Mathematics and Statistics Information Sheet for entry in 2018

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 skills required 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.

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. Mathematics and Statistics students also follow second-year 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 it provides an opportunity for more in-depth study, including a substantial Statistics project.

A typical weekly timetable

The typical week of a student in Mathematics and Statistics is similar to that for Mathematics:

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

1st year

Courses	Assessment
Compulsory 1st year includes: - Algebra - Analysis - Probability and statistics - Geometry and dynamics - Multivariate calculus and mathematical models	First University examinations: Five compulsory papers Computational mathematics projects

2nd year

Courses	Assessment
Current core courses: - Probability - Statistics - Algebra and differential equations - Metric spaces and complex analysis Current options: - Statistical programming and simulation - Selection from a menu of other options in Mathematics	Final University examinations, Part A: Five core papers and four or five optional papers

3rd year	
Courses Current options include: • Applied and computational statistics • Statistical inference • Applied probability • Statistical lifetime models • Actuarial science • Wide range of other options in Mathematics	**Assessment** Final University examinations, Part B: The equivalent of eight written papers including assessed practicals
4th year (extended terms)	
Research • Statistics project Current options include: • Stochastic models in mathematical genetics • Probability and statistics for network analysis • Statistical data dining and machine learning • Advanced simulation models • Bayes methods • Probabilistic combinatorics • 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.*	**Assessment** Final University examinations, Part C: The equivalent of eight written papers Currently upper second required to progress to Part C

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.

Fees

Oxford University is committed to recruiting the best and brightest students from all backgrounds. We offer a generous package of financial support to Home/EU students from lower-income households. (UK nationals living in the UK are usually Home students.)

These annual fees are for full-time students who begin this undergraduate course here in 2018.

Fee Status	Tuition fee	College fee	Total annual fees
Home/EU	£9,250	£0	£9,250
Islands (Channel Islands & Isle of Man)	£9,250	£0	£9,250
Overseas	£17,275	£7,570	£24,845

Information about how much fees and other costs may increase is set out in the University's Terms and Conditions.

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

Your living costs will vary significantly dependent on your lifestyle. These are estimated to be between £1,014 and £1,556 per month in 2018-19. Undergraduate courses usually consist of three terms of eight weeks each, but 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	£258	£361	£2,318	£3,245
Accommodation (including utilities)	£536	£677	£4,824	£6,093
Personal items	£118	£263	£1,066	£2,364
Social activities	£41	£123	£369	£1,105
Study costs	£39	£85	£348	£765
Other	£22	£47	£202	£419
Total	**£1,014**	**£1,556**	**£9,127**	**£13,991**

When planning your finances for future years of study at Oxford beyond 2018-19, you should allow for an estimated increase in living expenses of 3% each year.

10 November 2017