

Title of Examination(s):		MSc Mathematics and Foundations of Computer Science
External Examiner Details	Title:	Dr
	Name:	John Talbot
	Position:	Reader
	Home Institution:	UCL

Please complete both Parts A and B.

Part A					
		<i>Please (✓) as applicable*</i>	Yes	No	N/A / Other
A1.	Did you receive sufficient information and evidence in a timely manner to be able to carry out the role of External Examiner effectively?		x		
A2.	Are the academic standards and the achievements of students comparable with those in other UK higher education institutions of which you have experience?		x		
A3.	Do the threshold standards for the programme appropriately reflect the frameworks for higher education qualifications and any applicable subject benchmark statement? <i>[Please refer to paragraph 3(b) of the Guidelines for External Examiner Reports].</i>		x		
A4.	Does the assessment process measure student achievement rigorously and fairly against the intended outcomes of the programme(s)?		x		
A5.	Is the assessment process conducted in line with the University's policies and regulations?		x		
A6.	Did you receive a written response to your previous report?				x
A7.	Are you satisfied that comments in your previous report have been properly considered, and where applicable, acted upon?		x		
<p>* If you answer "No" to any question, please provide further comments in Part B. Further comments may also be given in Part B, if desired, if you answer "Yes" or "N/A / Other".</p>					

Part B

B1. Academic standards

- a. *How do academic standards achieved by the students compare with those achieved by students at other higher education institutions of which you have experience?*

The academic standards of this MSc are excellent, comparable or better than any other similar MSc that I am aware of.

- b. *Please comment on student performance and achievement across the relevant programmes or parts of programmes (those examining in joint schools are particularly asked to comment on their subject in relation to the whole award).*

Achievement was very good, with students showing in depth knowledge of the subject at a high level. The entry of level of most students is good however they clearly also have the opportunity to develop, with most working towards graduate research level by the time they leave.

B2. Rigour and conduct of the assessment process

Please comment on the rigour and conduct of the assessment process, including whether it ensures equity of treatment for students, and whether it has been conducted fairly and within the University's regulations and guidance.

The assessment process was both rigorous and fair, with ample opportunity to consider any borderline cases as well as extenuating circumstances.

B3. Issues

Are there any issues which you feel should be brought to the attention of supervising committees in the faculty/department, division or wider University?

None

B4. Good practice and enhancement opportunities

*Please comment/provide recommendations on any **good practice and innovation relating to learning, teaching and assessment**, and any **opportunities to enhance the quality of the learning opportunities** provided to students that should be noted and disseminated more widely as appropriate.*

The format of this course and its exam process are rather unique and work extremely well, there are no changes that I would recommend.

B5. Any other comments

Please provide any other comments you may have about any aspect of the examination process. Please also use this space to address any issues specifically required by any applicable professional body. If your term of office is now concluded, please provide an overview here.

The exam meetings are always very well organised with all necessary documentation presented in a user-friendly manner.

Signature:	John Talbot
Date:	12/10/2016
<p>Please email your completed form (preferably as a word document attachment) to: external-examiners@admin.ox.ac.uk and copied to the applicable divisional contact.</p> <p>Alternatively, please return a copy by post to: The Vice-Chancellor c/o Catherine Whalley, Head of Education Planning & Quality Review, Education Policy Support, University Offices, Wellington Square, Oxford OX1 2JD.</p>	

Title of Examination(s):		MFoCS
External Examiner Details	Title:	Dr
	Name:	Martin Hotzel Escardo
	Position:	Reader
	Home Institution:	School of Computer Science, University of Birmingham, UK

Please complete both Parts A and B.

