

**Handbook for the
MSc in Mathematical Sciences
and the MMath in Mathematics**

Version 1.0

Issued October 2020

This handbook applies to students taking the MSc in Mathematical Sciences¹ or the MMath in Mathematics (Part C) in the academic year 2020–21. The information in this handbook may be different for students taking the MSc or MMath in other years.

The Examination Regulations relating to this course are available at <http://www.admin.ox.ac.uk/examregs/>.

If there is a conflict between the information in this handbook and the Examination Regulations then you should follow the Examinations Regulations. If you have any concerns, please contact the Academic Administration team at omms@maths.ox.ac.uk.

The information in this handbook is accurate as at 1 October 2020, however it may be necessary for changes to be made in certain circumstances, as explained at www.ox.ac.uk/coursechanges. If such changes are made the department will publish a new version of this handbook together with a list of the changes and students will be informed.

Version 1.0

¹The MSc in Mathematical Sciences is also referred to as the ‘Oxford Masters in Mathematical Sciences’ or ‘OMMS’.

Welcome

Welcome to, or welcome back to Oxford! We hope the year ahead of you will be interesting and enjoyable and will build on the mathematical knowledge you already have.

For the third year, our MSc in Mathematical Sciences (OMMS) will run in parallel with our fourth year undergraduate course (Part C). We hope that those of you on Part C will be able to pass on your experience of life in Oxford to those new to the university, and that those of you on OMMS will be able to bring in fresh mathematical perspectives, giving one cohort of students committed to furthering their knowledge in the mathematical sciences.

The Mathematical Institute and the Department of Statistics hope to provide an inspirational setting in which to learn more mathematics and undertake research, despite current social distancing and other restrictions in place. We hope that both the virtual and (small group) face to face teaching will provide inspiration and challenge, and that there will be many opportunities to interact with students and faculty — if in adapted ways.

Oxford's Mathematical Sciences submission was ranked overall best in the UK in the 2014 Research Excellence Framework (the UK's system for assessing research excellence) and so you will have the opportunity to be taught by and work with internationally renowned mathematicians and statisticians.

Once again, welcome to the OMMS and Part C programmes at Oxford, and best wishes for an enjoyable and successful year.

Dr Kathryn Gillow, Dr Richard Earl and Dr Neil Laws

Contents

1 Introduction

This handbook contains important information about the Oxford Masters in Mathematical Sciences (OMMS) and the MMath in Mathematics (Part C). It is intended as a guide and reference for you throughout the course. There are a number of other sources of information that you will need to refer to during your course and links to these are given below, together with a list of key contacts.

1.1 Key Sources of Information

Course website: <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/part-c-students>

The course webpage contains information on courses and examinations, as well as links to various resources and support. An electronic copy of the course handbook can be found there.

Mathematical Institute website: <http://www.maths.ox.ac.uk/>

Department of Statistics website: <http://www.stats.ox.ac.uk/>

Department of Computer Science website: <http://www.cs.ox.ac.uk/>

Examination Regulations: <http://www.admin.ox.ac.uk/examregs/>

The University's examination regulations govern all academic matters within the University and contain the general regulations for the conduct of University examinations, as well as specific regulations for each degree programme offered by the University.

Examination Conventions: <https://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/examinations-and-assessments/part-c-and-omms>

The examination conventions for the course set out how each unit will be assessed and how the final degree classification will be derived from the marks obtained for the individual units.

Oxford Student website: <http://www.ox.ac.uk/students/>

This website provides access to a wide range of services and resources to support you during your studies.

Oxford Student Handbook: <https://www.ox.ac.uk/students/academic/student-handbook?wssl=1>

This contains general information and guidance about studying at the University of Oxford, and gives you formal notification and explanation of the University's codes, regulations, policies and procedures.

College Handbook: The handbook for your college will be available on the college website.

1.2 Key Contacts

OMMS Course Director Dr Kathryn Gillow (tel: (6)15322)
email: kathryn.gillow@maths.ox.ac.uk

Director of Undergraduate Studies (Mathematical Institute) Dr Richard Earl (tel: (6)15202)
email: director-ugrad-studies@maths.ox.ac.uk

Director of Studies (Department of Statistics) Dr Neil Laws (tel: (2)72597)
email: laws@stats.ox.ac.uk

Course Administrative Assistant Saskia Brueske (tel: (6)15207)
email: omms@maths.ox.ac.uk

Head of Academic Administration Charlotte Turner-Smith (tel: (6)15203)
email: academic.administrator@maths.ox.ac.uk

Undergraduate Studies Administrator Nicole Collins (tel: (6)15204)
email: acadadmin@maths.ox.ac.uk

Mathematical Institute (tel: (2)73525)
email: enquiries@maths.ox.ac.uk

Department of Statistics (tel: (2)72860)
email: info@stats.ox.ac.uk

Department of Computer Science (tel: (2)73838)
email: enquiries@cs.ox.ac.uk

1.3 The Academic Year

The course lasts three terms, from the beginning of October to the end of the following June. Work will be required to be carried out during the Christmas and Easter vacations.

The Oxford academic year is split into three terms: Michaelmas Term, Hilary Term and Trinity Term. Each of these terms is eight weeks in duration. You will find that the weeks of each term will be referred to as Week 1, Week 2, Week 3 and so on. For example, ‘lecture courses will begin on Monday of Week 1’. The week prior to the start of term is often referred to as Week 0 and the week after the end of term is referred to as Week 9.

The dates of the University Full Terms for the Academic Year 2020–2021 are:

Michaelmas Term (MT) 2020: Sunday 11th October – Saturday 5th December

Hilary Term (HT) 2021: Sunday 17th January – Saturday 13th March

Trinity Term (TT) 2021: Sunday 25th April – Saturday 19th June

Both Part C and MSc students are expected to be in Oxford in Week 0 of each term. For Week 9, there is no expectation that students are to be in Oxford, though students may wish to use facilities, such as the library, to help with their work. This will of course be dependent on accommodation.

A calendar of important course dates is given in Appendix ??.

1.4 Finding Your Way Around

In person teaching for the course will take place in the Mathematical Institute (<http://www.maths.ox.ac.uk/about-us/travel-maps/>), the Department of Statistics (<http://www.stats.ox.ac.uk/about-us/>) and the Department of Computer Science (<http://www.cs.ox.ac.uk/aboutus/directions.html>). The postal addresses for these departments are as follows:

Mathematical Institute:

Andrew Wiles Building
Radcliffe Observatory Quarter
Woodstock Road
Oxford

OX2 6GG

Department of Statistics:

24-29 St Giles'

Oxford

OX1 3LB

Department of Computer Science:

Wolfson Building

Parks Road

Oxford

OX1 3QD

A searchable, interactive map of all of the University of Oxford's colleges, departments and libraries can be found at <http://www.ox.ac.uk/visitors/map?wssl=1/>.

2 The Masters Course

2.1 Overview

The Part C Mathematics course at the Mathematical Institute is offered in two modes, the MMath in Mathematics (Part C) for Oxford undergraduate students and a 9 month graduate course for students originally from outside Oxford, titled the Oxford Masters in Mathematical Sciences (OMMS). The two modes are similar in terms of content and structure. If you are an Oxford MMath student, you will graduate as a “Master of Mathematics”. If you are a student on the MSc course, you will graduate with an “MSc in Mathematical Sciences”.

Qualifications may be compared to national standards for higher education qualifications through the Framework for Higher Education Qualifications (FHEQ). The University awards framework (UAF) maps the awards of the University against the levels of the FHEQ. The FHEQ level for the course is 7. The relevant subject benchmark statement for the course, which sets out expectations about standards of degrees in a given subject area, is Mathematics, Statistics & Operational Research (QAA 2015).

2.2 Aims

The Oxford Masters in Mathematical Sciences aims:

- to provide an internationally competitive mathematical education of excellent quality through a course which attracts students of the highest mathematical potential;
- to provide such within a framework that is inclusive of the broad and interdisciplinary applications of mathematics as well as recognizing the fundamental questions and themes of mathematics itself;
- to provide the foundations for graduate study through a research degree at a leading global university;
- to provide a learning environment which encourages and challenges the students to reach their full potential, personally and academically, by drawing on the expertise of the staff in teaching and research;
- to foster the advanced thinking, abstraction, problem-solving, mathematical modelling, technical and presentational skills widely sought in a range of careers, including varied academic roles across many mathematical and scientific disciplines;
- to offer an opportunity to individually investigate an advanced topic of mathematics, statistics or a mathematically related topic, and in writing a dissertation address the problems of communicating, presenting and organizing such a report.

