MODULE SPECIFICATION

Name of Module		Dissertation Research and Writing					
Parent School/Dept		Computer Science/Information Systems					
Programme(s) where module is offered		BSc Computer Science with Electrical Engineering; BSc Computer Science with Economics; BSc Computer Science with Business; BSc Computer Science with International Relations; BSc Computer Science with Political Science; BSc Information Systems with Electrical Engineering; BSc Information Systems with Economics; BSc Information Systems with Business; BSc Information Systems with International Relations; BSc Information Systems with Political Science;					
Status (core, option, free choice)		Core		**Pre-Requisite Modules or Qualifications**		CSIS110; CS280; CS330	
FHEQ Level	6	**Unit Value**	6 ECTS	**Module Code**	**CS492**	**Module coordinator**	Dr.Belma Ramic-Brkic
Term taught		Fall & Spring		**Applicable From**		2016	

Educational Aims of the Module

This writing and research intensive module is designed to provide guidance in the preparation of materials, development and completion of a dissertation research proposal, in compliance with the undergraduate dissertation requirements. This includes clarification of general program expectations, familiarisation with research resources, presentation of models of effective policy and administrative analytical reports, and provision of basic support in a structured environment of feedback.

All students are required, by the mandatory meeting, to have developed a dissertation proposal and named primary advisor, a full time faculty or a part-time faculty who have agreed to supervise and assist in the completion of the assignments required for this class.

A form for this purpose, which must be turned to Dean, is included in the Undergraduate Dissertation Manual.

Module Outline/Syllabus

This module will have weekly meetings throughout the fall and spring semesters. It is essential that students attend all class meetings. Most meetings have reading assignments that must be completed before the class meeting. This is absolutely not a lecture-based module. The format of most classes will be student-based discussions on how the reading assignments generally apply to dissertation projects. The remaining hours will be devoted to discussion on specific concerns that students have at the current stage of their work. All students are required to participate in these discussions and should come prepared to class each week with a summary of progress in the previous week, and questions/concerns that need to be addressed. Students should expect to be called on often to make such a report.

Students should expect to undertake substantial work outside of class in the forms of targeted readings related to their projects, identifying a research questions, organizing research strategies, and completing assignments that will lead to their dissertation. All students in this class will receive extensive written and verbal feedback on their assignments.

Key activities of the dissertation are:

1. Writing a dissertation proposal
2. Literature survey
3. Designing system and software architecture (CS students)
4. Implementing and testing software (CS students)
5. Producing a complete system analysis and design documentation for a proposed solution (IS students)
6. Producing a high quality prototype of a proposed solution (IS students)
7. Evaluating the developed software/mock-up against aims of the dissertation
8. Documenting dissertation progress and presenting the final solution

Dissertation Deliverables:

1. Dissertation proposal with specified objectives
2. First Dissertation draft
3. Second Dissertation draft
4. Poster presentation
5. Working software/mock-up and associated documentation
6. Final Dissertation report
7. Oral presentation

Student Engagement Hours			
Type	**Number per Term**	**Duration**	**Total Time**
Meetings	15 (Spring)	2 hours	30 hours
Seminars/Guest lectures	2 (Spring)	2 hours	4 hours
		Total Guided/Independent Learning Hours	116
		Total Contact Hours	**34**
		Total Engagement Hours	**150**

Assessment Method Summary				
Type	**Number Required**	**Duration / Length**	**Weighting**	**Timing/Submission Deadline**
Progress report	1	1,000 words	5%	Week 12 (Fall semester); Week 4 (Spring Semester)
Dissertation (written part)	1	6,000 words	35%	End of Spring semester
Defence (with slides)	1	60 minutes with questions	20%	End of Spring semester
Poster presentation	1	30 minutes	10%	End of Spring semester
Practical component of the dissertation	1	NA	20%	End of Spring semester

Module Outcomes

Intended Learning Outcomes:

1. Write and revise drafts to achieve clear and direct prose style, and employ standard editing practices for self- and peer-reviews.
2. Design usable documents, including graphic elements.
3. Produce a summarized version of a dissertation appropriate to field, audience and purpose.
4. Communicate dissertation research in an oral presentation.
5. Formulate and write a research proposal
6. identify and construct a problem/ dissertation statement
7. Identify and utilize source materials
8. Develop defensible conclusions
9. Demonstrate innovation, efficiency and entrepreneurship in developing working solutions
10. Show awareness of legal, social, ethical, and professional issues relevant to the project development and its deployment in practice.

Teaching and Learning Strategy:

For ILO:1-10:

- Laboratory/practical exercises
- Case-study discussion
- Homework/assignments
- Self-study
- Participation in class work: Laboratory and in-class participation

Assessment Strategy

1. Dissertation proposal (ILO: 5)
2. Dissertation (ILO: 1-10)
3. Defence (with slides) (ILO: 2-4, 7, 8-10)
4. Progress report (ILO: 1-3, 5-7, 9-10)
5. Poster (ILO: 3, 4, 9)

Practical Skills

1. Effectively record data and experiments so that others can understand them, and so that they can form the basis of a dissertation
2. Communicate science by means of a dissertation, written in the format of a scientific journal article
3. Practice effective, correct and appropriate

Teaching and Learning Strategy:

- A mixture of reading assignments, exercises in the class, and case studies are used to deliver the various topics in this module. (PS:1-4)
- Individual research using a problem-based format to advance the learning objectives. (PS:1-4)
- Tutors will use discussions in the class to test student subject knowledge (PS:1-4)

writing in the area of concentration (option) 4. Understand and critique scientific writing		**Assessment Strategy** 1. Progress Report (PS:3, 4) 2. Poster (PS:3,4) 3. Dissertation (PS:1-4) 4. Defence (with slides) (PS:1-4)
Transferable Skills 1. Research skills 2. Analytical skills 3. Ability to present a balanced argument 4. Ability to meet deadlines 5. Written communication skills 6. Presentation skills		**Teaching and Learning Strategy:** • Class discussions (TS:1-4) Individual research and final projects (TS:1-6)
		Assessment Strategy 1. Progress Report (TS:1-5) 2. Poster (TS:3,5,6) 3. Dissertation (TS:1-5) 4. Defence (with slides) (TS:3,6)

Key Texts and/or other learning materials

KEY TEXTS AND/OR OTHER LEARNING MATERIALS:

Recommended Texts will be selected based upon the final projects' topics.

- Cottrell, S., (2014), Dissertations and Project Reports (Palgrave Study Skills), Palgrave Macmillan
- Greetham, B., (2014), How to Write your Undergraduate Dissertation, 2nd Edition, Palgrave Macmillan
- Williams, K., (2013), Planning your Dissertation, Palgrave Macmillan
- Bell, J., Waters, S., (2014), Doing your Research Project: A Guide for First-time Researchers, Open University Press
- Denscombe, M., (2012), Research Proposals: A Practical Guide (Open Up Study Skills), Open University Press
- Grix, J., (2010), The Foundations of Research, 2nd Edition, Palgrave Macmillan

SOFTWARE TOOLS:

Recommended Software tools will be selected based upon the final projects' topics.

Please note: This specification provides a concise summary of the main features of the module and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module and programme can be found in the departmental or programme handbook. The accuracy of the information contained in this document is reviewed annually by the University of Buckingham and may be checked by the Quality Assurance Agency.

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