Appendix 1: PROGRAMME SPECIFICATION

MSc. Information Technology Programme Specification

Table 10.3.1 M.Sc. IT PROGRAMME SPECIFICATION DOCUMENT

1. Qualification	2. Programme Title	3. UCAS Code	4. Programme Type
MSc	**Information Technology**	NA	**Full-Time, Part-Time**

5. Main Purposes and Distinctive Features of the Programme

The programme provides an advanced course of instruction in the techniques, technologies and methods used in managing and implementing information technology systems. To this end its features are:

- **To develop at masters level the ability to contextualise computing systems and their management within a wide environment.**
- **To provide opportunity for systematic understanding and insights into current and new problems in IT systems, theory and practice.**
- **To research the applicability of recent IT developments in an innovative environment.**
- **To provide technical depth and intellectual challenge to aid understanding and appraisal of IT systems and their management.**

6. What a graduate should know and be able to do on completion of the programme

Knowledge and understanding in the context of the subject(s)

Students of the programme should know about:

- ***The integration of knowledge of information technologies into functioning solutions, and the evolution of standards.***
- ***How the stages of projects are managed within differing methodologies, and the implications for adherence to quality assurance standards.***

The nature of development change within the industry, and the impact that this has on the management and implementation of IT Systems.

The management of working IT environments.

The application with understanding of established techniques and how they are used to advance the subject.

Cognitive skills in the context of the subject(s)

Students of the programme should be able to:

- ***Solve routine and non-routine problems within the development and operation of IT systems.***
- ***Analyse and interpret information from different sources to support long-term strategic planning.***
- ***Interpret findings from data/information***

Subject-specific practical/professional skills

Students of the programme should be able to:

- ***Plan, analyse, design and manage IT systems.***
- ***Manage a working IT environment.***
- ***Prepare appropriate documentation and deliver relevant presentations and reports.***
- ***Use a selection of development tools/environments to produce prototypes of systems, and functioning multimedia systems.***
- ***Design systems that when implemented would be efficient in operation and effective within the domain of their implementation and reflect systems theory.***

Other skills (e.g. key/transferable) developed in subject or other contexts

Students of the programme should be able to:

- ***Communicate technical information effectively orally, and in writing, to a diverse audience.***
- ***Demonstrate capacity to pursue independent study and life long learning.***
- ***Exploit a range of advanced IT resources***

systems. • *Manage aspects of the system life cycle by applying critical judgement and analysis to their work and work of others.*	• *Demonstrate research skills of information retrieval from primary and secondary sources, critical analysis and synthesis.* • *Exhibit effective time management, organisational and team working skills* • *Interface appropriately with clients and business units.*

7. Qualities, Skills & Capabilities Profile

A Cognitive	B Practical	C Personal & Social	D Other
Applied problem solving	**Information and data processing**	**Team working**	**Awareness and appreciation of leading technological advancements in computing**
Exploration, analysis, critical judgement and synthesis	**Qualitative and quantitative analysis**	**Self development and motivation**	**Presentation techniques**
Creativity and originality	**Acquire and use research and scholarship skills for masters level study**	**Ability to work in teams with diverse backgrounds**	**Information gathering**
Strategic design and management	**Design and analysis using hardware and software**	**Oral and written communication**	
Relate theory to professional practice	**Writing and project management**	**Organisation and management**	

8. Duration and Structure of Programme/Modes of Study/Credit Volume of Study Units
(1 Year full-time; 3 years part time). MSc = 180 credits, Postgraduate diploma = 120 credits and Postgraduate Certificate = 60 credits.

Single Subject

	Core Modules (20 credits)	**Options** (20 credits)	**Project** (60 credits)
M Level Modules	**Intelligent Systems** **Enterprise Infrastructures** **IT Projects and Services** **Systems Theory & Practice**	**Internet Security** **Modern Database Systems** **Object Oriented Programming Approaches** **Web Systems Development** **Independent Study (10 credits)**	M.Sc. Project

9. Learning, Teaching and Assessment Strategy	10. Other Information ***(including compliance with relevant University policies)***

Learning and Teaching Methods

Each of the taught modules includes formal timetabled periods of study enabling directed learning, support and review.

Active learning is promoted via a range of sessions namely: Lectures, tutorials, seminars, group work, computer practical, project and Case study analysis

Assessment Methods

Assessments are linked to learning outcomes of each module. Assessments range from: Seen and unseen examinations, seminar presentations, creation of programs and systems, reports, project.

Assessment Classification System

Pass mark for individual assessments – 40%
Pass mark for module average – 40%
MSc award based on accumulation of 6 M level modules (120 credits) + Project 60 credits). An award with Distinction will be given to students who meet the award for M.Sc. with an aggregate mark >=70% across all modules.

Date programme first offered

September 2004

Admissions Criteria

Standard Requirements

A degree in Computing, Software Development, Internet Programming, Computer Science, Engineering/Science (with a substantial amount of computing)
Evidence of competence in English for International applicants is required. Overseas applicants are required to have International English Language Testing System (IELTS) at the level specified by the University's Centre for International Relations at the time of entry for a master of science programme. This is currently set at IELTS level 6.0 for postgraduate studies. Qualified students who do not meet the required level of English Language skills will be asked to undertake and successfully complete appropriate English Language course before entry to these programmes.

Non Standard Entry

Alternative qualifications and/or substantial experience demonstrating computing knowledge at Honours degree level which meets with demonstrable skills outlined in section 3.2 Entry Requirements of the Course Document.

Indicators of Quality and Standards

The programme has been (or will be) validated by the University's accreditation procedure which includes external subject specialists. The programme is subject to annual quality enhancement planning and annual feed through into the departmental Programme Evaluative Report. All assessed work is available for inspection by an External Examiner appointed to the programme.