2.3 Learning Outcomes

During the Masters course you will develop a knowledge and appreciation of:

- advanced topics of mathematics, statistics or related areas from a varied selection of courses;
- the diversity of mathematical and statistical approaches in a large, internationally successful research community;
- the organization and presentation required of submitting an extended piece of mathematical writing, if applicable.

You will also have the opportunity to develop the following skills:

Intellectual Skills

- Advanced logical reasoning, abstract thinking and problem-solving skills
- Conceptualizing a more in-depth presentation of a mathematical topic

Practical Skills

- Ability to apply mathematical methods to practical problems and develop problem-solving skills
- Ability to construct, write up and communicate logical arguments of some complexity

Transferable Skills

- Ability to solve problems effectively and to apply high-level mathematical methods to a wide range of problems
- Ability to manage your time and to acquire a complex body of knowledge in a limited time
- Ability to manage your own learning and study for research or other professional qualifications

2.4 Course Structure

The lecture synopses outline prerequisites for the courses: advice is given for each course on background material which you will need to have studied in order to successfully embark on the course.

The structure of the two modes will be covered in your comprehensive induction programme. If you are an MSc student, you will also be offered detailed academic guidance from the Course Director, and your Supervisor can provide further advice on choosing a path suitable for you. For Part C students, advice on academic matters is provided by your college tutor, as in previous years.

Course lecturers will also be able to advise all students on the recommended background for their courses or possible follow-up courses you might wish to choose. Students can also refer to the Guide to Part C document which gives a good introduction to the courses on offer at Maths. This is available at <https://www.maths.ox.ac.uk/system/files/attachments/Guide%20to%20Options%20at%20Part%20C.pdf>

2.4.1 MSc Students

You are required to take 8 units, of which 2 units will be a dissertation. You may take an additional 1-2 units if you wish.

A non-dissertation unit usually corresponds to a 16-hour lecture course, supplemented with 4 classes and corresponding problem sheets. For students who take 8 units, all units will contribute towards the classification of the MSc. For students who take 9-10 units, their marks for the dissertation, together with the best 6 other units, will contribute towards the classification. All additional units will appear on a final transcript. If you are considering taking additional courses, you are encouraged to discuss this with your departmental supervisor. At least 3 of the units taken by MSc students must be assessed by written examination. Full details are given in the Examination Conventions (<https://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/examinations-and-assessments/part-c-and-omms>).

Of the non-dissertation units, you may take Mathematics units, Statistics units, and up to 2 units from the Department of Computer Science.

2.4.2 Part C Students

You are required to take 8 units, of which 2 units will be a dissertation. You may take an additional 1-2 units if you wish.

A non-dissertation unit usually corresponds to a 16-hour lecture course, supplemented with 4 classes and corresponding problem sheets. For students who take 8 units, all units will contribute towards the classification of the MMath. For students who take 9-10 units, their marks for the dissertation, together with their best 6 other units will contribute towards the classification. All additional units will appear on a final transcript. If you are considering taking additional courses, you are encouraged to discuss this with your college advisor. Full details are given in the Examination Conventions (<https://www.maths.ox.ac.uk/members/students/undergraduate-courses/examinations-assessments/examination-conventions>).

You must take at least four units from the schedule of Mathematical Institute units. You may offer up to 4 units from the schedule of Statistics options, the schedule of Computer Science units and the schedule of other options, but offer no more than two units from each of these schedules. You must offer a double unit which is a dissertation. If you offer the dissertation on a mathematics topic, this will be under the Mathematics units. If the dissertation is on a mathematics-related topic, this would be offered under the schedule of Other Units.

2.4.3 Work Distribution

Students are advised that it is likely to work well if you take four units in Michaelmas Term, and a further two units in Hilary Term, when you will also be working on your dissertation. Dissertation topics will be circulated very early in the course, and you will be expected to choose a topic in Michaelmas Term, and to work on the dissertation in Hilary Term and over the Christmas and Easter vacations. The dissertations will be submitted in early Trinity Term. You will then want to focus on revising for written examinations, which are at the end of Trinity Term.

3 Teaching and Learning

3.1 Organisation of Teaching

Teaching for the course will be provided jointly by the Mathematical Institute, Department of Statistics and Department of Computer Science through a series of lectures and classes. In addition, students will have supervision meetings for their dissertation with an allocated dissertation supervisor, usually alongside other students offering the same dissertation topic.

On arrival in Oxford, MSc students will be assigned both a departmental supervisor and a college personal tutor. Students will be able to seek guidance on academic matters from their supervisors, who will have been allocated based on a student's interests. College tutors will be available to MSc students as a source of pastoral advice throughout the year.

Part C students will continue to receive both academic and pastoral advice from their college tutor. Beyond this, however, the college will have no role in the teaching of the course.

3.2 Lectures

Depending on the options you take you will have around 6–8 hours of lectures per week. Lectures in Michaelmas Term 2020 and Hilary Term 2021 will be pre-recorded and online. You can access these at the following links:

Mathematical Institute: <https://www.maths.ox.ac.uk/lecture-capture>

Department of Statistics: <https://canvas.ox.ac.uk/courses/67002/pages/year-4-part-c>

Department of Computer Science: <https://www.cs.ox.ac.uk/teaching/courses/>

The exception to this is the CCS2 Quantum Processes and Computation course. Times for this can be found at <https://www.cs.ox.ac.uk/teaching/timetables/timetable-MT2020.html>.

3.3 Classes

Lecture courses will normally be accompanied by four 90 minute classes which will be run by the class tutor with the help of a Teaching Assistant (TA). For each class, there will be a corresponding problem sheet that students will be expected to submit their work for marking by the TA prior to the class. In 2020–21, classes will be face to face where possible, with online access always being available via Microsoft Teams or, possibly in some cases, Zoom. Some classes will be online only and this will be communicated to you as necessary.

The aim of the classes is to address the problem sheets set by the course lecturer and any other questions that have arisen from the course material. The first class will normally be in either week 2 or 3 of each term, thus, you should be thinking about starting to work on the sheets early on.

The formative feedback you will receive in the classes will help to prepare you for the formal assessments, which will be used to assess your overall performance on the course.

For most courses you will need to sign up for the set of classes you wish to attend at the start of each term, and this is usually done via an online sign-up system. You will be sent an email in week 0 alerting you that class registration is open and providing you with details of the registration process. You can find out which class you have been allocated to by looking at the class lists for each department at the following links:

Mathematical Institute: <https://minerva.maths.ox.ac.uk/perl/classlists.pl/>

Department of Statistics: <http://minerva.stats.ox.ac.uk/perl/classlists.pl/>

Department of Computer Science: http://www.cs.ox.ac.uk/minerva/class_lists.pl/

3.3.1 How to Get the Best Out of the Classes

The classes work most productively when students are actively involved. By handing in your work promptly, you can get feedback from the TA, but can also show where there are topics or questions that you would like to focus on in class, which will help the tutor and TA when they plan the class.

By actively participating in each class, you have a positive effect on others' learning as well as your own. Please do join in with asking questions and discussing ideas – while of course recognising that others may have different priorities from you, so the discussion cannot always be tailored to your own agenda.

You will be allocated to classes for each course at the start of term. This should help you to connect with others who are studying the same course, with the aim that you can find peers to work with between classes. You are actively encouraged to collaborate on grappling with the material and thinking about problems. In order to make sure that you learn as much as possible and do not inadvertently plagiarise, it is best to write up your solutions independently, though working together on questions can be a fruitful way of building mathematical understanding.

3.3.2 Consultation Sessions

Consultation sessions is a term used interchangeably with revision sessions. They take place between Weeks 2 and 5 of Trinity Term, often as four one-hour sessions spread across the four week period. A provisional timetable for the consultation sessions is usually published in early Week 0 of Trinity Term at the following link: <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/ba-master-mathematics/examinations-assessments/consultation>.

