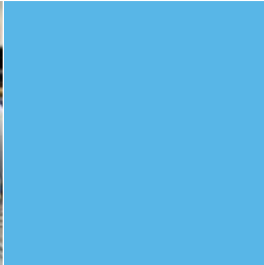
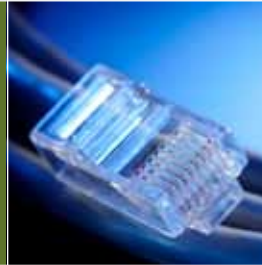
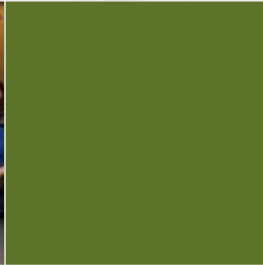


STUDYING COMPUTER SCIENCE AT OXFORD

Undergraduate degrees

- Computer Science
- Maths & Computer Science
- Computer Science & Philosophy



Profiles – snapshots of our students



Hannah Thomas

Third year Mathematics & Computer Science,
Worcester College

I'm from a state school in Maidstone, Kent where I studied German, French, Maths and Further Maths A-level.

I'd always been keen on Maths and my interest in problem solving and languages led me to Computer Science. It also did not assume any prior knowledge of Computer Science. The course has been challenging and exciting. The tutors are so approachable and the course incredibly flexible in the ways you can combine the two subjects. Any initial apprehension I had quickly became unimportant, as it was easy to settle in.



Lubomir Atanassov

Second year Mathematics & Computer Science, Balliol College
Before coming to Oxford I studied in my home country, Bulgaria. I attended a specialised mathematical high school.

I have found that the best thing about studying at Oxford is the truly unique mixture of people. The facilities available to students and the support we get is amazing. The classes at Oxford are small – and that offers a lot of advantages. The part of the course I most enjoy are the practical sessions, as they help me realise how the material we have covered in lectures could be implemented in practice.

Jennifer Hackett

Third year Computer Science, St. Catherine's College
I went to Taunton's, a Sixth Form College in Southampton.
I studied Mathematics, Further Maths, Physics and Computing A-level, and Chemistry AS-level.

The Oxford course strikes a balance between theory and practice that appeals to me. Although at the time I was deciding, I thought I'd be more interested in the practical side of things, I actually find that I prefer the theory now. If I could give a prospective student one piece of advice about coming to study Computer Science at Oxford, I'd say don't decide not to apply because you don't think you're good enough – you could be very surprised.



After you graduate

Our graduates progress to careers in many fields that need an understanding of computer systems, what they can (and cannot) do, and how to design them. Our graduate and postgraduate employment rates are exceptional. A 2010 survey by our Careers Service showed:




- 70% of 2007/8 graduates had gone on to work; 9% to a combination of work and study; and 17% to further academic pursuits. None went to non-graduate occupations or were unemployed.
- Oxford Computer Science students mostly become software professionals, computer programmers, enter the finance sector or embark on academic/research careers.
- The average annual salary of Computing Laboratory students who finished their studies in the 2007/8 academic year was £31,000. (The national average graduate salary for Computer Scientists was £20,388*.)

*What do graduates do? report by the Higher Education Careers Services Unit and the Association of Graduate Careers Advisory Services based on a poll of 2009 graduates six months after graduating.



Your week in Oxford – a rough guide

As a Computer Science student in Oxford, your week will be divided between study – based partly in the Department and partly in your college – and social, cultural and sporting activities.

