MRes Informatics
For students entering Part 1 in 2011/2

Awarding Institution: University of Reading
Teaching Institution: University of Reading
Relevant QAA subject Benchmarking group(s):
Faculty: Henley Business School at Univ of Reading
Programme length: 1 years
Date of specification: 23/Aug/2011
Programme Director: Prof Kecheng Liu
Programme Advisor:
Board of Studies: Informatics MScs
Accreditation:

Summary of programme aims

The programme aims to offer opportunities to local and international students entering postgraduate education at high standards. It will prepare students for effective management and utilisation of information resources in various domains such as business and management, biology and bio-diversity, computing, construction management, financial prognosis, and healthcare at postgraduate level. The programme will enhance students' existing knowledge and skills in key technological and business areas. Students will be able to apply their knowledge and skills in planning, management, design and implementation of IT based solutions to different application domains. Emphasis will also be placed on identification of relevant research topics, conducting independent research and publish their work.

Transferable skills

In parallel to subject competence that students are required to acquire from their programme of study, they are expected to enhance their research ability, team work, communication skills, information handling, problem-solving, project management, creativity, and analytical skills. This is achieved through a mix of different methods of teaching and learning (lecture/practical, classroom-based/problem-based, theory-oriented/skill-focused) and different methods of assessments (examination/coursework). A key part of the study programme is the MRes dissertation project in which students will be trained and assessed as specified in the module specification in most of the transferable skills (e.g. independent research, critical analysis and project planning and management).

Programme content

A student on the MRes programme must complete all compulsory modules. In addition, optional modules should be undertaken from any application domains to make up the rest of the credits required, and to fill the knowledge and skills gap so that a dissertation of the chosen area can be pursued effectively.

Compulsory Modules

Code	Title	Credits	Level
INMR61	Applied Informatics	20	7
INMR62	Research Methods	20	7
INMR63	Dissertation	100	7

Students must choose two optional modules to the value of 40 credits. A complete list of optional modules is available from the Programme Director, and a list of current options can be found in the relevant Programme Handbook. There is no guarantee that in any one year all modules will be available. New optional modules may also be added.

An exemplary list of optional modules include IT Project Management, Business Domain and Requirements Analysis, Systems Analysis and Design, Organisational Design and Management of Information, Enterprise IT Architecture, Business Intelligence and Data Mining, Social and Legal Issues in Computers and Communication, Enterprise Resource Planning Systems, Concepts, Strategy and Management (CE), and Biodiversity Information Systems (PS).

IN modules are offered by Informatics Research Centre. Other modules are offered by other Schools: PS - School of Biological Sciences; CE - School of Construction Management & Engineering.
Part-time or modular arrangements

This programme may be studied part-time over three consecutive years. This programme can be started in October or in January.

Progression requirements
A student may undertake an optional module at any time, without necessarily being constrained by the completion of core modules.
The dissertation project can commence after satisfactory completion of the Research Methods module.

Assessment and classification
All the modules may be delivered by a mix of lectures, tutorials and practicals. Each module will be delivered in a week of concentrated teaching, followed by a week of supported learning. The support learning will be in forms of email, bulletin board, electronic discussion forum and employment of other e-learning technologies. An examination of a module will take place at the end of each module.

Two exit points are built into the programme, and a student will be awarded the highest qualification he/she has achieved. A Postgraduate Certificate (PgCert) requires 60 credits; an MRes requires 180 credits including a dissertation.

Dissertation projects will be conducted by students individually under staff's supervision.

Mark Interpretation
70 - 100% Distinction
60 - 69% Merit
50 - 59% Good standard (Pass)

Failing categories:
40 - 49% Work below threshold standard
0 - 39% Unsatisfactory Work

For Masters Degrees
To pass the MRes students must gain an average mark of 50 or more overall including a mark of 50 or more for the dissertation. In addition the total credit value of all modules marked below 40 must not exceed 30 credits and for all modules marked below 50 must not exceed 55 credits.
Students who gain an average mark of 70 or more overall including a mark of 60 or more for the dissertation and have no mark below 40 will be eligible for a Distinction. Those gaining an average mark of 60 or more overall including a mark of 50 or more for the dissertation and have no mark below 40 will be eligible for a Merit.

For PG Certificate
To pass the Postgraduate Certificate students must gain an average mark of 50 or more. In addition the total credit value of all modules marked below 40 must not exceed 10 credits.

Admission requirements
Entrants to this programme are normally required to have obtained a 2.1 Honours Bachelors Degree or equivalent in related fields; or equivalent experience, subject to the University's APEL rules.

For an applicant whose first language is not English, either a university degree taken in English, or an IELTS 6.5 or equivalent is required. Exceptionally, if an applicant has worked in an English language environment, an English test, organised by the University's CALS, may be conducted in lieu of formal qualifications.