You are free to attend as many sessions as you wish and there is no registration required for those sessions run at the Mathematical Institute. Consultation sessions at the Departments of Statistics and Computer Science operate independently from those at the Mathematical Institute and you may be required to register for the sessions. Further details can be found on the consultation sessions webpage (<https://www.maths.ox.ac.uk/members/students/undergraduate-courses/ba-master-mathematics/examinations-assessments/consultation>).

To get the most out of these sessions, tutors will encourage students to email specific questions prior to the sessions and will often specify a past paper they will be covering. This will be communicated either directly through the mailing list or alongside the organisation of the classes on the timetable.

3.4 Dissertations

MSc and Part C students will be required to offer a dissertation, worth two units, under the guidance of a supervisor who will be a member of either the Mathematical Institute or the Department of Statistics. The dissertation is a double-unit and so is considered the equivalent of a 32-hour lecture course and the corresponding classes. The length of the dissertation should be up to 7,500 words, which normally equates to 25–35 pages.

A dissertation provides students with the opportunity to undertake an extended piece of independent study and investigation, under the guidance of a supervisor. It involves investigating and then presenting in writing

a particular area of Mathematical Sciences. You will not be required to (but may) obtain original results. A list of possible dissertation topics, each linked to the name of the supervisor, will be circulated to students early in Michaelmas Term. Often more than one student will write a dissertation starting with the same dissertation title.

Normally students will consult the supervisor up to four times before the submission of the dissertation in early Trinity Term. The first of these meetings is likely to take place before the Christmas Vacation, with some or all of the other students who have selected that particular dissertation title. At this meeting, broader aspects of the topic and possible avenues of investigation will be discussed.

Further details are given in Section ???. A copy of the Dissertation Guidance can be found on the course website (<https://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/teaching-and-learning/dissertations>).

3.5 Advice on Teaching and Learning Matters

MSc students will have a supervisor, available for consultation on any academic matter. Your supervisor will usually be appointed from the subject area in which you specified an interest when you applied for the course. You will also be able to discuss academic matters with the Course Director.

Part C students can consult their college tutor for advice on academic matters. Both Part C and MSc students can seek guidance on pastoral matters from their college tutor.

If you are concerned about your academic progress, please contact your college tutor or departmental supervisor, whichever applies. MSc students also have the option of consulting with the Course Director.

If you have any issues with teaching or supervision please raise these as soon as possible so that they can be addressed promptly. Details of who to contact are provided in Section ??? Complaints and Appeals.

3.6 Skills and Learning Development

3.6.1 Expectations of Study

You are responsible for your own academic progress. Therefore, in addition to the formal teaching you receive through lectures and classes, you will be expected to undertake a significant amount of self-directed, independent study on problem sheets and to consolidate the material covered in lectures and classes. You will also be expected to work during the Christmas and Easter vacations, further consolidating the term's work as well as working on your dissertation.

You are advised to read the University's guidance on undertaking paid work at <http://www.ox.ac.uk/students/life/experience/>. In general, it is recommended that students on the course do not undertake paid work alongside their studies.

3.6.2 University Lectures and Departmental Seminars

University lectures in all subjects are open to all students. A consolidated lecture list is available on the University website at: <http://www.ox.ac.uk/students/academic/lectures/>.

The Mathematical Institute runs two weekly virtual seminar series 'Fridays@2' and 'Fridays@4' with sessions on skills training, career development, and other topics. You are encouraged to join. See <https://www.maths.ox.ac.uk/events/list/> for further details.

Each of the departments organise a variety of seminars and colloquia, often given by researchers of international repute. These are announced on the departmental webpages (below) and you are encouraged to join any which interest you.

Mathematical Institute: <http://www.maths.ox.ac.uk/events/list/>

Department of Statistics: <http://www.stats.ox.ac.uk/news-events/>

Department of Computer Science: <http://www.cs.ox.ac.uk/news-events/>

3.6.3 Skills Development

Much of the advice and training in study skills will come in the regular class teaching you receive. The Departments will run some sessions specifically for MSc and Part C students, and you will be contacted about these. There will be general guidance provided by the department on writing dissertations. This will include general lectures on dissertations by the Chair of Projects Committee, as well as lectures on writing in \LaTeX .

A wide range of information and training materials are also available to help you develop your academic skills — including time management, research and library skills, referencing, revision skill and academic writing — through the Oxford Student website: <http://www.ox.ac.uk/students/academic/guidance/skills/>.

3.7 Key Teaching Links

Pre-recorded Lectures: <https://www.maths.ox.ac.uk/lecture-capture> (Mathematical Institute)
<https://canvas.ox.ac.uk/courses/67002/pages/year-4-part-c> (Department of Statistics)
<https://www.cs.ox.ac.uk/teaching/courses/> (Computer Science)
<https://www.cs.ox.ac.uk/teaching/timetables/timetable-MT2020.html> (Computer Science)

Class Lists: <https://minerva.maths.ox.ac.uk/perl/classlists.pl/> (Mathematical Institute)
<http://minerva.stats.ox.ac.uk/perl/classlists.pl/> (Department of Statistics)
http://www.cs.ox.ac.uk/minerva/class_lists.pl/ (Department of Computer Science)

Dissertation Guidance Notes: <http://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/teaching-and-learning/dissertations/>

4 Supervisors

4.1 MSc Students and Supervisors

All students will be assigned a general supervisor for the duration of the course. Supervisors are chosen with the students' interests taken into account.

Your academic progress will be monitored by your supervisor. Supervisors will submit termly reports on students' progress, via the Graduate Supervision Reporting (GSR), based on meetings with the students and the class reports written by the tutor and TA. The class reports include information on attendance and performance and are also available to the Course Director.

4.2 Part C Students and College Tutors

As fourth-year undergraduates, Part C students will continue to receive support from the college on academic and pastoral matters. Please refer to your college handbook for more information.

A Part C student's academic progress throughout the year is monitored by their college tutor. Each term your tutor will receive reports from the Part C class tutors through Minerva, a reporting system used by the Mathematical Institute, Department of Statistics and the Department of Computer Science. Usually, you will meet with your college tutor at the end of each term to review these reports.

4.3 Dissertation Supervisors

Each dissertation topic will be associated with a member of faculty or a researcher at either the Mathematical Institute or the Department of Statistics. Based on your topic allocation, the associated individual will be your dissertation supervisor. For MSc students, it is possible that you might have the same individual acting as your departmental supervisor and dissertation supervisor.

Students will normally have an initial meeting with their supervisors at the end of Michaelmas Term, allowing work to be done on the project over the Christmas Vacation. This meeting is intended to be an introduction to the topic and an opportunity to discuss potential avenues of investigations. For this first meeting, those students who have also been allocated the topic will be in attendance.

It is expected that students will meet with supervisors three further times in Hilary Term. These will serve as opportunities to update your supervisor on the progress of your dissertation and any issues you may have encountered. Your supervisor will be able to give suggestions on how you can overcome these issues, as well as advice on writing mathematics, if required.

Dissertation supervisors will act as an assessor for the project, thus, will not complete a read-through of the final dissertation. However, your supervisor will attend your oral presentation and will be able to provide feedback on content towards the start of the Easter Vacation.

5 Examinations and Assessments

5.1 Assessment of the Course

All of the units you undertake will have a component of formal assessment: a written open book online exam; a take-home mini-project; or the dissertation.

Each unit will be assessed by the method considered most suited to the material being taught. The course synopses specify the method of assessment for each course. Links to the course synopses for each department are located on the course website (<https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/part-c-students>).

The assessment of the course is governed by the University's Examination Regulations and the course examination conventions.

5.1.1 Written Examinations

Many courses are assessed by written examinations sat in Trinity Term of each academic year. These written examinations usually take place in weeks 6–8 of Trinity Term. It is generally the case that the lecturer of a course is the assessor for the corresponding examination. An assessor is responsible for the setting and marking of that paper under the oversight of a board of examiners and with another assessor checking the exam.

Assessment by examination at the end of the academic year gives students due time to process the lecture course's concepts and develop the relevant techniques. Assessment at the end of the year also allows time for revision and to place the course's material alongside that of other related courses. Completion of questions in the examination will require both a demonstration of the standard theory and techniques of the lecture course as well the ability to apply that theory/technique in somewhat new and unfamiliar ways.

