Mathematics Information Sheet for entry in 2018

Mathematicians have always been fascinated by numbers. One of the most famous problems is Fermat's Last Theorem: ie if $n \geq 3$, the equation $x^n + y^n = z^n$ has no solutions with x, y, z all nonzero integers. An older problem is to show that one cannot construct a line of length $3\sqrt{2}$ with ruler and compass, starting with just a unit length.

Often the solution to a problem will require you to think outside its original framing. This is true here, and you will see the second problem solved in your course; the first is far too deep and was famously solved by Andrew Wiles.

In applied mathematics we use mathematics to explain phenomena that occur in the real world. You can learn how a leopard gets its spots, explore quantum theory and relativity, or study the mathematics of stock markets.

We will encourage you to ask questions and find solutions for yourself. You will need to think mathematically and we begin by teaching you careful definitions so that you can construct theorems and proofs. Above all, mathematics is a logical subject, so you will need to argue clearly and concisely as you solve problems. For some of you, this way of thinking or solving problems will be your goal. Others will want to see what further can be discovered. Either way, it is a subject we want you to enjoy.

The course

There are two Mathematics 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.

The first year consists of core courses in pure and applied mathematics (including statistics). Options start in the second year, with the third and fourth years offering a large variety of courses, including options from outside mathematics.

A typical weekly timetable

- Years 1 and 2: around ten lectures a week, two–three tutorials or classes a week
- Additional practicals in computing (first year) and numerical analysis (if taken)
- Years 3 and 4: eight lectures a week, with two–four classes a week, depending on options taken

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
• Compulsory core of Algebra, Complex analysis, Metric spaces, Differential equations • Selection from topics including Algebra; Number theory; Analysis; Applied analysis; Geometry; Topology; Fluid dynamics; Probability; Statistics; Numerical analysis; Graph theory; Special relativity; Quantum theory	Final University examinations, Part A: Three core papers and six or seven optional papers

3rd and 4th years

Courses	Assessment
Large variety, ranging across: Algebra; Analysis; Applied analysis; Geometry; Topology; Logic; Number theory; Applied probability; Statistics; Theoretical mechanics; Mathematical physics; Mathematical biology; Information theory; Actuarial mathematics; Undergraduate Ambassadors Scheme; Dissertation; Mathematical philosophy; Computer Science options; History of Mathematics *The options listed above are illustrative and may change. A full list of current options is available on the Maths website.*	3rd year: Final University Examinations, Part B: Eight papers or equivalent 4th year: Final University Examinations, Part C: Eight papers or equivalent Classification on Parts A and B. Currently upper second required to progress to Part C. Separate classification on 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

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

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