

**EXTERNAL EXAMINER REPORT FORM 2023**

<b>External examiner name:</b>	Prof. Julia Wolf		
<b>External examiner home institution:</b>	University of Cambridge		
<b>Course(s) examined:</b>	MSc Mathematics and Foundations of Computer Science (MFoCS)		
<b>Level:</b> (please delete as appropriate)		Postgraduate	

**Please complete both Parts A and B.**

<b>Part A</b>					
		<i>Please (✓) as applicable*</i>	<b>Yes</b>	<b>No</b>	<b>N/A / Other</b>
A1.	Are the academic standards and the achievements of students comparable with those in other UK higher education institutions of which you have experience? <i>[Please refer to paragraph 6 of the Guidelines for External Examiner Reports].</i>		Yes		
A2.	Do the threshold standards for the programme appropriately reflect:  (i) the frameworks for higher education qualifications, and  (ii) any applicable subject benchmark statement? <i>[Please refer to paragraph 7 of the Guidelines for External Examiner Reports].</i>		Yes		
A3.	Does the assessment process measure student achievement rigorously and fairly against the intended outcomes of the programme(s)?		Yes		
A4.	Is the assessment process conducted in line with the University's policies and regulations?		Yes		
A5.	Did you receive sufficient information and evidence in a timely manner to be able to carry out the role of External Examiner effectively?		Yes		
A6.	Did you receive a written response to your previous report?		Yes		
A7.	Are you satisfied that comments in your previous report have been properly considered, and where applicable, acted upon?				Other
<p><b>* If you answer "No" to any question, you should provide further comments when you</b></p>					

**complete Part B.**

## **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 achieved by students on the MFoCS continue to be very high and appear to me to be in line with those of students at other top-tier higher-education institutions in the UK. The dissertation component in particular offers students the opportunity to explore a topic chosen from a wide range of cutting-edge themes in mathematics and computer science in significant depth. It thereby provides a solid foundation for those wishing to pursue further research in these areas, while at the same time developing essential transferable skills. The general standard of student presentations at dissertation vivas was very high this year.

- b. *Please comment on student performance and achievement across the relevant programmes or parts of programmes and with reference to academic standards and student performance of other higher education institutions of which you have experience (those examining in joint schools are particularly asked to comment on their subject in relation to the whole award).*

### **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.*

As in previous years, to the best of my knowledge the conduct of the assessment process complied with the University's regulations and guidance.

A great deal of care had been taken by setters of mini-projects to ensure an appropriate balance of straightforward and challenging elements. The recommendation that some part of each project be open-ended was almost uniformly followed. Almost all projects were available in good time for scrutiny by the examiners.

The marks of mini projects and dissertations are carefully documented, and reconciliation of marks is handled with professionalism and care.

I am satisfied that the viva fulfils its function of assuring the integrity of the dissertation work.

### **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?*

1. The organisation of examiners' meetings showed marked improvement this year.
2. The average mark on computer science and mathematics projects, respectively, for each term continued to be unavailable to examiners. This makes it difficult for examiners to ascertain whether there is a divergence in standards on the programme between the mathematics and computer science component (a concern raised under (2)(a) in 2020-21 and 1(b) in 2021-22). Even if the supervisory committee finds no meaningful discrepancy upon further investigation for this year, I recommend that this data be made available to examiners as a matter of routine.

3. Previously identified inaccuracies in the marks spreadsheet were corrected, facilitating a much smoother process at the final examiners meeting.
4. The process for mitigating circumstances benefited significantly from the clarification added to the MFoCS exam conventions this year. Award criteria for prizes were again not available at the final examiners meeting.
5. My previous recommendation 2(c) in 2020-21 (and (3) in 2021-22) was unfortunately misinterpreted. I did *not* suggest that an example of a mini-project be made available to students. Instead, I recommend creating template instructions for assessors for 'literature review'-style mini-projects, to better communicate to students what is expected and which aspects of the work marks will be awarded for. Moreover, I recommend refining the assessor template for standard, problem-type projects, as the current wording sets a rather low standard for students as far as clarity and concision of writing are concerned.
6. In cases where the second marker was only present remotely the dissertation viva felt somewhat less effective. In the interest of fairness to all students every effort should be made by all participants to attend in person.