General information on University examinations can be found on the Examinations and Assessment section of the University website (<http://www.ox.ac.uk/students/academic/exams/>). Specific guidance on open book examinations can also be found at <https://www.ox.ac.uk/students/academic/exams/open-book>. Information on (a) the standards of conduct expected in examinations and (b) what to do if you would like examiners to be aware of any factors that may have affected your performance before or during an examination (such as illness, accident or bereavement) are available on the Oxford Student website (<http://www.ox.ac.uk/students/academic/exams>) and in Section 6.1 of the Examination Conventions.

5.1.2 Mini-Projects

Several of the courses are assessed by *mini-projects*. Such mini-projects are commonly used for courses involving elements of programming, computing packages or data sets where it is felt that a timed, paper-based assessment would not be appropriate. The format of the mini-project can vary between courses and might include a computation or written report.

The examiners will send out notices to candidates detailing any specific requirements for the mini-projects. An electronic copy will need to be submitted via the departmental webpages and the precise details of this submission process will be included in the notice to candidates.

It is vital that you submit your work by the given deadline as any late submission will be reported to the Proctors and a late submission penalty may be applied (see Section 7 in the Examination Conventions). Please refer to the examination conventions and the Oxford Student website (<http://www.ox.ac.uk/>

students/academic/exams/submission/) for advice on what to do if you are unable to submit your work on time due to medical emergency or other urgent cause.

5.1.3 Dissertation

Each project will be double marked, with one of the two assessors being the supervisor. The two marks will be reconciled through discussion between the two assessors and overseen by the examiners.

Dissertations, identified by your candidate number only, should be submitted online by the stated deadline in Trinity Term. These will be sent to the Chair of Examiners for MSc in Mathematical Sciences or MMath Mathematics (Part C), whomever applicable.

A copy of the Dissertation Guidance can be found on the course website <https://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/teaching-and-learning/dissertations>.

5.2 Examination Conventions

Examination Conventions for the course are the formal record of the specific assessment standards for the course. They set out how each unit will be assessed and how the final degree classification will be derived from the marks obtained for the individual units. They include information on marking scales, marking and classification criteria, scaling of marks, formative feedback and penalties for late submission. The examination conventions for 2019–20 can be found on the course website at <https://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/examinations-and-assessments/part-c-and-omms>.

5.3 Preparing for Examinations

Each Part C course will have revision sessions, also known as consultation sessions, which take place in Trinity Term. Further information can be found in Section ?? of this handbook.

The University maintains a collection of past papers on a webpage known as OXAM (<https://weblearn.ox.ac.uk/portal/site:oxam/>). Though the solutions are not available, these are still useful revision tools with the problems often worked through during consultation sessions. The Mathematical Institute website has a page of useful revision resources, including a document on preparing for Mathematics exams. This page can be found at the following link <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/examinations-assessments/revision-resources>.

The Mathematical Institute also has an archive of specimen solutions which are available to help with revision. Further information can be found at <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/examinations-assessments/part-c-specimen-solutions>.

5.4 Examination Entries

You will need to formally enter for the units you wish to be assessed on by completing an examination entry form. This is done online through Student Self Service (<https://evision.ox.ac.uk/>) and further information on the process can be found at <http://www.ox.ac.uk/students/academic/exams/entry>.

When completing your examination entry you should try to ensure that the decisions you make are as final as possible. However, if you subsequently change your mind about which courses you would like to be assessed on, then it is possible to make changes to your entry. To change an option after the examination entry deadline has passed you must apply for permission in writing through your Senior Tutor or other

college officer using the change of options form available from your college office. You will need to pay a fee for making a late change to your examination entry.

If you have entered for assessments in additional courses (beyond the required eight units) but subsequently decide not to take the additional assessments, then you should inform your college office. You must do this prior to either the examination date for written examinations or the submission date for coursework.

5.5 Examination Dates and Submission Deadlines

The calendar of important dates (Appendix ??) gives the expected start dates for the open book written examinations and coursework submission deadlines. The examination timetable for written examinations will be set by the Examination Schools and published online at <http://www.ox.ac.uk/students/academic/exams/timetables/>.

Exam results are normally conveyed to students through Student Self Service in late June or early July. Further information on results can be found at the following link <https://www.ox.ac.uk/students/academic/exams/results?wssl=1/>.

5.6 Plagiarism

Plagiarism is presenting someone else's work or ideas as your own, with or without their consent, by incorporating it into your work without full acknowledgement. All published and unpublished material, whether in manuscript, printed or electronic form, is covered under this definition. Plagiarism may be intentional or reckless, or unintentional. Under the regulations for examinations, intentional or reckless plagiarism is a disciplinary offence. Please see the University's guidance on plagiarism <http://www.ox.ac.uk/students/academic/guidance/skills/plagiarism/> for further information.

5.7 Examination Prizes

All examination prizes are awarded by the examiners and no application is necessary. A list of previous winners can be found online at: <http://www.maths.ox.ac.uk/members/students/undergraduate-courses/ba-master-mathematics/examinations-assessments/prizes/>.

5.8 Key Assessment Links

Examination Regulations: <http://www.admin.ox.ac.uk/examregs/>

Examination Timetables: <http://www.ox.ac.uk/students/academic/exams/timetables>

Consultation (Revision) Sessions: <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/ba-master-mathematics/examinations-assessments/consultation>

Past examination papers: <http://weblearn.ox.ac.uk/portal/site/:oxam/>

Part C Specimen Solutions: <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/examinations-assessments/part-c-specimen-solutions>

Past examiners reports: <https://www.maths.ox.ac.uk/members/students/postgraduate-courses/omms-part-c/examinations-and-assessments/part-c-and-omms>

6 Resources and Facilities

6.1 Departmental Work and Social Spaces

6.1.1 Mathematical Institute

The Mathematical Institute is based in the Andrew Wiles Building on Woodstock Road. The department has one of the more modern buildings at the university and was designed in consideration of the Mathematical mind, including the Penrose Paving outside the building. The mezzanine level of the building contains six lecture theatres (L1-L6), which vary in size to cater for the department's various needs, six spacious classrooms (C1-C6) and the Mathematical Institute's café.

The mezzanine space is also home to the Undergraduate and OMMS Study Room. The room contains a number of computers and desks to facilitate quiet study within the Mathematical Institute. It also has a number of power sockets for students wishing to use their own laptops and there is wi-fi throughout the building. Please note that under social distancing rules at the start of the 2020–21 academic year, this study room will not initially be available. Any change to this will be communicated to students.

The department's café is usually open during weekdays. However, the café currently remains closed. Please check the Mathematical Institute's website for updates on this (<https://www.maths.ox.ac.uk/members/covid-19>).

6.1.2 Department of Statistics

Students taking Statistics courses and dissertation topics will have access to the Department of Statistics, located a short walk from the Andrew Wiles Building on St Giles'. The recently refurbished building has a large ground floor study area with kitchen facilities, as well as a departmental library.

6.2 Libraries

6.2.1 College Library

The main source of borrowed books is your **college library**. College libraries generally purchase the books which appear in the **reading lists** for many of the Part C courses. In practice, college libraries also provide a good selection of the books listed as 'further reading', and, indeed, a wider selection of background and alternative reading, some of which have gone out of print.

Many college libraries have a number of copies of key books and are usually responsive to requests for new purchases, but *they need to be asked*.

6.2.2 The Radcliffe Science Library (RSL)

Website: <http://www.bodleian.ox.ac.uk/science/>

The Radcliffe Science Library is located on Parks Road and includes mathematics books at graduate and research level. The library is the science part of the Bodleian Library and your University Card will facilitate access.

Information about all University of Oxford libraries can be found at: <http://www.bodleian.ox.ac.uk/subjects-and-libraries/libraries/>

6.2.3 The Whitehead Library, Mathematical Institute

Librarian: Ms Cathy Hunt

Email: library@maths.ox.ac.uk

Website: <http://www.maths.ox.ac.uk/members/library/>

The Whitehead Library holds material covering mathematical topics at postgraduate and research level. Please contact the Librarian, Cathy Hunt, at the above email address, if you wish to consult a book that is relevant for your dissertation and is only held by the Whitehead Library (and not held in your College library or Radcliffe Science Library). You will be able to consult such books for reference, not borrowing.

