

**ACADEMIC TRANSCRIPT****Personal Information**

Student: Tuomas Sebastian Ralph Laakkonen  
 University Reference: 1417185  
 Qualification Sought: Master of Science  
 Start Date: 10 October 2021  
 HESA Reference: 2111565059353  
 FHEQ Level: Masters

**Programme Information**

Teaching institution:	University of Oxford	Awarding Institution:	University of Oxford
College:	St Catherine's College	Mode of Attendance:	Full-time
Programme of Study:	Master of Science in Mathematics and Foundations of Computer Science	Language of Instruction:	English

**Award Information**

Qualification Awarded: Master of Science in Mathematics and Foundations of Computer Science  
 Classification: Distinction  
 Date of Award: 22 September 2022

**Assessment Information (Academic Year, Assessment Name, Result Mark/Grade)**

2021/22	Analytic Number Theory	78
2021/22	Computer-aided Formal Verification	78
2021/22	Cryptography	91
2021/22	Dissertation	85
2021/22	Introduction to Quantum Information	88
2021/22	Oral examination	Pass
2021/22	Quantum Processes and Computation	80
2021/22	Quantum Software	96

Students studying in the 2019-20/2020-21 academic years faced severe disruption due to the exceptional effects of the Covid-19 pandemic, impacting the 2020 and 2021 assessment periods, and this should be taken into account in reading the transcript. For some degree programmes, parts of assessments were cancelled for reasons entirely beyond students' control; where this is the case, students are deemed to have passed and these assessments are listed without an accompanying mark.

Students shall successfully complete a written assignment on each of five courses chosen from a list of approved courses and students are required to satisfy the examiners in at least two courses from section B and in at least two courses taken from schedule II. Students must submit a dissertation on a topic approved and selected in consultation with the dissertation supervisor and must bear regard to course material from Sections A or B. An oral examination on the dissertation and its background material will take place and the student will normally be expected to give a short presentation on the dissertation.

The Examiners may award a Distinction for excellence throughout the examination. This usually requires distinction level marks (70+) in each of five mini projects as well as the dissertation. A Merit usually requires marks of 65+ in

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Registrar

Transcript issued on 14 November 2022

Page 1 of 3



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each of five mini projects and the dissertation. In both cases exceptions may be made. (Please note, a Merit is only available to students who began their course from October 2018). Implementing the safety-net in 2019-20, the requirements for awarding a Distinction and Merit have been relaxed slightly in work submitted after the beginning of Hilary Term 2020.

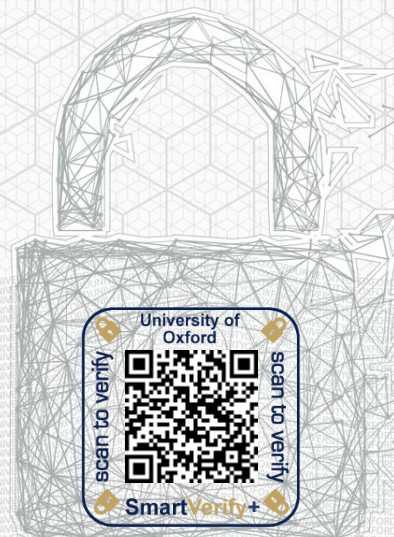
For the safety-net in 2019-20 a mini-project taken by a student in Michaelmas Term term will count as distinction level if the mark is at least 70. A mini-project taken in Hilary or Trinity Term, and the dissertation, will count as distinction level if the mark is at least 67. A mini-project taken by a student in Michaelmas Term will count as merit level if the mark is at least 65. A mini-project taken in Hilary or Trinity Term, and the dissertation, will count as merit level if the mark is at least 62.

End of Transcript



Registrar

Transcript issued on 14 November 2022 Page 2 of 3





UNIVERSITY OF  
OXFORD

### About the University of Oxford

The University of Oxford is an independent self-governing university. It is the oldest university in the English-speaking world and has been in continuous existence for some nine centuries. It is an international leader in learning, teaching and research. As a collegiate institution, it comprises the central university and 39 colleges and 6 permanent private halls

### University of Oxford Transcripts

The transcript should not be released to another person, organisation or institution except to officials internal to your own organisation or institution who have a reasonable business use for the information. Release to other parties requires the written consent of the student. The following information is provided to aid in the evaluation of this student's academic record. Further explanation or detailed information can be obtained by contacting Degree Conferals via the email address [edocuments.support@admin.ox.ac.uk](mailto:edocuments.support@admin.ox.ac.uk).

Under University regulations, Boards of Examiners may, where appropriate, take account of information additional to the profile of marks listed overleaf in deciding the final degree classification awarded to any student. The explanatory text on the transcript is subject to change until such time that the programme of study is completed.

### Academic Credit

The University does not routinely apply credit weightings to its programmes and its courses are not generally taught on a modular basis. We take each year of full-time undergraduate study to equal 120 UK credits and 180 UK credits for Masters-level postgraduate study according to the Higher Education Credit Framework for England. In relation to the European Credit Transfer Scheme (ECTS), this is equivalent to 60 credits for undergraduate study and 90 credits for Masters-level postgraduate study.

### Framework for Higher Education Qualifications (FHEQ levels)

8 (Doctoral)	Doctoral Degrees (e.g. DPhil, DCLinPsych)
7 (Masters)	Master's Degrees (including Integrated Master's Degrees) Postgraduate Diplomas & Certificates
6 (Honours)	Bachelor's Degrees with Honours Bachelor's Degrees Professional Graduate Certificate in Education
5 (Intermediate)	Undergraduate Diplomas
4 (Cert)	Undergraduate Certificates

### Authentication

This academic transcript can be authenticated by scanning the QR code which is visible in the main section of the document. Further information on authentication may be obtained by contacting Degree Conferals on the email address [edocuments.support@admin.ox.ac.uk](mailto:edocuments.support@admin.ox.ac.uk).

### Mark Scales

All marks included on a final academic transcript have been ratified by the Registrar. Examiners are required to express final agreed marks on all formally assessed work according to the following marking scales:

### Undergraduate Programmes

	Model 1	Model 2
70-100	First Class	Distinction
60-69	Upper Second Class	Pass
50-59	Lower Second Class	Pass
40-49	Third Class	Pass
30-39	Pass	Fail
0-29	Fail	Fail

Model 1 will be used for all final assessments. Model 2 will be used for all qualifying assessments unless the explanatory text overleaf states otherwise.

### Postgraduate Taught Programmes

For students who started their courses **before** October 2018.

Model 1	Model 2	
70-100	70-100	Distinction
50-69	60-69	Pass
0-49	0-59	Fail

For students who started their courses **from** October 2018.

Model 1	Model 2	
70-100	70-100	Distinction
N/A	65-69	Merit
50-69	50-64	Pass
0-49	0-49	Fail

Model 2 will be used for all Award Programmes unless the explanatory text overleaf states otherwise.

### Transcript Terminology

Results Not Moderated (On-Course Transcripts Only):

Indicates a mark that may be subject to moderation in the process of concluding the final outcome of an examination comprising more than one part and taken over more than one year.

Declared to have deserved: the exam board considered the candidate was absent from part of the examination for good cause and declared them to deserve the Award.

### Programme Information

The relevant *Examination Regulations* for the programme are available at: <https://examregs.admin.ox.ac.uk/>

