### PROGRAMME SPECIFICATION

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<tr>
<th>Awarding body/institution:</th>
<th>Queen Mary, University of London</th>
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<td>Teaching institution (if different from above):</td>
<td>Queen Mary, University of London</td>
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<tr>
<td>Name of the final award and Programme title:</td>
<td>MSc Computing &amp; Information Systems</td>
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<tr>
<td>Duration of Study/Period of Registration</td>
<td>1 year FT  2 years PT</td>
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<td>UCAS code:</td>
<td>G5U5</td>
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<tr>
<td>QAA Benchmark Group</td>
<td>Computing</td>
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<tr>
<td>Academic Department/s involved in programme delivery</td>
<td>School of Electronic Engineering &amp; Computer Science</td>
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If accredited by a professional/statutory body, please give the name, date of last accreditation visit, approximate date of next visit and details of exemptions that will be given to QMUL graduates.

| None |

### Criteria for admission to the programme

A First or Upper Second Class Honours degree either in a subject not related to Computer Science and or with less than 50% of the modules in Computer Science subjects. Candidates should normally have a GPA of greater than 3.2. Evidence of mathematical ability equivalent to UK GCSE grade B

Version 4 – 21.04.2011
Aims of the programme

This is an intensive conversion Masters course. The programme has a strong practical character concentrating on software engineering, computer systems and applications. Its aim is to provide a foundation programme in computing for highly motivated graduates who have little or no previous experience. On completion students are readily able to find employment as software designers and engineers in various areas of industry and commerce.

Learning outcomes for the programme

The programme provides opportunities for students to develop and demonstrate knowledge, understanding and skills in the following areas:

- in-depth experience of at least one programming language in common use in industry (currently Java)
- appreciate the importance of simplicity, robustness and systematic organization in program design
- knowledge of the software life-cycle, software design methodologies and software development tools
- experience of developing large-scale software systems
- follow through all the stages of the software development process
- work effectively as a member of a software engineering team
- knowledge of project management skills
- knowledge of computer systems components and organization
- understanding of database principles and techniques and they role they play in information
- management knowledge and understanding of further selected topics in software engineering, computer systems or applications, depending on the options chosen

Teaching, learning and assessment strategies

All taught courses involve lectures, problem-solving courseworks and practical sessions. Lectures are used to introduce principles, methods and techniques and, through the use of examples, to illustrate how they can be applied in practice. Courseworks and additional exercises develop the students' own skills in problem-solving, analysis, design and implementation. These give students practical experience of building computer systems and applications using a range of tools and techniques. Practical sessions provide students with the guidance and help required to achieve this. These sessions take the form of programming laboratories, design studios and project consultancy meetings run by academic staff with the assistance
of research students. On all our courses, students mostly 'learn through doing' and can expect to spend far longer in the teaching laboratory than in lectures.

The project is supervised by an academic member of staff with whom there are weekly consultancy meetings. These are used for students to report on their progress, discuss design alternatives and plan their future work. These reinforce and develop the ability to communicate technical ideas clearly and effectively.

The majority of taught courses are assessed through a combination of written examination and practical coursework. Coursework is often examined through live demonstrations and orals. Some courses also include in-term tests as a component in assessment. The project is examined on the basis of a written report and oral presentation.

Programme structure(s) and requirements, levels and modules

The taught component of the programme consists of a core programme of five modules and a range of advanced options from which students select two. Each taught module is 15 credits (Level 7) unless stated otherwise. The individual project is undertaken during the summer months and is worth 60 credits.

**SEMESTER A**

*Core Modules*
- AMCM067 Information Technology Programming (30 credits)
- AMCM235 Software Engineering
- AMCM310 Systems Analysis

**SEMESTER B**

*Core Modules*
- AMCM225 Database Systems
- AMCM235 Software Engineering (contd.)

*plus 2 options from*
- AMCM326 Artificial Intelligence
- AMCM068 Business Information Systems
- AMCM052 Entrepreneurship in Information Technology
- AMCM224 Graphical User Interfaces
- AMCM318 Interaction Design
- AMCM055 Software Risk Assessment
- AMCM069 Advanced Study Project
- ELEM406 Network Programming

*Core Module*
- AMCM025 Dissertation

*IT Project*

The individual IT Project Dissertation typically involves the specification and development of a substantial software system fulfilling a real need. Students are encouraged to integrate their newly acquired computing knowledge and skills with
those from their previous background. Industry-related projects are both possible and desirable. The project reinforces and extends practical software design skills and knowledge and presents an extended opportunity for students to demonstrate their practical capabilities in computing.

Quality assurance mechanism (please include details of: SSLC meetings, student feedback mechanisms, personal tutor arrangements, programme induction, programme review and monitoring.)

1 Covered by the School of Electronic Engineering & Computer Science SSLC; graduate student representative
2. Students feedback questionnaires for taught courses and peer review.
3. Personal supervisor for project.

Employers Links
Please provide details of any links with employers e.g.
- Details of advisory panels that include current or potential employers;
- Organisations that regularly employ graduates from this programme and the roles that graduates undertake.
- Student prizes donated by organisations that may offer employment to graduates from this programme.

If there are no links with employers consider the learning outcomes and transferable skills and explain how these might be used to inform employers about the qualities and skills a graduate from this programme might be expected to have.

The School of Electronic Engineering & Computer Science has a wide range of industrial contacts secured through research projects and consultancy, our Industrial Experience programme and our Industry Panel.

The Industry Panel works to ensure that our courses are state of the art and match the changing requirements of this fast moving industry. The Panel includes representatives from a variety of Computer Science oriented companies ranging from SMEs to major blue-chips. These include: Microsoft Research, Royal Bank of Scotland, BT Labs, Oaklodge Consultancy, Intel Research, The Usability Company, Hewlett Packard Labs and Arclight Media Technology Limited

Recent graduates have found employment as programmers, Systems Analysts, Software Engineers, database developers, IT consultants and web developers with well known multinational companies throughout the UK and Europe, the Americas and Asia,

Merril Lynch, Microsoft, Nokia, Barclays Capital, Logica, JPMorgan and Bear Sterns are among the organizations that have recently employed graduates of EECS

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