6.2.4 Department of Statistics Library

Email: lib@stats.ox.ac.uk

Website: <http://www.stats.ox.ac.uk/about-us/>

Subjects covered include statistics, probability, operational research, mathematical genetics, and bioinformatics.

6.2.5 Department of Computer Science Library

Email: library@cs.ox.ac.uk

Website: <https://intranet.cs.ox.ac.uk/library/>

Subjects covered include formal methods, computer security, artificial intelligence, machine learning, automated verification, quantum computation, computational biology.

6.3 Computing Facilities

The central IT Services are located at 13 Banbury Road and offer facilities, training and advice to members of the University in all aspects of academic computing. You can attend training sessions run by the IT services. More information can be found at <http://www.it.ox.ac.uk/>. The Guide to IT at Oxford for New Users is available online at <http://www.it.ox.ac.uk/want/get-started/>.

Some University webpages are NOT available from outside the Oxford network. If you are regularly using a computer outside the Oxford network, you need to set up VPN. Instructions on how to do this can be found at:

<http://help.it.ox.ac.uk/network/remote/index>

You will not be issued a departmental IT account. However, if you find that you are in need of departmental computing facilities, you are welcome to apply by contacting Academic Administration via acadadmin@maths.ox.ac.uk.

You will be allocated, or will have already been allocated a college email account. It is important that you either access any Oxford email account regularly or set up a forward into an account that is read regularly.

Both the Mathematical Institute and the Department of Statistics operate email IT help request systems (it-support@maths.ox.ac.uk and ithelp@stats.ox.ac.uk) as a method of IT support.

6.3.1 Useful Links

IT support at the Mathematical Institute:

<http://www.maths.ox.ac.uk/members/it/support/>

Connecting to Wi-fi:

<http://www.maths.ox.ac.uk/members/it/faqs/connection/personal-device-wifi-network-connection>

6.4 Careers Service

Careers guidance is provided by the *Careers Service* (<http://www.careers.ox.ac.uk/>), which also provides training in writing applications and CVs, interview techniques and analysis of transferable skills. The Careers Service provides information about occupations and employers, and advertises work experience opportunities. The Careers Service can also advise students who are considering continuing their studies to complete a DPhil or a PhD.

In addition to its general programme, the Careers Service runs an annual ‘Jobs for Mathematicians’ half-day, usually in November, in collaboration with the Mathematical Institute. At this event there are talks from alumni working in various industries and a talk for those interested in continuing on to further postgraduate study. In 2020-21, this event will take place virtually.

Other events will be held during the year — including as part of the ‘Fridays@2’ and ‘Fridays@4’ seminar series (see Section ??). Further information about postgraduate study opportunities can be found at the following links:

Mathematical Institute: <http://www.maths.ox.ac.uk/study-here/postgraduate-study>

Department of Statistics: <http://www.stats.ox.ac.uk/study-here/research-degrees/>

Department of Computer Science: <http://www.cs.ox.ac.uk/admissions/graduate/index.html>

6.5 Language Centre

The Language Centre provides resources and services for members of the University who need foreign languages for their studies or research, and for those who have a personal interest in languages. The Language Centre runs a variety of language courses throughout the year and has a large library and self-study area.

Further information can be found at <http://www.lang.ox.ac.uk/>.

7 Student Representation and Feedback

7.1 MSc Students

7.1.1 Student Representation

MSc students will be able to nominate a representative to sit on the OMMS Supervisory Committee which oversees the course. Volunteers will be sought at the Induction Session and an election held if necessary. The student representative will be able to raise matters with the Supervisory Committee on behalf of the cohort.

7.1.2 Consultative Committee for Graduates — Mathematics

The Consultative Committee for Graduates (CCG) meets once a term and discusses any matters that graduate students wish to raise. The committee considers syllabus, teaching arrangements, library facilities, office facilities and general aspects of examinations.

The committee consists of at least one student from each taught masters course and two Directors of Graduate Studies. Students will be invited to nominate a representative to serve as the OMMS rep on this committee via email in Michaelmas Term.

7.2 Part C Students

7.2.1 Mathematics Undergraduate Representative Committee (MURC)

The MURC is composed of students who represent the interests of Mathematics and joint school undergraduate students. It consists of a representative from each college. It holds regular meetings to discuss the various issues connected to academic organisation, including lectures, examinations and syllabus content. It is a forum to allow students to raise issues with their courses. The views of this committee are channelled to the faculties and departments through the Joint Consultative Committee with Undergraduates.

A fourth-year undergraduate MURC representative will also sit on the OMMS Supervisory Committee.

7.2.2 Joint Consultative Committee with Undergraduates (JCCU)

The JCCU meets regularly once a term and discusses any matters that the MURC representatives wish to raise. In addition, it considers matters relating to the synopses and proposed changes of syllabus, and the statistical feedback from questionnaires.

The membership of the JCCU consists of fourteen members of MURC appointed by MURC and representatives of the Departments of Mathematics and of Statistics. The committee is usually chaired by the Director of Undergraduate Studies and the Secretary is an undergraduate member of the committee. This committee is available for consultation by the departments and by the divisional board on any matter which relates to the undergraduate courses. Minutes of the JCCU meetings taken by your student representatives, reports and feedback on student requests can also be found at <http://www.maths.ox.ac.uk/members/students/undergraduate-courses/undergraduate-representation/jccu>.

7.3 Divisional and University Representatives

The Mathematical, Physical and Life Sciences (MPLS) Division also runs a divisional Undergraduate Joint Consultative Forum, a divisional Graduate Joint Consultative Forum, and is establishing a Joint Consultative Forum for Graduate Taught Courses. Each Forum is chaired by the senior MPLS Academic who is responsible for that area across the Division, an undergraduate or graduate representative from each department, the undergraduate or graduate representative on the Academic Committee and Divisional Board, and the Oxford Union Student Union (Oxford SU) Vice-President (Access and Academic Affairs) or Vice-President (Graduates).

Student representative sitting on the MPLS Divisional Board are selected through a process organised by Oxford SU. See <http://www.mpls.ox.ac.uk/study/applicants/student-representation>.

For representation on a University level, further information can be found on the Oxford Student Union website (<https://www.oxfordsu.org/education/representation/>).

7.4 Opportunities to Provide Feedback

Students will be asked to complete questionnaires evaluating the teaching received for the lectures and classes of each unit. Please take time to complete these as your feedback is valuable for future course planning. In addition, students will be provided with the opportunity to give mid-term feedback for lecture courses. This will be a useful opportunity to highlight issues that can be resolved prior to the end of term, as well as the end of the course.

MSc students, like all students on matriculated courses, will be surveyed on all aspects of their course (learning, living, pastoral support, college) through the annual Student Barometer. Previous results can be viewed by students, staff and the general public at: <https://www.ox.ac.uk/students/life/student-engagement?wssl=1>.

Part C students will be invited to complete the National Student Survey (NSS) that assesses aspects of the whole undergraduate degree.

Students will also be asked to complete an end of year questionnaire for the course and are invited to provide feedback on all aspects of the Masters course.

7.5 Key Student Representation Links

CCG: <http://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/consultative-committee-graduates/>.

MURC: <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/undergraduate-representation/murc>

JCCU: <http://www.maths.ox.ac.uk/members/students/undergraduate-courses/undergraduate-representation/jccu>

UJCF: <http://www.mpls.ox.ac.uk/study/applicants/student-representation>

Feedback at the Mathematical Institute: <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/undergraduate-representation/questionnaires/>

Oxford SU: <http://oxfordsu.org/>

University Surveys: <https://www.ox.ac.uk/students/life/student-engagement?wssl=1>

8 Student Support and Academic Policies

8.1 Where to Find Help

Generally speaking for graduate students departments are the main source of academic support and colleges are the main source of pastoral support. Part C students will receive both academic and pastoral support from their college.

Every college has their own systems of support for students, please refer to your college handbook or website for more information on who to contact and what support is available through your college.

