

## MODULE DESCRIPTOR

### Module Title

MSc Project			
Reference	CMM500	Version	1
Created	June 2022	SCQF Level	SCQF 11
Approved	June 2022	SCQF Points	60
Amended		ECTS Points	30

### Aims of Module

To undertake all the stages of a substantial research, IT, computing, cyber security or data science project from critical review of the literature, to the development of a solution to the problem.

### Learning Outcomes for Module

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

- 1 Analyse the problem and conduct a critical review of relevant literature.
- 2 Prepare a well justified and detailed project specification and project plan, including use of resources with consideration of legal, ethical, social and professional issues as well as risks to the project.
- 3 Critically appraise alternative solutions to the problem and develop, test and critically evaluate a well-justified solution to the problem. The solution should include a substantial practical application of technical skills.
- 4 Using written, graphical and oral communication, report on and demonstrate the main aspects of the project in an effective and professional manner.

### Indicative Module Content

The development of a plan and breakdown of activities which takes into account the results of risk evaluation. An overall and a detailed research strategy/design specification. The development of a solution to the problem at hand. Regular reviews of the plan including social, ethical, legal and professional issues arising from changes to the plan. The evaluation of scientific risk and subsequent risk management. The critical evaluation of the solution to the problem using quantitative and/or qualitative methods. A review of the work with recommendations for future research/development. A practical demonstration of the operational project and conclusions, including an oral presentation. A final report and all software or video demonstration as appropriate.

### Module Delivery

Within an IT, computing, cyber security or data science context, students undertake the critical appraisal of the problem, literature review, design, implementation, testing, evaluation, documentation and demonstration of a project. Lectures and workshops provide an initial explanation of project activities, together with guidance on research and report writing. Students will be allocated an academic supervisor with whom they will have face to face meetings as well as conference calls and/or electronic communications.

### Indicative Student Workload

	Full Time	Part Time
Contact Hours	20	20
Non-Contact Hours	580	580
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	600	600
<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
Description:	Portfolio of work including report, software and presentation and demonstration of the work as appropriate.				

### MODULE PERFORMANCE DESCRIPTOR

#### Explanatory Text

Component 1 (coursework) comprises 100% of the module grade. To pass the module, a D grade is required.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	A in Component 1
<b>B</b>	B in Component 1
<b>C</b>	C in Component 1
<b>D</b>	D in Component 1
<b>E</b>	E in Component 1
<b>F</b>	F in Component 1
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

### Module Requirements

Prerequisites for Module	None in addition to progression to project requirements.
Corequisites for module	None.
Precluded Modules	None.

**INDICATIVE BIBLIOGRAPHY**

- 1 BCS Trustee Board, 2021, CODE OF CONDUCT FOR BCS MEMBERS, version 7 (last reviewed and approved by Trustee Board 9 June 2021) [accessed 09/06/2022].
- 2 Hughes, B., Ireland, R., West, B., Smith, N. and Shepherd, D. 2019. Project Management for IT related projects. 3rd ed. BCS.
- 3 The Data Protection Act, 2018, <https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted> [accessed 09/06/2022]
- 4 Creswell, J.W., Creswell, J. D. 2017. Research design: qualitative, quantitative, and mixed methods approaches. 5th Ed. Sage.