Course Information Sheet for entry in 2018-19 MSc in Mathematics and Foundations of Computer Science



About the course

The MSc in Mathematics and Foundations of Computer Science, run jointly by the Mathematics Institute and the Department of Computer Science, focuses on the interface between pure mathematics and theoretical computer science.

The mathematical side concentrates on areas where computers are used, or which are relevant to computer science, namely algebra, general topology, number theory, combinatorics and logic. Examples from the computing side include computational complexity, concurrency, and quantum computing. Students take a minimum of five options and write a dissertation.

The course is suitable for those who wish to pursue research in pure mathematics (especially algebra, number theory, combinatorics, general topology and their computational aspects), mathematical logic, or theoretical computer science. It is also suitable for students wishing to enter industry with an understanding of the mathematical and logical design and concurrency.

The course will consist of examined lecture courses and a written dissertation. The lecture courses will be divided into two sections:

- Section A: Mathematical Foundations
- Section B: Applicable Theories

Each section shall be divided into schedule I (basic) and schedule II (advanced). Students will be required to satisfy the examiners in at least two courses taken from section B and in at least two courses taken from schedule II. The majority of these courses should be given in the first two terms.

During Trinity term and over the summer students should complete a dissertation on an agreed topic. The dissertation must bear regard to course material from section A or section B, and it must demonstrate relevance to some area of science, engineering, industry or commerce.

It is intended that a major feature of this course is that candidates should show a broad knowledge and understanding over a wide range of material. Consequently, each lecture course taken will receive an assessment upon its completion by means of a test based on written work. Students will be required to pass five courses, that include two courses from section B and two at the schedule II level - these need not be distinct - and the dissertation.

The course runs from the beginning of October through to the end of September, including the dissertation.

Changes to courses

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.

Expected length of course

12 months

Costs

Annual fees for entry in 2018-19

Fee status	Tuition fee	College fee	Total annual fees
Home/EU (including Islands)	£6,270	£3,112	£9,382
Overseas	£17,275	£3,112	£20,387

The fees shown above are the annual tuition and college fees for this course for entry in the stated academic year; for courses lasting longer than one year, please be aware that fees will usually increase annually. Information about how much fees and other costs may increase is set out in the University's Terms and Conditions.

Tuition and college fees are payable each year for the duration of your fee liability (your fee liability is the length of time for which you are required to pay tuition and college fees).

Additional cost information

There are no compulsory elements of this course that entail additional costs beyond fees and living costs. However, as part of your course requirements, you may need to choose a dissertation, a project or a thesis topic. Please note that, depending on your choice of topic and the research required to complete it, you may incur additional expenses, such as travel expenses, research expenses, and field trips. You will need to meet these additional costs, although you may be able to apply for small grants from your department and/or college to help you cover some of these expenses.

Living costs

In addition to your tuition and college fees, you will need to ensure that you have adequate funds to support your living costs for the duration of your course.

The likely living costs for 2018-19 are published below. These costs are based on a single, full-time graduate student, with no dependants, living in Oxford. We provide the cost per month so you can multiply up by the number of months you expect to live in Oxford.

	Likely living costs for 1 month		Likely living costs for 9 months		Likely living costs for 12 months	
	Lower range	Upper range	Lower range	Upper range	Lower range	Upper range
Food	£258	£361	£2,318	£3,245	£3,090	£4,326
Accommodation	£536	£677	£4,824	£6,093	£6,432	£8,124
Personal items	£118	£263	£1,066	£2,364	£1,421	£3,152
Social activities	£41	£123	£369	£1,105	£492	£1,474
Study costs	£39	£85	£348	£765	£464	£1,020
Other	£22	£47	£202	£419	£269	£559
Total	£1,014	£1,556	£9,127	£13,991	£12,168	£18,655

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

More information about how these figures have been calculated is available at www.graduate.ox.ac.uk/livingcosts.