Details of the wide range of sources of support available more widely in the University are available from the Oxford Student website (<http://www.ox.ac.uk/students/welfare/>), including in relation to mental and physical health, and disability.

8.2 Code on Harassment

The Mathematical Institute has appointed several senior members who may be consulted in connection with the University's Code on Harassment. Details are posted on the Mathematical Institute webpage: <https://www.maths.ox.ac.uk/members/personnelhr/during-employment/harassment>.

8.2.1 Consent Matters — Part of the Oxford Against Sexual Violence Campaign

Consent matters. That is why we are asking all students to complete a new online consent programme to develop your understanding, communication and respect as a student in Oxford's community. In the short interactive course, you will learn how to recognise and ask for sexual consent, look out for others, and where to find support if you need it.

You can access the course remotely now, via <https://www.ox.ac.uk/students/welfare/supportservice/consent-matters>, and we encourage you to complete the training before arriving in Oxford for the start of term.

Consent Matters forms part of Oxford Against Sexual Violence (for more details see <https://www.ox.ac.uk/againstsexualviolence>), the University's campaign that exists to send a clear message that sexual harassment and violence of any form is unacceptable.

Free, independent support and advice is available to any student who has been affected by sexual harassment or violence through the Sexual Harassment and Violence Support Service (<https://www.ox.ac.uk/students/welfare/supportservice>).

8.3 Complaints and Academic Appeals Within the Departments

The University, the Mathematical, Physical and Life Sciences Division, and the Mathematical Sciences departments all hope that provision made for students at all stages of their course of study will result in no need for complaints (about that provision) or appeals (against the outcomes of any form of assessment).

Where such a need arises, an informal discussion with the person immediately responsible for the issue that you wish to complain about, and who may not be one of the individuals identified below, is often the simplest way to achieve a satisfactory resolution.

Many sources of advice are available from colleges, faculties/departments and bodies like the Counselling

Service or the Oxford SU Student Advice Service, which have extensive experience in advising students. You may wish to take advice from one of those sources before pursuing your complaint.

General areas of concern about provision affecting students as a whole should be raised through Joint Consultative Committees or via student representation on the faculty/department's committees.

8.3.1 Complaints

If you wish to raise a concern or make a complaint, you should get in contact with either the OMMS Course Director (**Dr Kathryn Gillow**), Course Administrative Assistant (**Saskia Brueske**), Head of Academic Administration (**Charlotte Turner-Smith**) or Directors of Undergraduate and Graduate Studies (**Dr Richard Earl** and **Prof Marc Lackenby** for Maths, **Dr Neil Laws** for Statistics). The aforementioned will be able to pass on your complaint to the most relevant individual within the departments if necessary.

If you are dissatisfied with the outcome, you may take your concern further by making a formal complaint to the Proctors under the University Student Complaints Procedure (<https://www.ox.ac.uk/students/academic/complaints>).

If your concern or complaint relates to teaching or other provisions made by your college, you should raise it either with your tutor or with one of the college officers, Senior Tutor, Tutor for Graduates (as appropriate). Your college will also be able to explain how to take your complaint further if you are dissatisfied with the outcome of its consideration.

8.3.2 Academic Appeals

An academic appeal is an appeal against the decision of an academic body (e.g. boards of examiners), on grounds such as procedural error or evidence of bias. There is no right of appeal against academic judgement.

If you have any concerns about your assessment process or outcome it is advisable to discuss these first informally with your subject or college tutor, Senior Tutor, Course Director, Director of Graduate Studies, supervisor or college or departmental administrator as appropriate. They will be able to explain the assessment process that was undertaken and may be able to address your concerns. Queries must not be raised directly with the examiners.

If you still have concerns you can make a formal appeal to the Proctors who will consider appeals under the University Academic Appeals Procedure (<https://academic.admin.ox.ac.uk/academic-appeals>).

8.4 Buddy System

The Buddy System is a departmental initiative to connect MSc students with a Part C student over the summer before the start of the academic year. We have aimed to make these pairings based on colleges, and where possible, academic interests.

Once an MSc student has met the conditions of their offer, we will pass on the college email of their Part C buddy. The purpose of the system is to help integrate new students, as well as create community between MSc and Part C students. MSc students are welcome to email their Part C buddy before their arrival with any questions they may have about Oxford and the course.

8.5 Student Societies

There are number of Mathematical Sciences student societies which you may like to join. Details of the main societies are given below. In addition there are also over 200 clubs and societies covering a wide range of interest which you may join or attend. A full list is available at <http://www.ox.ac.uk/students/life/clubs/list/>.

8.5.1 Invariants

Invariants is Oxford University's student society for Mathematics. Their goal is to promote Mathematics and provide a social environment for the students of the Mathematical Institute. They hosts informal lectures, often given by leading mathematicians, as well as socials and puzzle competitions.

Email: invariants@invariants.org.uk

Website: <http://www.invariants.org.uk/>

Facebook: <https://www.facebook.com/oxford.invariants/>

8.5.2 Mirzakhani Society

The Mirzakhani Society is a society aimed at supporting female and non-binary students in Oxford who are studying Mathematics. They usually run a weekly 'Sip and Solve' where individuals are encouraged to come along to do problem sheets, with the provision of tea and cake. Arrangements may be different this year.

Email: mirzakhansociety@gmail.com

Website: <https://www.mirzakhansociety.org.uk/>

8.5.3 LGBTI^3

LGBTI^3 is a student group for all LGBTQ-identifying students at the Mathematical Institute, the Department of Statistics and the Department of Computer Science. The group aims to provide a friendly space to connect for both undergraduates and postgraduates. They usually meet fortnightly during term for tea, biscuits and a chat. Please email them for details.

Email: oxlgbtqubed@gmail.com

8.6 Key Student Support Links and Contacts

8.6.1 Departmental Links and Contacts

Disability Co-ordinator (Mathematical Institute):

Charlotte Turner-Smith (academic.administrator@maths.ox.ac.uk)

Information on Disability and Accessibility at the Mathematical Institute:

<https://www.maths.ox.ac.uk/members/policies/disability>

<https://www.maths.ox.ac.uk/members/building-information/accessibility>

Information on Disability and Accessibility at the Department of Statistics:

<http://www.stats.ox.ac.uk/student-resources/disability-and-access/>

Harassment Advisors at the Mathematical Institute: <https://www.maths.ox.ac.uk/members/personnelhr/during-employment/harassment>

8.6.2 University Links and Contacts

University's Disability Advisory Service: (tel: (2)80459)

Website: <http://www.ox.ac.uk/students/welfare/disability>

Careers Service: (tel: (2)74646)

email: reception@careers.ox.ac.uk

Counselling Service: (tel: (2)70300)

email: counselling@admin.ox.ac.uk

Equal Opportunities Officer: (tel: (2)89825)

email: equality@admin.ox.ac.uk

Oxford University Student Union, Vice President (Welfare): (tel: (2)88452)

email: vpweo@oxfordsu.ox.ac.uk

Proctors' Office: (tel: (2)70090)

email: proctors.office@proctors.ox.ac.uk

Student Immigration (for international students):

email: student.immigration@admin.ox.ac.uk

Website: <http://www.ox.ac.uk/students/visa/>

Address: Examination Schools, High Street

9 Policies

9.1 University Policies

The University has a wide range of policies and regulations that apply to students. These are easily accessible through the A-Z of University regulations, codes of conduct and policies available at <http://www.ox.ac.uk/students/academic/regulations/a-z>. Particular attention is drawn to the following University policies.

Equal Opportunities Statement:

<https://edu.admin.ox.ac.uk/equality-policy>

Intellectual Property Rights: www.admin.ox.ac.uk/rso/ip

Code on Harassment: <http://www.admin.ox.ac.uk/eop/harassmentadvice/policyandprocedure/>

Policy on Plagiarism: <http://www.ox.ac.uk/students/academic/guidance/skills/plagiarism>

Policy on recording lectures by students: <https://academic.admin.ox.ac.uk/policies/recording-lectures-other-teaching-sessions>

9.2 Departmental Safety Policies

You are urged to act at all times responsibly, and with a proper care for your own safety and that of others. Departmental statements of safety policy are posted in all departments, and you must comply with them. Students should note that they, and others entering onto departmental premises or who are involved in departmental activities, are responsible for exercising care in relation to themselves and others who may be affected by their actions.

