MSc Information Systems

Programme Specification

Primary Purpose:
Course management, monitoring and quality assurance.

Secondary Purpose:
Detailed information for students, staff and employers. Current students should refer to the related Course Handbook for further detail.

Disclaimer:
The University of Portsmouth has checked the information given in this Programme Specification and believes it to be correct. We will endeavour to deliver the course in keeping with this Programme Specification but reserve the right to change the content, timetabling and administration of the course whilst maintaining equivalent academic standards and quality.

Contents

Programme Specification

1. Named Awards

MSc Information Systems

2. Course Code (and UCAS Code if applicable)

C0054 F and P

3. Awarding Body

University of Portsmouth

4. Teaching Institution

University of Portsmouth

5. Accrediting Body

None at present

6. QAA Benchmark Groups

Computing

7. Document Control Information

Release 2.6 October 2008.
Release 3.0 October 2011

8. Effective Session

2012-13

9. Author

Revised by Dr Jonathan Crellin

10. Faculty

Faculty of Technology

11. Department

School of Computing

12. Educational Aims

The course aims to equip students to work professionally within an information systems environment. In particular, the Programme will aim to develop reflective academic skills and provide technical knowledge and skills associated with the development and management of Information Systems and related software and equipment. Students will develop intellectual, analytical and problem solving skills, in order to develop professional and interpersonal abilities. Students should be able to undertake the full range of technical tasks associated with information systems applications supported by the knowledge of the information requirements for these systems. In addition, and more generally, the course aims to:

- Provide a challenging, stimulating and self-rewarding study environment.
- Accommodate student needs in relation to maximising their career potential by enabling them to develop knowledge, understanding and skills in their chosen subject area.

13. Reference Points

This section sets out the reference points that have been consulted in the development of the course and which demonstrate that the programme has currency and relevance within the academic, professional and employer communities:

- University of Portsmouth Curricula Framework Document (March 2011)
- The scholarship and research expertise of academic members of staff
- QAA Code of Practice for the Assurance of Academic Quality and Standards in Higher Education
- National Qualifications Framework
- Subject Benchmark Statements (SBS).

14. Programme Learning Outcomes:

A. Knowledge and Understanding of:

1. The applicability, implementation and management of information systems (IS).
2. The World Wide Web and its uses and resources.
3. Technical aspects of IS – networks, programming concepts, methodologies.
4. Human aspects of IS – HCI, human resources.
5. Development, planning management of IS projects.
6. Ethical issues, codes of conduct and professional practice; intellectual property, copyright.

Learning and Teaching Strategies and Methods

Core knowledge will be acquired through computer laboratory work and taught classroom based lectures and seminar sessions that include the use of video and case studies. Individual learning will be supported by directed reading, study guides, case studies, laboratory sessions, and the preparation of journal article reviews.

Assessment

Is both formative and summative. Core knowledge will be tested largely by coursework and unseen examinations. Coursework may be assessed through presentations, reports, essays and reviews of journal papers. Software design and related activities will be assessed by assignment work, reports, tests and simulation exercises.

B. Cognitive (Intellectual or Thinking) Skills, able to:

1. Develop general abilities of an intellectual, analytical problem-solving nature related to technology.
2. Critically evaluate information needs against the available technology.
3. Make appropriate decisions as to relevant IS technologies to use in given situations.
4. Plan, manage, undertake and report on a significant IS project.

Learning and Teaching Strategies and Methods

Cognitive skills will be developed through the class sessions and through the computer laboratory sessions based on case studies. The use of case studies, worked examples and journal papers helps prepare students to think critically and be aware of technological developments and their impact on Information Systems applications. The ability to plan and manage software development against a given brief will be addressed during case studies and coursework. Abilities related to dealing with complex projects will be acquired through the PJE60P Project unit, and through a range of practical sessions on other units.

Assessment

Seen and Unseen time constrained assessments plus the use of coursework assignments will be the main methods. In addition extended review articles, research presentations and laboratory sessions will be used to develop critical skills.

C. Practical (Professional or Subject) Skills, able to:

1. Write appropriate computer code to accomplish given tasks.
2. Provide appropriate technical solutions to IS problems.
3. Provide appropriate human solutions to IS problems.
4. Design and implement IS applications to satisfy a given brief.

Learning and Teaching Strategies and Methods

Subject-specific skills will be developed through the use of case studies and analysis of case histories. Laboratory based exercises will be used to develop technological skills. The use of case studies, worked examples, reports and journal papers helps prepare students to think critically about their professional role and develop innovation from scholarly literature.

Assessment

Software-related activities will be assessed by observation, reports and the building of suitable artefacts. Other skills will be assessed by the use of case studies, class reports and time-constrained investigations.

D. Transferable (Graduate and Employability) Skills, able to:

1. Communication: communicate effectively in writing, speaking and in appropriate forms of presentation.
2. Communication: read and understand complex documents related to software products and requirements.
3. Information Technology: Use IT to assist in presentations, demonstrations and communications.
4. Application of Number: deal with numerical data as might be found in typical business oriented applications.
5. Problem Solving: explore complex domains and develop viable solutions.
6. Improving Own Learning: build on previous achievements in order to generalise.
7. Working with Others: ability to work collaboratively but also be distinctly individual.
8. Personal Skills Development (All KS): strategically plan and successfully manage dynamically complex work.

