

MSci in Computing Science MSci in Software Engineering MSci in Mobile Software Engineering

Information Session 12 March 2012

What is the MSci in Computing Science?

- "The Master of Science degree should not be confused with the more recent MSci, or Master in Science degree, now offered by UK institutions. This is an extended undergraduate degree, with honours awarded, and is intended to better prepare students for postgraduate study." (wikipedia)
- i.e., the Master in Science, or MSci, is a <u>research-oriented</u> first degree qualification at Masters level
- Relatively rare in the past in Computing, but becoming more common
 - Imperial College London
 - Birmingham University
 Kings College London
 Lancaster University

 - Queen Mary University of LondonUniversity College London

 - Aberdeen University

Key Features of the GU SoCS MSci

- · 5 years of study
 - completion in June
 - hence, shorter than BSc + MSc
- · Focussed on research training
- · Entry possible in L3/L4

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Course Team - Course Director: Wim Vanderbauwhede - Project Coordinator: Gethin Norman - Administrator: Teresa Bonner **Funding** • The MSci is eligible for SAAS and Student Loan funding If eligible, MSci students will receive support for all five years Students entering during year 4 will have to inform SAAS that this is not their final year of study This makes the MSci a more attractive alternative than a conventional 1 year MSc for students currently supported by SAAS **MSci Structure** Normally, 610 credits over 5 years 120 credits must be Level M Levels 1 & 2 as usual Levels 3 as (Mob)SE3H or CS3H (normally) In 4th year Electives: 80 credits including up to 20 credits level M Level 4 project (40 credits)

In 5th year - In 1st semester

In 1st semester
Research Readings in Computing Science (20 credits)
Research Methods and Techniques (10 credits)
Elective (10 credits)
Project Proposal module (20 credits)
In 2nd semester
Advanced Research Readings in Computing Science (10 credits)
Project (60 credits)

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Relationship to Other SoCS Degree Programmes

- Single Honours CS students are eligible for MSci in Computing Science
- (Mob)SE students are eligible for MSci in (Mob) Software Engineering
 - Must finish work placement
 - Will receive credit for work placement

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Relationship to Other UG Degree Programmes

- · Combined Honours
 - Combined MSci with Mathematics or Physics is available
 - · Similar to basic MSci except
 - · Project may be in either Dept
 - · Electives come from both Departments
 - Some CS mandatory modules are offered at a lower credit rating
 - No other combined options are currently available

Admissions

- Level 3
 - Students enter the course by application during the second half of the year

 - Applications must be lodged by Monday 31 May
 Entry will be limited and will be based on academic performance during level 3
 - Minimum requirement is an average aggregate score of 12 (C3)
- · Level 4
 - Vel 4 "If places are available, a student may, during their 4th year of study, transfer onto the MSci if they meet the normal conditions for admission or, exceptionally, if exemplary performance during their 4th year of study is deemed to compensate for a failure to meet the normal admission criteria. Such applications for transfer will be handled on a case-by-case basis."
- · You will be informed of decision after Examiners' Board meeting in June

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Key Courses: Research Readings in Computing Science

- Based on reading, summarising, discussing and presenting papers in a wide range of topics
- 12 topic areas, one per week
 - HCI, Software Engineering, Distributed Systems and Networks, Operating Systems, Formal Methods, Computer Architecture, Information Retrieval, Prog Languages, Computer Vision, Bioinformatics, Machine Learning
- Two 1.5 hour sessions per week, devoted to 3 or 4 papers, presented by students
- Assessment via 1 page paper summaries (20%); presentation (6%); participation (4%), Exam (70%)

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Key Courses: Research Methods and Techniques

- · Closely linked to RRCS
- 10 credits
- · Covers basic research skills
 - Paper review
 - Literature survey
 - Design of experiments
 - Presentation skills
 - Technical Writing
- · Assessed by coursework only (no exam)

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Key Courses: Advanced Research Readings in Computing Science

- Based on reading, critiquing and discussing papers, like RRCS
- · In depth examination of a single topic
- weekly during 2nd semester
- Assessment by presentation to research group and examination
- Topics offered depend on demand, e.g.
 - Information Security, Software Engineering, Mobile & Ubiquitous Systems, Operating Systems
 - Student preferences are taken into account, but other factors are also taken into account (e.g., the maximum number of options that can be resourced)

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Project

- Much more substantial than 4th year project
- · Involves
 - Research Proposal

 - Literature Review
 Development of Research Question and Research Plan
 - Research Project

 - Execution of plan from 1st term
 Dissertation submitted at end of 2nd semester

• See http://w http://www.dcs.gla.ac.uk/~daw/masters-projects/Hall-of-Fame.html for example of projects

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Progression

- Progression from level 4 to level 5 requires students to achieve an average aggregate score of 12 (C3) during level 4.
- Students who do not achieve the progression criteria or who do not satisfactorily complete the programme during year 5 will will be "assessed as if they were Honours Computing Science or Software Engineering students and will be awarded the appropriate BSc qualification based on their results in years 3 and 4, using the normal weighting for the relevant BSc Hons degree."

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Assessment

- Overall assessment based on this table
- MSci awarded with a classification as 1, 2.1, 2.2, 3
- In the case of failure, you will be considered for the award of the relevant BSc, based on the results from years 3 & 4, using normal BSc weighting

Year	Weight
5	50%
4	30%
3	20%

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