#### **B4. Good practice and enhancement opportunities**

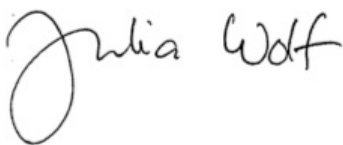
*Please comment/provide recommendations on any **good practice and innovation relating to learning, teaching and assessment**, and any **opportunities to enhance the quality of the learning opportunities** provided to students that should be noted and disseminated more widely as appropriate.*

As mentioned in a previous report, the double-blind marking and associated reconciliation process for mini-projects without a mark scheme is commendable. It is applied meticulously and contributes substantially to ensuring fair outcomes for all candidates.

#### **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.*

This is my last year as an external examiner on the MFoCS. It has been a privilege to gain insight into the workings of this world-class programme, and I would like to thank both departments for this opportunity. I am exceedingly grateful to Prof. Oliver Riordan and the MFoCS administrative team for their warm welcome and support.

<b>Signed:</b>	
<b>Date:</b>	20/10/2023

**Please ensure you have completed parts A & B, and email your completed form to: [external-examiners@admin.ox.ac.uk](mailto:external-examiners@admin.ox.ac.uk) AND copy it to the applicable divisional contact set out in the guidelines.**

**EXTERNAL EXAMINER REPORT FORM 2023**

<b>External examiner name:</b>	Miriam Backens		
<b>External examiner home institution:</b>	University of Birmingham		
<b>Course(s) examined:</b>	MFoCS		
<b>Level:</b> (please delete as appropriate)			Postgraduate

**Please complete both Parts A and B.**

<b>Part A</b>					
		<i>Please (✓) as applicable*</i>	<b>Yes</b>	<b>No</b>	<b>N/A / Other</b>
A1.	Are the academic standards and the achievements of students comparable with those in other UK higher education institutions of which you have experience? <i>[Please refer to paragraph 6 of the Guidelines for External Examiner Reports].</i>		x		
A2.	Do the threshold standards for the programme appropriately reflect:  (i) the frameworks for higher education qualifications, and  (ii) any applicable subject benchmark statement? <i>[Please refer to paragraph 7 of the Guidelines for External Examiner Reports].</i>		x		
A3.	Does the assessment process measure student achievement rigorously and fairly against the intended outcomes of the programme(s)?		x		
A4.	Is the assessment process conducted in line with the University's policies and regulations?		x		
A5.	Did you receive sufficient information and evidence in a timely manner to be able to carry out the role of External Examiner effectively?		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><b>* If you answer "No" to any question, you should provide further comments when you complete Part B.</b></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 achieved by the students on the MFoCS programme are equal to or higher than the standards at other higher education institutions with which I am familiar.

- b. *Please comment on student performance and achievement across the relevant programmes or parts of programmes and with reference to academic standards and student performance of other higher education institutions of which you have experience (those examining in joint schools are particularly asked to comment on their subject in relation to the whole award).*

The MFoCS students achieved very high grades: 12 distinctions, 4 merits and 3 passes (plus three students whose grades are not finalised yet due to extensions). This reflects achievements which are very high compared with e.g. the student cohort in Birmingham.

### 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 is suitably rigorous with all mini projects either marked according to a pre-defined mark scheme (though these could sometimes be a little more detailed), or blind double-marked. Final projects are blind double-marked.

Processes have been followed except for one case where a second marker for a final project was also co-supervisor of the same project. The exam board recommended that more care be taken in future years to ensure that second markers have no close connection to the project they are marking (or the student conducting the project).

### 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 were no issues that require broader attention.

### 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 marking of mini projects and project reports follows good practice with blind double-marking procedures.

A few students seemed to struggle with presentation skills during their project vivas, they might benefit from more opportunities to practice or at least observe presentations.

**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.*

No other comments.

<b>Signed:</b>	<i>M. Bokus</i>
<b>Date:</b>	16 October 2023

Please ensure you have completed parts A & B, and email your completed form to: [external-examiners@admin.ox.ac.uk](mailto:external-examiners@admin.ox.ac.uk) AND copy it to the applicable divisional contact set out in the guidelines.