

Module 9: Dissertation / Dissertation By Practice

Stage		1				
Semester		3				
Module Title		Dissertation / Dissertation by Practice				
Module Number		9				
Module Status		Mandatory				
Module ECTS Credits		30				
Module NFQ level		9				
Pre-Requisite Module Titles		None				
Co-Requisite Module Titles		None				
Capstone Module?		Yes				
List of Module Teaching Personnel		Dr Waseem Akhtar Dr Faheem Bukhatwa Mr Tony Mullins Mr Barry Denby				
Contact Hours				Non-contact Hours		
24				576		
Lecture	Practical	Tutorial	Seminar	Assignment	Placement	Independent Work
		24				576
Allocation of Marks (Within the Module)						
	Continuous Assessment	Project	Practical	Final Examination	Total	
Percentage Contribution		100			100	

Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

1. draw on the reflective insights and skills imparted by the MSc. Programme to carry out a systematic piece of research.
2. Integrate the learning on the programme in an effective way by undertaking a project of professional and institutional relevance.
3. Demonstrate the technical design and implementation skills acquired during the programme.
4. demonstrate an ability to research, analyse and draw conclusions in a systematic manner
5. demonstrate an ability to reason in a consistent and methodological manner at an abstract level.
6. Demonstrate and ability to write coherently and present information in a systematic manner to the required academic level.
7. demonstrate a familiarity with research methodologies and presentation skills
8. undertake a technical project and bring it to completion
9. document, at a level befitting a professional the complete life-cycle from requirements acquisition to product testing
10. develop the awareness necessary to become a skilled reflective practitioner of computing science.

Project Proposal

Each learner must complete a project proposal for validation by a panel of project supervisors. Once approved, the learner may commence their project work. The project proposal is the output from the Research Methodologies section outlined below.

All proposals submitted should be no more than 2,000 words describing what is intended to be done and offer a review of current research in the area together with a literature review. A project proposal should be more than just a documented idea. Learners must demonstrate that they have carried out some outline research on their proposal and have considered the appropriateness, technical complexity, feasibility and scope of their proposed project. This work should be completed under the guidance of the supervisor.

Dissertation Supervision

Each learner is assigned a project supervisor who is responsible for giving individual guidance and direction during the duration of the project. It is the responsibility of each learner to:

1. agree a work schedule with their supervisor
2. meet deadlines agreed in the work schedule
3. execute the research, design and implementation in accordance with professional academic standards
4. provide deliverables on time and in the correct format

Supervisors are chosen on the basis of their experience and active research interests. Each supervisor is required to agree a work schedule with the learner, guide and advice on the direction of the work, set deadlines and record the performance and commitment of the learner undertaking the project.

Dissertation Assessment

The project is evaluated on its quality of thought, interpretation and insight as well as the contribution it makes to the field of study and the writer's own professional development. An essential ingredient is the learner's ability to master a technical body of knowledge and apply it to a given problem domain. The ability to think and reason with the material at issue is crucial. The design, layout, quality of expression, structure and coherence of all documentation is taken into account when grading the finished work. The ability of the learner to present and defend the material is also of significant importance. The marks for the project are apportioned as follows:

Process (20%)

The Project is a work in progress and should be conducted in a professional manner. This means that goals and deadlines are based on a project plan. Marks must be awarded for meeting these goals and deadlines. A project log must be maintained by each learner.

The supervisor also awards marks to the learner based on the learner's commitment and work ethic, and their ability to meet deadlines and carry out the work involved in completing the task.

Product (40%)

The goal is to deliver a product that meets the requirements laid out in the project specification. Each learner is required to present / demonstrate their project work and defend the work they have completed. This may take the form of a software demonstration or a short lecture depending on the nature of the project.

Note: By product we mean a working software application, an original algorithm or proof of concept.

Project Report (40%)

The report describes the research, design and implementation of the project. The report is assessed on a number of different levels.

- **Level of Complexity:** This measures the originality, depth of knowledge and understanding of the learner.
- **Organisation and Structure:** This measures the ability of the learner to organize the material and present it in a clear, comprehensive and logical manner.
- **Scope/Quantity:** This measures the quantity of work completed giving due regard to the depth and difficulty of the material involved.

There are three levels of Pass.

Hons1 (70%+) This grade is only awarded to learners who have mastered an extremely challenging project, have produced a comprehensive body of work and have demonstrated an ability to analyse and apply a body of knowledge.

Hons2 (60%+) This grade is awarded where substantial mastery and application of a body of knowledge in a given problem area is demonstrated by the learner.

Pass (40%+) This grade is awarded for a straightforward project where the learner demonstrates reasonable analytical skills and shows that they can apply a body of knowledge in a particular problem domain.