3 Hayley, S., 2017. Literature Review: How to do it quickly and effectively at crunch time: For Undergraduate and Postgraduate Students. Kindle edition.
- 4 ZOBEL, J., 2015. Writing for Computer Science. 3rd ed. Springer.
- 5 Harris, David J. Literature review and research design : a guide to effective research practice. Routledge. 2019