9.2.1 Mathematical Institute

In the Mathematical Institute accidents should be reported immediately to reception (tel: (2)73525) who keep the accident book. There is a first aid room located on the ground floor of the South wing. If you require access to this room please report to reception.

Each lecture theatre has its own proper escape route and you are urged to familiarise yourself with these. Those for the Mathematical Institute lecture and seminar rooms, are set out online at <http://www.maths.ox.ac.uk/members/building-information/security-safety-and-reporting-building-issues/>. In the case of evacuation of the lecture theatre give heed to the instructions of the lecturer.

A Course Calendar

The Course Calendar will be updated throughout the year as dates are confirmed. For the most up-to-date version see <https://www.maths.ox.ac.uk/members/students/undergraduate-courses/teaching-and-learning/part-c-students/course-calendar>.

Date	Michaelmas Term
<i>Week 0</i>	OMMS and Part C induction videos available
<i>Week 0, Wednesday</i>	Michaelmas Term class registration opens
<i>Week 0, Thursday</i>	OMMS induction session
<i>Week 0, Friday</i>	Dissertation abstracts published
<i>Week 1, Monday</i>	Michaelmas Term class registration closes
<i>Week 1, Monday</i>	Lectures begin (pre-recorded week 1 lectures available)
<i>Week 3, Friday</i>	Deadline for dissertation topic preferences submission
<i>Week 4, Wednesday</i>	Online Graduate Open Day
<i>Week 5, Monday</i>	Students notified of dissertation allocation
<i>Week 5</i>	OMMS Exam Conventions Briefing
<i>Week 7, Tuesday</i>	‘Jobs in Mathematics’ online careers event
<i>Week 7, Friday</i>	Maths mini-projects available for collection
<i>Week 10, Thursday 12noon</i>	Maths mini-project submission deadline

Date	Hilary Term
<i>Week 0, Wednesday</i>	Hilary Term class registration opens
<i>Week 1, Monday</i>	Hilary Term class registration closes
<i>Week 1, Monday</i>	Lectures begin (pre-recorded week 1 lectures available)
<i>TBC</i>	Examination entry deadline
<i>Week 8, 12noon Friday</i>	Maths mini-project available for collection
<i>Week 11, 12noon Wednesday</i>	Maths mini-project submission deadline

Date	Trinity Term
<i>Week 1, 12noon Monday</i>	Dissertation submission deadline
<i>Week 2, Monday</i>	Consultation sessions begin
<i>Week 2, Monday or Tuesday</i>	OMMS Exam Briefing
<i>Week 5, Friday</i>	Consultation sessions end
<i>Week 6, Monday</i>	Examination period begins
<i>Week 8, Monday</i>	Leaving Party (provisional)
<i>Week 8, Friday</i>	Examination period ends
<i>Week 8, Friday</i>	Course ends

B Course List

Course	Department	Weight	Assessment Type	Term
C1.1 Model Theory	Maths	Unit	Written Examination	MT
C1.2 Gödel Incompleteness Theorems	Maths	Unit	Written Examination	HT
C1.3 Analytic Topology	Maths	Unit	Written Examination	MT
C1.4 Axiomatic Set Theory	Maths	Unit	Written Examination	HT
C2.1 Lie Algebras	Maths	Unit	Written Examination	MT
C2.2 Homological Algebra	Maths	Unit	Written Examination	MT
C2.3 Representation Theory of Semisimple Lie Algebras	Maths	Unit	Written Examination	HT
C2.4 Infinite Groups	Maths	Unit	Written Examination	MT
C2.5 Non-Commutative Rings	Maths	Unit	Written Examination	HT
C2.6 Introduction to Schemes	Maths	Unit	Written Examination	HT
C2.7 Category Theory	Maths	Unit	Written Examination	MT
C3.1 Algebraic Topology	Maths	Unit	Written Examination	MT
C3.2 Geometric Groups Theory	Maths	Unit	Written Examination	HT
C3.3 Differentiable Manifolds	Maths	Unit	Written Examination	MT
C3.4 Algebraic Geometry	Maths	Unit	Written Examination	MT
C3.5 Lie Groups	Maths	Unit	Written Examination	HT
C3.7 Elliptic Curves	Maths	Unit	Written Examination	HT
C3.8 Analytic Number Theory	Maths	Unit	Written Examination	MT
C3.9 Computational Algebraic Topology	Maths	Unit	Mini-Project	HT
C3.10 Additive and Combinatorial Number Theory	Maths	Unit	Written Examination	MT
C3.11 Riemannian Geometry	Maths	Unit	Written Examination	HT
C4.1 Further Functional Analysis	Maths	Unit	Written Examination	MT
C4.3 Functional Analytic Methods for PDEs	Maths	Unit	Written Examination	MT
C4.6 Fixed Point Methods for Nonlinear PDEs	Maths	Unit	Written Examination	HT
C4.8 Complex Analysis: Conformal Maps and Geometry	Maths	Unit	Written Examination	MT
C4.9 Optimal Transport and Partial Differential Equations	Maths	Unit	Written Examination	HT
C5.1 Solid Mechanics	Maths	Unit	Written Examination	MT
C5.2 Elasticity and Plasticity	Maths	Unit	Written Examination	HT
C5.3 Statistical Mechanics	Maths	Unit	Written Examination	HT
C5.4 Networks	Maths	Unit	Mini-Project	HT
C5.5 Perturbation Methods	Maths	Unit	Written Examination	MT
C5.6 Applied Complex Variables	Maths	Unit	Written Examination	HT
C5.7 Topics in Fluid Mechanics	Maths	Unit	Written Examination	MT
C5.9 Mathematical Mechanical Biology	Maths	Unit	Written Examination	HT
C5.11 Mathematical Geoscience	Maths	Unit	Written Examination	MT

C5.12 Mathematical Physiology	Maths	Unit	Written Examination	MT
C6.1 Numerical Linear Algebra	Maths	Unit	Written Examination	MT
C6.2 Continuous Optimisation	Maths	Unit	Written Examination	HT
C6.3 Approximation of Functions	Maths	Unit	Written Examination	MT
C6.4 Finite Element Method for PDEs	Maths	Unit	Written Examination	HT
C6.5 Theories of Deep Learning	Maths	Unit	Mini-Project	MT
C7.1 Theoretical Physics	Physics	Double Unit	Written Examination	MT + HT
C7.4 Introduction to Quantum Information	Maths	Unit	Written Examination	HT
C7.5 General Relativity I	Maths	Unit	Written Examination	MT
C7.6 General Relativity II	Maths	Unit	Written Examination	HT
C7.7 Random Matrix Theory	Maths	Unit	Written Examination	HT
C8.1 Stochastic Differential Equations	Maths	Unit	Written Examination	MT
C8.2 Stochastic Analysis and PDEs	Maths	Unit	Written Examination	HT
C8.3 Combinatorics	Maths	Unit	Written Examination	MT
C8.4 Probabilistic Combinatorics	Maths	Unit	Written Examination	HT
C8.5 Introduction to Schramm-Loewner Evolution	Maths	Unit	Written Examination	HT
C8.6 Limit Theorems and Large Deviations in Probability	Maths	Unit	Written Examination	HT
SC1 Stochastic Models in Mathematical Genetics	Stats	Unit	Written Examination	MT
SC2 Probability and Statistics for Network Analysis	Stats	Unit	Written Examination	MT
SC4 Advanced Topics in Statistical Machine Learning	Stats	Unit	Written Examination	HT
SC5 Advanced Simulation Methods	Stats	Unit	Written Examination	HT
SC6 Graphical Models	Stats	Unit	Written Examination	MT
SC7 Bayes Methods	Stats	Unit	Written Examination	HT
SC8 Topics in Computational Biology	Stats	Unit	Mini-Project	HT
SC9 Probability on Graphs and Lattices	Stats	Unit	Written Examination	MT
SC10 Algorithmic Foundations of Learning	Stats	Unit	Written Examination	MT
CCS1 Categories, Proofs and Processes	CompSci	Unit	Mini-Project	MT
CCS2 Quantum Processes and Computation	CompSci	Unit	Mini-Project	MT
CCS3 Automata, Logic and Games	CompSci	Unit	Mini-Project	MT

C Recommended Pattern of Teaching

C.1 Part C Mathematics

Course structure: Students take the equivalent of 8 units at Part C. The schedule of Part C units is divided into Mathematics units, Statistics units, Computer Science units and Other units. Students must offer at least four Mathematics units and may offer up to four units from from the remaining schedules but with no more than two from each category (Statistics units, Computer Science units, Other units). All students must offer a double unit which is a Dissertation.

