

Mathematics and Statistics Information Sheet for entry in 2021

All over the world, human beings create an immense and ever-increasing volume of data, with new kinds of data regularly emerging from science and industry. A new understanding of the value of these data to society has emerged, and with it, a new and leading role for statistics. In order to produce sensible theories and draw accurate conclusions from data, cutting-edge statistical methods are needed. These methods use advanced mathematical ideas combined with modern computational techniques, which require expert knowledge and experience to apply. A degree in Mathematics and Statistics equips you with the requisite skills for developing and implementing these methods, and provides a fascinating combination of deep and mathematically well-grounded method-building and wide-ranging applied work with data.

The Department of Statistics at Oxford is an exciting and dynamic place to study, with teaching and research strengths in a wide range of modern areas of statistical science. Many of its academic staff work in the development of fundamental statistical methodology and probability. There is a strong new research group working on statistical machine learning and scalable methods for Big Data. The department's world-leading team, working on population genetics and evolution, applied new statistical methods to huge genetic data sets to unlock the secrets of human genetic variation and disease. Other groups work on applied probability, network analysis, and medical, actuarial and financial applications. These interests are reflected in the lecture courses available to undergraduates in their third and fourth years.

A typical week

The typical week of a student in Mathematics and Statistics is similar to that for [Mathematics](#):

- Years 1 and 2: around ten lectures and 2–3 tutorials or classes a week
- Years 3 and 4: 8–12 lectures and 2–4 classes a week, depending on options taken. (Courses involving statistical software packages have some lecture hours replaced by teaching sessions in labs).

Tutorials are usually 2-4 students and a tutor. Class sizes may vary depending on the options you choose. There would usually be around 8-12 students though classes for some of the more popular papers may be larger. Most tutorials, classes, and lectures are delivered by staff who are tutors in their subject. Many are world-leading experts with years of experience in teaching and research. Some teaching may also be delivered by postgraduate students who are usually studying at doctorate level. To find out more about how our teaching year is structured, visit our [Academic Year](#) page.

Course structure

The first year of this course is identical to [Mathematics](#), and the core mathematics part of the degree is completed in the first term of the second year. You will also follow second-

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year Mathematics courses in probability and statistics, and the remainder of the second year allows for some choice of topics in preparation for the greater selectivity of the third and fourth years. In the first two years, it is usually straightforward to move between the Mathematics course and the Mathematics and Statistics course, subject to the availability of space on the course and to the consent of your college.

There are two Mathematics and Statistics degrees, the three-year BA and the four-year MMath. Decisions regarding continuation to the fourth year do not have to be made until the third year. All third- and fourth-year mathematical topics available in the Mathematics course are also available to Mathematics and Statistics students. The fourth year is naturally more challenging and provides an opportunity for more in-depth study, including a substantial Statistics project.

YEAR 1	
COURSES Compulsory Year 1 includes: <ul style="list-style-type: none">• Algebra• Analysis• Probability and statistics• Geometry and dynamics• Multivariate calculus and mathematical models	ASSESSMENT First University examinations: five compulsory papers; Computational mathematics projects
YEAR 2	
COURSES Current core courses: <ul style="list-style-type: none">• Probability• Statistics• Algebra and differential equations• Metric spaces and complex analysis Current options: <ul style="list-style-type: none">• Simulation and statistical programming• Selection from a menu of other options in Mathematics	ASSESSMENT Final University examinations, Part A: five core papers and four or five optional papers
YEAR 3	
COURSES Current options include: <ul style="list-style-type: none">• Applied and computational statistics• Statistical inference• Statistical machine learning• Applied probability• Statistical lifetime models• Actuarial science	ASSESSMENT Final University examinations, Part B: the equivalent of eight written papers including assessed practicals



<ul style="list-style-type: none"> • Wide range of other options in Mathematics 	
YEAR 4	
COURSES	ASSESSMENT
<p>Statistics dissertation, current options include:</p> <ul style="list-style-type: none"> • Stochastic models in mathematical genetics • Network analysis • Advanced statistical machine learning • Advanced simulation methods • Graphical models • Bayes methods • Computational biology • Algorithmic foundations of learning • Wide range of other options in Mathematics 	<p>Final University examinations, Part C: the equivalent of eight written papers. (Currently a 2:1 in Parts A and B, as well as a 2:1 in Part B alone, is required to progress to Part C.)</p>

The University will seek to deliver each course in accordance with the descriptions set out above. However, there may be situations in which it is desirable or necessary for the University to make changes in course provision, either before or after registration. For further information, please see the [University's Terms and Conditions](#).

