UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title	Dissertation
Module Code	COS7004-E
Academic Year	2022/3
Credits	60
School	Department of Computer Science
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Lectures	6
Project Supervision	18
Lectures	9
Independent Study	567

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Non-Standard Academic Year

Module Aims

The Dissertation for all MSc programmes is driven by the student's aspirations and preferences and draws on and enhances the professional skills and knowledge gained by the student during the taught component of the course.

The student must select relevant tools and techniques acquired throughout their specific programme of study (AI or Cyber Security, Big Data, IoT or AI) and design and develop a solution to a practical problem or challenge by using either (1) a real-world data set or (2) a generated hypothetical data set.

Completing their dissertaion, the student will be able to demonstrate evidence of achieving the programme learning outcomes and graduate attributes and be able to demonstrate these to future employers, including consideration of legal, social, ethical and professional issues relevant to their topic.

Outline Syllabus

This module will include topics such as:
- What is a project lifecycle?
- How do you choose your project?
- How do you critically research existing literature?
- How do you critically evaluate tools and techniques?
- What LSEP considerations do you need to address?
- How do you effectively problem solve and find creative solutions?
- How do you structure a dissertation or final project report?

All projects will be closely supervised by academics with ongoing feedback and guidance at all stages of the project from the conception to completion.

Learning Outcomes

Outcome Number	Description
1	Apply practical and analytical skills developed in your programme of study.
2	Critically evaluate literature, technical material and existing solutions in your programme topic.
3	Evaluate suitable tools and techniques for design and (where appropriate, the) development of a quality solution, together with an evaluation of that solution to the subject of your project.
4	Demonstrate the integration of legal, social, ethical and professional considerations and responsible computing within your dissertation report and any related artefacts (e.g. software, research findings, conclusions, recommendations).
5	Demonstrate research, design and development skills within a substantial project.

Learning, Teaching and Assessment Strategy

This is the final element of the Master?s degree and students determine the specific applied area that they want to focus on for their dissertation based on their aspirations and preferences.

Lecture sessions take place for consideration and integration of the taught material of the student?s programme. In the lectures, seminars introduce concepts and wider context of legal, social, ethical and professional (LSEP) practices within the discipline (e.g. analysis skills, the research process, dissertation outlines, managing projects, data protection, computer misuse, ethics etc.)

The sessions define terms and implications for professional practice. A group tutorial with a case study will discuss and debate the various aspects of LSEP practice and possible decisions and outcomes. The tutorial will be followed by a summary plenary. To ensure important topics are developed, these initial workshops will be strengthened through discussion of these issues with your supervisor on a one to one basis.

Students will work on an individual project with regular communication with a supervisor assisted by, if relevant, module tutors. Specification, analysis, design, development, test, maintenance and deployment of prototype to integrate field knowledge will be addressed. The supervisors give regular formative feedback to their students.

While it has no independent weighting, a viva (max.1 hour) is held to help in confirming the overall mark for the dissertation. The viva/demo provides an opportunity for students to show systems developed in the course of their project and demonstrate their understanding of the subject under study. Without a viva/demo there will be less evidence of the student?s work and less opportunity to fully demonstrate student understanding and attainment of the learning outcomes of the module. This may significantly affect the overall mark, with the weight attached to the viva clearly indicated on assessment marking schemes. Supplementary assessment - as original.

Mode of Assessment

Type	Method	Description	Weighting
Summative	Dissertation or Project Report	Dissertation (approximately 12000 words) and viva/demo (up to 1 hour)	100%

Reading List

To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:
This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.
