



### **Mathematics and Philosophy Information Sheet for entry in 2019**

This course brings together two of the most fundamental and widely applicable intellectual skills. Mathematical knowledge and the ability to use it is the most important means of tackling quantifiable problems, while philosophical training enhances the ability to analyse issues, question received assumptions and clearly articulate understanding. The combination provides a powerful background from which to proceed to graduate study in either Mathematics or Philosophy or to pursue diverse careers. Historically, there have been strong links between Mathematics and Philosophy; logic, an important branch of both subjects, provides a natural bridge between the two, as does the philosophy of mathematics.

The degree is constructed in the belief that the parallel study of these related disciplines can significantly enhance your understanding of each.

The Philosophy Faculty is the largest in the UK, and one of the largest in the world, with more than 70 full-time members and admitting around 450 undergraduates annually to read the various degrees involving Philosophy. Many faculty members have a worldwide reputation, and the faculty has the highest research ratings of any philosophy department in the UK. The Philosophy Library is among the best in the country. The large number of undergraduates and graduates reading Philosophy with a variety of other disciplines affords the opportunity to participate in a diverse and lively philosophical community.

The Mathematics Department, since 2013 housed in the Andrew Wiles Building, is also one of the largest and best in the UK and contains within it many world-class research groups. This is reflected in the wide choice of mathematics topics available to you, especially in the fourth year.

#### **The course**

There are two Mathematics and Philosophy degrees, the three-year BA and the four-year MMathPhil. Decisions regarding continuation to the fourth year do not have to be made until the third year.

The mathematics units in this joint course are all from the single-subject Mathematics course. Accordingly the standard in mathematics for admission to the joint course is the same as for admission to the single-subject Mathematics course. The compulsory core mathematics for the joint course consists of the pure (as opposed to applied) mathematics from the compulsory core for the single-subject Mathematics course. The philosophy units for the Mathematics and Philosophy course are mostly shared with the other joint courses with Philosophy.

In the first year all parts of the course are compulsory. In the second and third years some subjects are compulsory, consisting of core mathematics and philosophy and bridge papers on philosophy of mathematics and on foundations (logic and set theory), but you also choose options. In the fourth year there are no compulsory subjects, and you can do all Mathematics, all Philosophy, or a combination of the two.



**A typical week**

- Years 1 and 2: up to ten lectures a week, two–three tutorials a week
- Years 3 and 4: up to eight lectures a week. Equivalent of eight units taken each year. Weekly tutorials per Philosophy subject. Fortnightly classes per Mathematics unit

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.

<b>1st year</b>	
<p><b>Courses</b></p> <p>Mathematics</p> <ul style="list-style-type: none"> <li>• Algebra</li> <li>• Analysis</li> <li>• Calculus and probability</li> </ul> <p>Philosophy</p> <ul style="list-style-type: none"> <li>• Elements of deductive logic</li> <li>• General philosophy</li> <li>• Frege, <i>Foundations of Arithmetic</i></li> </ul>	<p><b>Assessment</b></p> <p>First University examinations: Five compulsory written papers</p>
<b>2nd and 3rd years</b>	
<p><b>Courses</b></p> <p>Mathematics</p> <ul style="list-style-type: none"> <li>• Core pure mathematics (Algebra, Metric spaces, Complex analysis)</li> <li>• Foundations (Set theory, Logic)</li> <li>• Intermediate mathematics options</li> </ul> <p>Philosophy</p> <ul style="list-style-type: none"> <li>• Knowledge and reality or Early Modern philosophy</li> <li>• Philosophy of mathematics</li> <li>• Further philosophy papers</li> </ul>	<p><b>Assessment</b></p> <p>Final University examinations, Part A (2nd year): Two written papers on pure mathematics core and two written papers on mathematics options</p> <p>Final University examinations, Part B (3rd year): Four 90-minute exams in Mathematics and three three-hour papers in Philosophy and either two further 90-minute Mathematics exams or one further three-hour Philosophy paper (or the equivalent)</p>
<b>4th year</b>	
<p><b>Courses</b></p> <p>Mathematics</p> <p>Advanced options including:</p> <ul style="list-style-type: none"> <li>• Axiomatic set theory</li> <li>• Elliptic curves</li> <li>• Gödel’s incompleteness theorems</li> <li>• Infinite groups</li> <li>• Model theory</li> </ul>	<p><b>Assessment</b></p> <p>Final University Examinations, Part C: Philosophy subjects include a 5000-word essay. Students study three Philosophy subjects or eight Mathematics units, or a mixture of the two disciplines. Upper second currently required to progress to Part C.</p>



- Stochastic differential equations
- Optional mathematics dissertation

Philosophy

Advanced options in Philosophy

Optional Philosophy thesis

*The options listed above are illustrative and may change. A full list of current options is available on the [Mathematics website](#) and the [Philosophy website](#).*

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

These annual fees are for full-time students who begin this undergraduate course here in 2019.

Fee status	Annual Course fees
Home/EU	£9,250
Islands (Channel Islands & Isle of Man)	£9,250
Overseas	£27,240

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 Philosophy

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 £1,058 and £1,643 per month in 2019-20. 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.

	Per month		Total for 9 months	
	Lower range	Upper range	Lower range	Upper range
Food	£265	£371	£2,387	£3,342
Accommodation (including utilities)	£566	£739	£5,093	£6,655
Personal items	£122	£271	£1,098	£2,435
Social activities	£42	£126	£380	£1,138
Study costs	£40	£88	£359	£788
Other	£23	£48	£208	£432
<b>Total</b>	<b>£1,058</b>	<b>£1,643</b>	<b>£9,525</b>	<b>£14,790</b>

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 2019-20, you should allow for an estimated increase in living expenses of 3% each year.