UNDERGRADUATE ADMISSIONS AND OUTREACH
University Offices, Wellington Square, Oxford OX1 2JD

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Mathematics and Statistics Course Information Sheet for entry in 2023

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-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	**ASSESSMENT**
Compulsory Year 1 includes: • Algebra • Analysis • Probability and statistics • Geometry • Dynamics • Multivariable calculus	First University examinations: five compulsory papers; Computational mathematics projects

YEAR 2	
COURSES	**ASSESSMENT**
Current core courses: • Probability • Statistics • Algebra • Differential equations • Metric spaces • Complex analysis	Final University examinations, Part A: five core papers and four or five optional papers

Current options: • Simulation and statistical programming • Selection from a menu of other options in Mathematics	

YEAR 3	
COURSES Current options include: • Applied and computational statistics • Statistical inference • Statistical machine learning • Applied probability • Statistical lifetime models • Wide range of other options in Mathematics	**ASSESSMENT** Final University examinations, Part B: the equivalent of eight written papers including assessed practicals

YEAR 4	
COURSES • Statistics dissertation Current options include: • Stochastic models in mathematical genetics • Probability and statistics for network analysis • Advanced topics in statistical machine learning • Advanced simulation methods • Graphical models • Topics in computational biology • Algorithmic foundations of learning • Probability on graphs and lattices	**ASSESSMENT** 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.)

• Wide range of other options in Mathematics *The options listed above are illustrative and may change. A full list of current options is available on the Mathematics and Statistics websites.*	

The University will seek to deliver this course in accordance with the description 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.

Fees

These annual fees are for full-time students who begin this undergraduate course here in 2023.

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)	£37,380

Note: Irish nationals living in the UK or Ireland, EU, other EEA, and Swiss nationals who have been granted settled or pre-settled status in the UK under the EU settlement scheme are eligible for 'Home fee' status and student loan support, subject to meeting residency requirements. We will contact you directly if we need further information from you to determine your fee status.

Please refer to the Undergraduate fee status pages for more information.

Living costs

Living costs for the academic year starting in 2023 are estimated to be between £1,290 and £1,840 for each month you are in Oxford. Our academic year is made up of three eight-week terms, so you would not usually need to be in Oxford for much more than six months of the year but 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	£300	£470	£2,700	£4,230
Accommodation (including utilities)	£715	£860	£6,435	£7,740
Personal items	£180	£305	£1,620	£2,745
Social activities	£40	£90	£360	£810
Study costs	£35	£80	£315	£720
Other	£20	£35	£180	£315
Total	**£1,290**	**£1,840**	**£11,610**	**£16,560**

In order to provide these likely living costs (which are rounded to the nearest £5), the University and the Oxford SU 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 current economic climate and high national rate of inflation make it very hard to estimate potential changes to the cost of living over the next few years. When planning your finances for any future years of study in Oxford beyond 2023-24, it is suggested that you allow for potential increases in living expenses of 5% or more each year – although this rate may vary significantly depending on how the national economic situation develops. UK inflationary increases will be kept under review and the Living costs webpage updated.

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.