Course Information Sheet for entry in 2016-17

MSc in Computer Science

About the course

The MSc in Computer Science at Oxford has been designed to teach the mathematical principles of specification, design and efficient implementation of both software and hardware. This course is intended for graduates in computer science as well as graduates in other numerate disciplines who have some training or experience in programming.

As in other branches of applied mathematics and engineering, improvements in the practice of programming require determined and meticulous application of methods of mathematical understanding, calculation and proof.

Recognising this, this full-time, twelve-month MSc has been designed to teach the mathematical principles of specification, design and efficient implementation of both software and hardware.

The course aims:

to provide the foundation for a professional career in the computing-based industries, including telecommunications, process control, business-, mission-, and safety-critical fields;

to enhance the skills of a professional who is already working in one of these industries;

to provide a foundation for research into the theory and practice of programming and the design of computer-based systems;

to present knowledge, experience, reasoning methods and design and implementation techniques that are robust and forward-looking.

The Department of Computer Science is committed to the development and application of effective theory based on realistic practice, and some of the modules were developed through consultation and collaboration with industry. The department believes that only by the interplay of theory and practice can you be trained properly in such a rapidly advancing subject. Practice alerts us to real contemporary problems - theory is a shield against professional obsolescence.

You and other entrants to the course will come from a variety of backgrounds. If you are an experienced programmer in industry and commerce, you are motivated by the need for formal methods to overcome the problems of unreliable and inadequate software, or wish to extend your understanding by studying new programming and development paradigms. You may be a recent graduate in computer science and will supplement your knowledge with the kind of sound mathematical basis which is not always found in undergraduate courses. If you are a graduate in mathematics, science or engineering, you will apply your training in the context of a rigorous application of the fundamental techniques of computer science.

You will develop knowledge and understanding of a formal disciplined approach to computer science, a range of relevant concepts, tools and techniques, the principles underpinning these

techniques and the ability to apply them in novel situations. On subsequent employment, you will be able to select techniques most appropriate to your working environment, adapt and improve them as necessary, establish appropriate design standards for both hardware and software, train colleagues and subordinates in the observance of sound practices, and keep abreast of research and development.

The academic year is split into three terms of eight weeks but work on the MSc course continues throughout the year and is not restricted just to term time.

The academic content of this course is as follows:

Taught modules

During the three terms of the course, you will choose from a group of modules on various aspects of computer science. Most modules will last for one term and will be between 16 to 24 lectures. In addition, all modules will have problem classes and some may also have practical sessions associated with them, and the mode of assessment shall be either written assignment or written examination.

Dissertation

In Trinity term you should undertake a dissertation of up to 30,000 words, completed independently under the guidance of an expert supervisor, on a topic of your choice and approved by the supervisor and MSc Course Director.

Changes to courses

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.

Expected length of course

12 months

Annual fees for entry in 2016-2017

Fee Status	Tuition fee	College fee	Total annual fees
Home/EU (including islands)	£7,185	£2,933	£10,118
Overseas	£18,770	£2,933	£21,703

The fees shown above are the annual tuition and college fees for this course for entry in the 2016-17 academic year; for courses lasting longer than one year, please be aware that fees will usually increase annually. For details, please see our guidance on likely increases to fees and charges.

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 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 2016-17 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	£265	£298	£2,384	£2,673	£3,177	£3,565
Accommodation	£469	£667	£4,221	£6,002	£5,627	£8,006
Personal items	£119	£244	£1,073	£2,187	£1,429	£2,915
Social activities	£60	£107	£539	£960	£718	£1,280
Study costs	£36	£73	£314	£661	£418	£880
Other	£19	£44	£197	£410	£265	£547
Total	£970	£1,433	£8,727	£12,894	£11,636	£17,191

When planning your finances for any future years of study in Oxford beyond 2016-17, you should allow for an estimated increase in living expenses of 2% each year.

More information about how these figures have been calculated is available at www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs.

21 October 2015