Paper	Term	Dept		College		Comments
		Lectures	Classes	Tutorials	Classes	
Mathematics Units						
C1.1–C8.4	MT/HT	16	4			
CCD Dissertation on a Mathematical Topic ★	MT/HT	2		4		The balance of tutorials between MT and HT is agreed between the student and the supervisor.
Statistics Units						
SC1–SC10	MT/HT	16	4			Taught by Dept. of Statistics.
Computer Science Units						
Categories, Proofs and Processes	MT	20	7			Taught by Dept. of Computer Science.
Quantum Computer Science	MT	24	7			Taught by Dept. of Computer Science.
Automata, Logic and Games	HT	24	7			Taught by Dept. of Computer Science.
Other Units						
COD Dissertation on a topic related to mathematics ★	MT/HT	2		4		The balance of tutorials between MT and HT is agreed between the student and the supervisor.
Notes:						
<p>Intercollegiate classes are arranged in place of college tutorials for the Mathematics, Statistics and Computer Science lecture courses. For some lecture courses, there may not be sufficient students to run an intercollegiate classes and tutorials will be arranged instead. It is recommended that 4 hours of tutorials are provided for a 16 hour lecture course. Colleges may decide to opt out of the intercollegiate class scheme and teach their students in tutorials for a particular course.</p> <p>In addition to the classes, drop-in consultation sessions are arranged in Trinity Term by way of revision for those lecture courses assessed by written examination. Please note that courses marked with a ★ are double units.</p>						

Please note that in the case of teaching provided by colleges, these figures are the departmental recommendations only and individual colleges may provide different amounts of types of teaching than those stated above for a variety of reasons (e.g. individual student needs or differing number of contact hours depending on tutorial group size).

C.2 MSc in Mathematical Sciences (OMMS)

Course structure: Students take the equivalent of 8 units, including the compulsory two unit Dissertation, and an additional 1–2 units if they wish to do so. The schedule of units available to Masters students is divided into Mathematics units, Statistics units, Computer Science units and Other units. Students can offer units from the Mathematics schedule and Statistics schedule, as well as up to two units from the Computer Science schedule. Students must offer a Dissertation which is a double unit and complete at least three courses assessed by written examination.

Paper	Term	Dept		College		Comments
		Lectures	Classes	Tutorials	Classes	
Mathematics Units						
C1.1–C8.4	MT/HT	16	4			
CCD Dissertation on a Mathematical Topic ★	MT/HT	2		4		The balance of tutorials between MT and HT is agreed between the student and the supervisor.
Statistics Units						
SC1–SC10	MT/HT	16	4			Taught by Dept. of Statistics.
Computer Science Units						
Categories, Proofs and Processes	MT	20	7			Taught by Dept. of Computer Science.
Quantum Computer Science	MT	24	7			Taught by Dept. of Computer Science.
Automata, Logic and Games	HT	24	7			Taught by Dept. of Computer Science.
Other Units						
COD Dissertation on a topic related to mathematics ★	MT/HT	2		4		The balance of tutorials between MT and HT is agreed between the student and the supervisor.
Notes:						
<p>Intercollegiate classes are arranged in place of college tutorials for the Mathematics, Statistics and Computer Science lecture courses. For some lecture courses, there may not be sufficient students to run an intercollegiate classes and tutorials will be arranged instead. It is recommended that 4 hours of tutorials are provided for a 16 hour lecture course. Colleges may decide to opt out of the intercollegiate class scheme and teach their students in tutorials for a particular course.</p> <p>In addition to the classes, drop-in consultation sessions are arranged in Trinity Term by way of revision for those lecture courses assessed by written examination. Please note that courses marked with a ★ are double units.</p>						

Please note that in the case of teaching provided by colleges, these figures are the departmental recommendations only and individual colleges may provide different amounts of types of teaching than those stated above for a variety of reasons (e.g. individual student needs or differing number of contact hours depending on tutorial group size).

D Glossary of Key Terms

A list of useful terms for those new to Oxford.

Battels: The charges made to a member of a college (student or Fellow) for accommodation, meals etc.

Coming up/Going down: Arriving at Oxford at the beginning of the term/leaving at the end of term.

Consultation Sessions: Revision sessions that take place in Weeks 2-5 of Trinity Term.

Consultative Committee for Graduates (CCG): A committee consisting of postgraduate representatives from the Mathematical Institute and the departments two DGS's.

Degree Days: Various days throughout the year on which students may graduate.

DGS: Director of Graduate Studies.

Don: A professor, a lecturer or a Fellow.

Examination Conventions: The Examination Conventions act as a supplement to the Examination Regulations. The Conventions explain how a student will be assessed for their course within the framework of the Examination Regulations.

Examination Regulations: Sometimes referred to as the 'Grey Book', the Examination Conventions govern all academic matters within the University.

Examination Schools: A building located on High Street where Exams often take place.

Invariants: A student-run society at the Mathematical Institute.

GSO: Graduate Studies Office, part of the central University.

GSR: Graduate Supervision Reporting. Supervisors will submit termly reports through GSR on their student's academic progress.

Hilary Term: The second term of an academic year, running from January to March.

Intercollegiate Classes: Each Part B and C lecture course is accompanied by a set of intercollegiate classes which total to 6 hours. These will be run by a tutor and teaching assistant (TA) and will cover any problems that have arisen from the problem sheets.

Lecturer: Lecturers are those who have the responsibility to present lectures.

LGBT^3: A group of students aiming to provide a friendly environment for those LGBTQ-identifying individuals studying within the Mathematical Sciences.

Matriculation: Matriculation confers membership of the University on those students who are enrolled at the University of Oxford and following a degree-level course.

MCF: Masters in Mathematical and Computational Finance. An MSc course run at the Mathematical Institute.

MFoCS: Masters in Mathematics and Foundations of Computer Science. An MSc course run jointly by the Mathematical Institute and the Department of Computer Science.

Michaelmas Term: The first term of an academic year, running from October to December.

Mini-Project: Also known as a take-home exam, which is to be completed within a specified amount of time.

Minerva: A system used by teaching staff to record attendance and marks for the students in their class. The class times, days and locations are exported from this system and are advertised to students through the departmental class lists.

Mirzakhani Society: A society at the Mathematical Institute for female and non-binary students.

MMSC: Masters in Mathematical Modelling and Scientific Computing. An MSc course run at the Mathematical Institute.

MPLS: Mathematical, Physical and Life Sciences Division.

MTP: Masters in Mathematical and Theoretical Physics. An MSc course run jointly by the Mathematical Institute and the Department of Physics.

Oxford SU: Oxford University Student Union.

Papers: Constituent parts of an examination.

Part C: The term given to the fourth year undergraduate students studying for an integrated Masters. Part C is used to describe the courses that are open to these students.

Proctors: The two Proctors (Senior and Junior) are elected each year by colleges in rotation to serve for one year. The statutes provide that they shall generally ensure that the statutes, regulations, customs, and privileges of the University are observed. They serve on the University's main committees, and where not members of committees, may receive their papers and attend meetings but not vote. They have responsibilities under the statutes and regulations for aspects of student discipline, for ensuring the proper conduct of examinations and for dealing with complaints. They also carry out ceremonial duties, e.g. at degree ceremonies.

Student Self Service: Student Self Service allows a student to access their student record and complete other tasks such as examination entry.

Sub fusc: Formal attire worn by students and academics on formal occasions, including matriculation, examinations and graduation. This is not required for online open book examinations.

Trinity Term: The third term of an academic year, running from April to June.

Vac: Abbreviation of vacation.

Week 0: The week preceding the start of each term. Week 0 in Michaelmas Term is sometimes referred to as 'noughth week'.