Learning and Teaching Strategies and Methods

Communications skills and problem solving skills are developed, extended and refined in Supervised Work Sessions which form part of the unit assessments for a number of core units. Application of Number is developed via case studies and research exercises. Skills directed towards Improving own learning and performance are identified, discussed and developed in the PJE60P Project unit and by extensive and detailed feedback to students following assessments. Supervised Work Sessions and group assignments for assessment provide opportunities for the development of skills in Working with Others; such skills are further refined during the project Unit.

Assessment

The ability to work effectively in teams will be assessed through group work and reports marked by the tutor or by peer observation. Individuality will be assessed by presentations and by individual assignments and reports. Personal Skills Development will be assessed by means of extended project work. Other skills will be demonstrated and assessed as part of almost all units.

15. Course Structure, Progression and Award Requirements

- A Master of Science award requires 180 credits. The award may be given with Merit for good performance and Distinction for outstanding performance.
- A Postgraduate Diploma award requires 120 credits. The award may be given with Merit for good performance Distinction for outstanding performance.
- A Postgraduate Certificate award requires at least 60 credits from taught units.
- There will be 4 core 30 credit units.
- A full time route is offered over 12 months, a part time route is offered over 3 years
- The projects will involve industrially sponsored projects where possible.

16. Employability Statement

The MSc Information Systems award demonstrates that a student has a good general understanding of the computer industry, and can work in many different computing and information technology roles with a company. The breadth of the material covered is the principle strength of this course, with current problems and challenges being presented to students in a range of different topics. The project provides an opportunity for students to work on a problem with a client, either external to the University or with an academic within the University (as well as with their project supervisor). Personal Development Planning during personal tutoring is used to help the student develop their employment qualities, and to clearly understand their personal strengths and weaknesses in employment (as well as study) terms.

17. Support for Student Learning

- The Course is managed by a Course Leader.
- Extensive induction programme introduces the student to the University and their course.
- Each student has a personal tutor, responsible for pastoral support and guidance.
- University support services include careers, financial advice, housing, counselling etc.
- The Academic Skills Unit (ASK).
- The Additional Support and Disability Advice Centre (ASDAC).
- Excellent library facilities.
- The University of Portsmouth has consistently been awarded an excellent rating for student support and guidance in a number of Quality Assurance Agency inspections.
- Student course and unit handbooks provide information about the course structure and University regulations etc.
- Feedback is provided for all assessments.
- Personal Development Planning (PDP) for all awards.

18. Admissions Criteria

A. Academic Admissions Criteria

Standard University rules apply and this will normally mean that candidates are in possession of an honours degree with at least a classification of 2.2 and in a relevant discipline. All other qualification or experience presented must be forwarded to the Head of School for a decision on acceptance. Evidence of competence in the use of the English Language must be demonstrated, typically by an IELTS score of 6.0 where candidate's first language is not English.

B. Disability

The University makes no distinction in its admissions policy with regard to disability and will endeavour to make all reasonable adjustments in order to make it possible for students to study at Portsmouth on a course of their choice.

19. Evaluation and Enhancement of Standards and Quality in Learning and Teaching

A. Mechanisms for Review and Evaluation

- Course Leader's Annual Standards and Quality Evaluative Review.
- Head of School's Annual Standards and Quality Evaluative Review.
- Unit and Course Level student feedback considered at Board of Studies.
- Unit Assessment Board consideration of student performance for each programme.
- Annual Standards and Quality Reports to Board of Studies, including consideration of Subject and Award External Examiner Reports.
- Periodic Programme Review.
- Student Representatives and Student/Staff Consultative Committees.
- National Student Survey.
- Staff Performance and Development Review.
- Peer Review and Development Framework.

- Faculty Learning and Teaching Committee.

B. Responsibilities for Monitoring and Evaluation

- Unit Co-ordinators for unit content and delivery.
- Course Leader for day-to-day running of course.
- Board of Studies with overall responsibilities for operation and content of course.
- Head of School.
- Associate Dean (Academic).
- Associate Dean (Students).
- Quality Assurance Committee.
- Unit, Award and Progression Board of Examiners.

C. Mechanisms for Gaining Student Feedback

- Student Representation on Board of Studies.
- Student Staff Consultative Committees.
- Unit and Course level student feedback questionnaires.
- University participates in external student surveys, eg National Student Survey (NSS), Postgraduate Research Experience Survey (PRES) and International Student Barometer (ISB).

D. Staff Development Priorities

- Academic staff undertake activities related to research, scholarship, teaching and learning and student support and guidance.
- Annual staff performance and development reviews match development to needs.
- Managers undertake a variety of management development programmes.
- New academic staff required to undertake PgCert Learning and Teaching in Higher Education.
- All academic staff encouraged to seek Higher Education Academy membership.
- Academic staff new to teaching required to undertake Initial Professional Development Programme (iPROF).
- Support Staff are encouraged to attend short courses in areas such as minute taking, and specific IT packages.