Part A					
		<i>Please (✓) as applicable*</i>	Yes	No	N/A / Other
A1.	Did you receive sufficient information and evidence in a timely manner to be able to carry out the role of External Examiner effectively?		x		
A2.	Are the academic standards and the achievements of students comparable with those in other UK higher education institutions of which you have experience?		x		
A3.	Do the threshold standards for the programme appropriately reflect the frameworks for higher education qualifications and any applicable subject benchmark statement? <i>[Please refer to paragraph 3(b) of the Guidelines for External Examiner Reports].</i>		x		
A4.	Does the assessment process measure student achievement rigorously and fairly against the intended outcomes of the programme(s)?		x		
A5.	Is the assessment process conducted in line with the University's policies and regulations?		x		
A6.	Did you receive a written response to your previous report?		x		
A7.	Are you satisfied that comments in your previous report have been properly considered, and where applicable, acted upon?		x		
<p>* If you answer "No" to any question, please provide further comments in Part B. Further comments may also be given in Part B, if desired, if you answer "Yes" or "N/A / Other".</p>					

Part B

B1. Academic standards

- a. *How do academic standards achieved by the students compare with those achieved by students at other higher education institutions of which you have experience?*

The academic standard achieved by the majority of the students is high compared to those similar degree programs in the country and abroad, with a number of them amply qualified for PhD studies after completion of this degree. Only two or three students produce work and projects below standard. It is unclear what, if anything, could be done to avoid (or even predict) this. The selection procedure seems to be rather rigorous.

This is top M.Sc. degree with the highest academic standards, both nationally and internationally. Its interdisciplinary character is particularly attractive. The courses offered are deep, relevant, and at the cutting-edge of research. It is an excellent path to doctoral study, and, indeed, a good proportion of the students have been offered PhD studentships at renowned institutions after completion.

- b. *Please comment on student performance and achievement across the relevant programmes or parts of programmes (those examining in joint schools are particularly asked to comment on their subject in relation to the whole award).*

I would like to commend the joint work of the Computer Science and Mathematics departments to both produce and implement this degree. The projects and mini-projects have a wide range in the spectrum ranging from theoretical computer science to mathematics, which makes the course rich and attractive, and rigorously prepares potential PhD students for a variety of subjects. Students with both mathematical or computer-science orientations perform equally highly, and produce equally deep projects, some at publishable level.

B2. Rigour and conduct of the assessment process

Please comment on the rigour and conduct of the assessment process, including whether it ensures equity of treatment for students, and whether it has been conducted fairly and within the University's regulations and guidance.

All students are treated equally and the examination is conducted fairly, rigorously following the regulations. Moreover, before each meeting, the external examiners are given a clear explanation of the regulations. With four examiners (two in mathematics, and two in computer science), the level of scrutiny is rather high, with few or no opportunities for misjudgement or unfairness.

B3. Issues

Are there any issues which you feel should be brought to the attention of supervising committees in the faculty/department, division or wider University?

There are no issues to report for this period. The examinations ran smoothly, with all difficult cases dealt with in a satisfactory way, respecting academic standards and treating the students in a fair way.

B4. Good practice and enhancement opportunities

*Please comment/provide recommendations on any **good practice and innovation relating to learning, teaching and assessment**, and any **opportunities to enhance the quality of the learning opportunities** provided to students that should be noted and disseminated more widely as appropriate.*

I made a number of suggestions in my previous two reports, which were taken on board. I do not have further suggestions at this stage.

B5. Any other comments

Please provide any other comments you may have about any aspect of the examination process. Please also use this space to address any issues specifically required by any applicable professional body. If your term of office is now concluded, please provide an overview here.

I would like to observe that among the papers that have no mark scheme, an imprecise mark scheme, and a fairly detailed marking scheme, it is the ones with imprecise, but present, mark scheme that tend to obtain marks that better reflect the academic performance of the students, particularly in the more computer-science oriented papers given to me. As an external examiner, I am able to give better feedback when at least some mark scheme is given, whether imprecise or detailed. However, a marker who has to follow an extremely detailed mark scheme will not necessarily be able to give the academically most adequate mark. Most papers in fact do have an imprecise but present mark scheme. But those in the other two extremes were the ones which generated the most discussion during examiners meetings.

Signature:	Martin Escardo
Date:	24 May 2017
<p>Please email your completed form (preferably as a word document attachment) to: external-examiners@admin.ox.ac.uk and copied to the applicable divisional contact.</p> <p>Alternatively, please return a copy by post to: The Vice-Chancellor c/o Catherine Whalley, Head of Education Planning & Quality Review, Education Policy Support, University Offices, Wellington Square, Oxford OX1 2JD.</p>	