Admissions Tutor:

Support for students and their learning
University support for students and their learning falls into two categories.   Learning support is provided by a wide array of services across the University, including: the University Library, the Student Employment, Experience and Careers Centre (SEECC), In-sessional English Support Programme, the Study Advice and Mathematics Support Centre teams, IT Services and the Student Access to Independent Learning (S@il) computer-based teaching and learning facilities. There are language laboratory facilities both for those students studying on a language degree and for those taking modules offered by the Institution-wide Language

Programme. Student guidance and welfare support is provided by Personal Tutors, School Senior Tutors, the Students' Union, the Medical Practice and advisers in the Student Services Centre. The Student Services Centre is housed in the Carrington Building and offers advice on accommodation, careers, disability, finance, and wellbeing. Students can get key information and guidance from the team of Helpdesk Advisers, or make an appointment with a specialist adviser; Student Services also offer drop-in sessions and runs workshops and seminars on a range of topics. For more information see www.reading.ac.uk/student

Career prospects

This Masters programme is designed to be industry oriented with the possibility of allowing students to carry out in-depth academic enquiries. The prospective students may be fresh graduates or experienced professionals. They can undertake the programme of study on part-time or full-time bases. Given these, it is expected that graduates from this programme will able to take the following responsibilities either in industry or academia: systems manager, technical manager with IT expertise, IT operation manager, system analyst, software engineer, application architect/developer, project leader, researcher/educator/trainer.

Opportunities for study abroad or for placements

Placement is not required in the programme of study, though students can conduct their dissertation projects in business organisations, which needs to be arranged by the students.

Programme Outcomes

Knowledge and Understanding

A. Knowledge and understanding of:

1. Information Systems (IS) planning and management:
   1.1 IS architecture and components
   1.2 IS development and methodologies
   1.3 Business processes and IS design
   1.4 Project management and planning
   1.5 Business intelligence analysis
2. Practice
   2.1 Problem identification and critical analysis
   2.2 Design, development and evaluation
   2.3 Management and organisation
   2.4 Professionalism and ethics
   2.5 Commercial and industrial exploitation
3. Communication and interaction
4. Theory

Teaching/learning methods and strategies

The course concentrates on aspects 1 and 2. All modules collectively will cover the identified scope. Introduction to new concepts as well as the use of practical case studies will enable students to think critically.
Aspects 3 and 4 are covered within other modules such Research Methods and Informatics. Students of MRes Informatics place more emphasis on Theory through research in the dissertation project.

Assessment
Knowledge is tested through a mixture of formal examinations and practical work.
The dissertation project will also assess the knowledge, understanding and ability of applying them in solving problems.

Skills and other attributes

B. Intellectual skills - *able to:*

1. Demonstrate knowledge and understanding related to aspects outlined above
2. Apply such knowledge and understanding to the formulation of IS solutions
3. Recognise and analyse criteria and specifications appropriate to a specific problem
4. Critically evaluate and test a computer based solution to business problems
5. Reflect and communicate
6. Recognise and conform to appropriate professional, ethical and legal practices

Teaching/learning methods and strategies

1 and 2 as above.
3, 4 and 5 will be taught as part of the core modules, and will be exercised in the dissertation. The Options will also address these aspects.
6 will be taught in the modules on Professional Issues and Research Methods.

Assessment
These skills are tested through a mixture of formal examinations and practicals. The dissertation will also assess these skills.

C. Practical skills - *able to:*

Teaching/learning methods and strategies

1. Analyse business problems, specify business requirements
2. Specify, design and construct IS solutions
3. Evaluate the solutions
4. Recognise risks and safety aspects
5. Communicate, present and disseminate the solutions

1, 2, 3 will be covered both in the business and IT related modules. Both are present as the cores.
3 will be also addressed in the Research Methods module.
4 and 5 will be covered in the Research Methods module and the Dissertation Project.

Assessment
Skills 1 to 5 will be assessed by a mixture of practical work and examination.

D. Transferable skills - *able to:*

1. Independent research, including planning and management
2. Literature research
3. Time management
4. Critical analytical skills
5. Communication and presentation in a professional manner
6. Technical documentation in English

Teaching/learning methods and strategies

1 will be covered in all modules as each student is required to conduct a substantial amount of independent study before and after the intensive study blocks.
1, 2, 3 and 4 will be addressed in the dissertation project.
5 and 6 will be addressed in the Research Methods Module and the Dissertation Project.
6 will be addressed in all modules, especially in the course work.

Assessment
All will be assessed by examination, practical work and dissertation.

Please note - This specification provides a concise summary of the main features of the programme 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 can be found in the module description and in the programme handbook. The University reserves the right to modify this specification in unforeseen circumstances, or where the process of academic development and feedback from students, quality assurance process or external sources, such as professional bodies, requires a change to be made. In such circumstances, a revised specification will be issued.