20. Assessment Strategy

Level 7 students should show a professional approach to work and research, and demonstrate that they have: developed independence of thought; a high level of intellectual rigour and consistency; excellent academic/ intellectual skills; considerable creativity and originality; and excellent research skills.

A variety of assessment styles are used in different units. Practical skills are assessed in coursework and supervised work sessions. In these students need to demonstrate the ability to reflect on the work, not simply report it. The assessments are designed to allow appraisal of skill, and for the students to demonstrate a wider contextual understanding of what they are doing. Ethical considerations are often directly assessed in units. Supervised Work Sessions provide an opportunity to demonstrate effective professional skills, working in teams (characteristic of many areas of the computing industry), and communicating and reporting. The Project is the opportunity for students to draw together skills and knowledge acquired from different taught units, and use them to develop or research an IS solution.

21. Assessment Regulations

Standard university rules apply (see Assessment and Regulations).

22. Role of Externals

Subject External Examiners who will:

- oversee unit assessment and usually attend Unit Assessment Boards;
- review unit assessment strategy;
- sample assessment artefacts;
- present report to Unit Assessment Boards.

Award External Examiners (usually also a Subject External Examiner) who will:

- oversee and attend Award/Progression Boards;
- scrutinise and endorse the outcomes of assessment;
- ensure that the standard of the award is maintained at a level comparable with that of similar awards elsewhere in the United Kingdom.

23. Indicators of Standards and Quality

A. Professional Accreditation/Recognition

Exemption (Certificate, Diploma & Diploma Project) from the BCS Professional Examination and accredited as partially meeting the educational requirement for CEng/CSci registration, for a period of five intakes, from the 2004 intake up to and including the 2008 intake.

B. Periodic Programme Review (or equivalent)

Approved March 2008

C. Quality Assurance Agency

QAA Institutional Audit, December 2008, 'broad confidence' (for full report see QAA Institutional Audit: University of Portsmouth 2008).

D. Others

None.

24. Other Sources of Information

Other sources of information may be found in:

- Course Approval Document.
- Student Handbook.
- University of Portsmouth Curricula Framework.
- University of Portsmouth Undergraduate Prospectus.
- Assessment Regulations.
- University of Portsmouth (http://www.port.ac.uk/) and http://www.port.ac.uk/departments/academic/comp/) websites.

Unit Assessment Map

UNITS						COURSEWORK				EXAMINATION			
Level	Name	Code	Credit	Delivery	C/O	Total%	Type of Artefact	Duration/ Max Length	Weighting%	Total%	Open/ Closed	Duration (hrs)	Weighting%
7	Interaction in Computer Systems	P24436	30	Year	C	100	1 CW reflective report 2 SWS system/system issues 3 SWS user/system issues	2,500 words 750 words 750 words	50% 25% 25%				
7	Masters Engineering Project (PJE60)	U22244	60	Year	SCO	100	Dissertation Research and Professionalism Presentation	Report, 10-12K words Essay, 3k words Oral presentation (20 minutes)	80% 15% 5%				
7	Masters Study Project (PJS60)	U22445	60	Year	SCO	100	Dissertation Research and Professionalism Presentation	Report, 10-12K words Essay, 3k words Oral presentation (20 minutes)	80% 15% 5%				
7	Information Systems Development (INSYD)	P22242	30	Sept-Dec	C	100	1 CW database design 2 SWS requirements management 3 SWS analysis and design	4000 words 1000 words 1000 words	60% 20% 20%				
7	Information Systems Management (INFMAN)	P22437	30	Jan-June	C	100	1 CW project management critique 2 SWS project problem solving 3 SWS prototype artefact	3000 words 1500 words 1500 words	40% 30% 30%				
7	Web Development (WEBDEV)	P22439	30	Year	C	100	1 CW research based essay 2 SWS, web implementation 3 SWS, website management	2500 words 750 words 750 words	40% 30% 30%				

Unit Learning Outcomes Map[1]

UNITS																										
Level	**Name**	Code	Credit	Delivery	C/O	A1	A2	A3	A4	A5	A6	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4	D5	D6	D7	D8
7	Information Systems Development	P22242	30	Sept-Dec	C	Y		Y		Y	Y	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	
7	Masters Engineering Project (PJE60)	U22244	60	Year	SCO	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y		Y	Y	Y	Y
7	Masters Study Project (PJS60)	U22445	60	Year	SCO						Y	Y	Y	Y	Y	Y	Y			Y	Y	Y		Y	Y	Y	Y
7	Interaction in Computer Systems	P24436	30	Year	C		Y	Y	Y	Y		Y	Y	Y		Y			Y	Y	Y	Y	Y	Y	Y	Y	
7	Information Systems Management	P22437	30	Jan-June	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y		Y	Y	Y	
7	Web Development	P22439	30	Year	C	Y	Y	Y	Y	Y		Y	Y	Y		Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	

[1] A = Knowledge and Understanding; B = Cognitive (Intellectual) Skills; C = Practical (Subject Specific) Skills; D = Transferable Skills