Teaching delivery

At the time of writing course information sheets for 2021/22 entry, the COVID-19 pandemic was still impacting the University. A range of measures have been put in place to comply with Government legislation and guidance in response to the pandemic, and to help keep students, staff and the wider community safe.

Inevitably, some changes have been necessary to teaching and student services during the pandemic (for example, a greater amount of online teaching and examinations, and restrictions on numbers allowed to access facilities at one time).

Whatever the circumstances in the 2021/22 academic year, the University will deliver core services and learning outcomes for each course, even though the modes of delivery may change.

All course information sheets should be read in that context, and we will keep offer holders and students regularly informed if circumstances change. Further details are available on our [website](#) and within the [Student Terms and Conditions](#).

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Fees

These annual fees are for full-time students who begin this undergraduate course here in 2021. Information about how much fees and other costs may increase is set out in the University's Terms and Conditions.

Please note that while the University sets out its annual fees as a single figure, this is a combined figure for both your University and college fees. More information is provided in your [Terms and Conditions](#).

Fee status	Annual Course fees
Home (UK, Republic of Ireland, Channel Islands & Isle of Man)	£9,250
Overseas (including most EU students– see Note below)	£31,230

Note: Following the UK's departure from the EU, most EU students starting a course in 2021/22 will no longer be eligible to pay fees at the 'Home' rate and will instead be charged the higher 'Overseas' rate. This change will not apply to Irish nationals living in the UK or Ireland, who will continue to be charged fees at the 'Home' rate for the duration of their course.

The government has issued guidance stating that EU, other EEA, and Swiss nationals who have been granted settled or pre-settled status in the UK under the EU settlement scheme may be eligible for 'Home fee' status and student loan support, subject to meeting residency requirements. However, until the government formally updates its fee status regulations the University is unable to confirm fee statuses for students who may qualify on this basis. We will contact you directly if we need further information from you to determine your fee status.

Please refer to the [Undergraduate fee status](#) and the [Oxford and the EU](#) pages for more information.

Additional Fees and Charges Information for Mathematics and Statistics

There are no compulsory costs for this course beyond the fees shown above and your living costs.

If you're buying a computer for university, please do consider a laptop over a desktop, so that you can take the laptop to classes. If you don't have your own, the department has several spare laptops that you are welcome to use.

Living costs

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Your living costs will vary significantly dependent on your lifestyle. These are estimated to be between £1,175 and £1,710 per month in 2021-22. Each year of an undergraduate course usually consists of three terms of eight weeks each but you may need to be in Oxford for longer. As a guide, you may wish to budget over a nine-month period to ensure you also have sufficient funds during the holidays to meet essential costs.

Living costs breakdown

	Per month		Total for 9 months	
	Lower range	Upper range	Lower range	Upper range
Food	£280	£400	£2,520	£3,600
Accommodation (including utilities)	£655	£790	£5,895	£7,110
Personal items	£130	£250	£1,170	£2,250
Social activities	£45	£115	£405	£1,035
Study costs	£45	£100	£405	£900
Other	£20	£55	£180	£495
Total	£1,175	£1,710	£10,575	£15,390

In order to provide these likely living costs, the University and the Oxford University Students' Union conducted a living costs survey to complement existing student expenditure data from a variety of sources including the UK government's Student Income and Expenditure Survey and the National Union of Students (NUS). The likely lower and upper ranges above are based on a single student with no dependants living in college accommodation (including utility bills) and are provided for information only.

When planning your finances for future years of study at Oxford beyond 2021-22, you should allow for an estimated increase in living expenses of 3% each year.

Document accessibility

If you require an accessible version of the document, please contact Undergraduate Admissions by email (uao.comms@admin.ox.ac.uk) or via the online form (<http://www.ox.ac.uk/ask>).

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Please note, at the time of publishing the CIS, further details regarding the availability and eligibility of financial support for some EU students with settled or pre-settled status remained outstanding. Confirmation about funding arrangements for the year abroad were also outstanding. Any updates impacting students will be published on the Oxford and the EU webpage.