	MORNING	AFTERNOON	EVENING
MONDAY	<p>Lectures bring together students from all colleges to hear about some aspect of Computer Science, often from a world expert on that part of the subject. The lectures naturally concentrate on the principles behind how computer systems work, so that what you learn will continue to be useful long after you have graduated. Our students typically attend eight to twelve lectures a week.</p>		<p>Sleeping and eating: All colleges offer you a room in college for at least your first and third years, with most housing you for your whole time in Oxford. You won't have to find somewhere to live before you come to Oxford. And you will often only pay for your room during term-time, rather than for a full year. Lunch and dinner in college provide you with an opportunity to get together with friends.</p>
TUESDAY	<p>Project work: In the third year, and again in the optional fourth year, you will have the opportunity to make a more extensive exploration of some of the ideas from your course by doing a project that counts for about a quarter of the exam marks in the year. You will have a project supervisor to guide your work, and might meet with them once a week.</p>		
WEDNESDAY	<p>Tutorials are based in colleges, and are an opportunity for you and a fellow student to spend an hour discussing some aspect of Computer Science with a tutor. In your own time, you will write solutions to a set of problems, and your tutor will mark your work and then discuss it with you for an hour. Students typically have two or three tutorials or classes each week.</p>		<p>Sport: Oxford provides unequalled facilities for sport at every level, from the boat race to your college darts team. If you can play a sport at international level, then there will be opportunities to do that; but equally, if you just like to kick a football around occasionally, there will be a place for you in one of your college's teams.</p>
THURSDAY		<p>Practicals give you an opportunity to work on real programs that reflect the principles you have learned, and are a way to become familiar with up-to-date computing and programming technology. One week you might be creating interactive computer graphics, and another week you might be building a compiler for your own programming language, guided by a member of staff. Practical work might occupy two afternoons a week.</p>	
FRIDAY	<p>Problem classes: In later years of the course, you will also take part in small classes for the specialised topics that you have chosen to study as options in your degree. These small classes allow students to be taught by tutors with special knowledge in the topic, including experts with a world-wide reputation and enthusiastic young researchers.</p>		
SATURDAY	<p>Drama, politics, music: Oxford offers unsurpassed opportunities to get involved in activities outside the confines of your subject, and most students have one or more passions that they pursue with others of the same persuasion, either within their college or together with students from other colleges. At eight weeks, Oxford terms are very short, but somehow you will find the time to fit it all in.</p>	<p>Time off: Oxford is packed with ways to relax with friends and enjoy yourself. Every college has a bar, and college bops are a good way to unwind at the end of term. Oxford has plenty of student-oriented pubs, restaurants and clubs, and for those who can be lured away by the bright lights, London is little more than an hour away by bus.</p>	
SUNDAY			

Our course – year by year



First year

The first year lays the mathematical foundations for the work you will do later in the degree. Start by studying the basics of Computer Science, beginning with how to write a good computer program. Though you may have written programs at school, you will find that the approach we take to programming is quite different, because the emphasis is on explaining why it is that programs work correctly.

College tutors generally set informal tests after each vacation so you can check how you are doing. At the end of the year you will take five university exams.

Second year

You will continue to study the core of Computer Science, but will start to choose optional courses in the areas that interest you most, whether in Computer Architecture, Compilers, Computer Graphics, Advanced Data Structures & Algorithms, or a range of other specialised subjects. Also in the second year you will take part in a group design practical, working with a group of fellow students to design a solution to a practical problem with the support of industry partners such as Ocado and IBM.

You will take four exams at the end of the year, one on core subjects, and three on the options you have chosen.

Third year

You will choose from a range of more advanced options, perhaps also choosing some additional options that you missed in the second year. For example, Intelligent Systems, Computer Security, Knowledge Representation & Reasoning, and Lambda Calculus and Types. You will also undertake an extended project, usually with the aim of developing a substantial computer program.

The year is assessed through a report on your project, and also three exam papers on the options you have taken. The marks from second and third year exams and from your project go together to make up your final degree classification.

Fourth year

Some students choose to leave after three years, but others stay on to do more advanced work that leads to a Master's degree in Computer Science. If you stay for the fourth year, you will take about four advanced research-orientated options, bringing you to the forefront of Computer Science, and preparing you to work in advanced development or research. You will also do a more advanced and extensive project that may lead on to a subsequent research degree.

Most options are assessed by a take-home exam that you will complete during the vacations.

Our Joint Honours courses

The Maths and Computer Science joint degree gives you the chance to combine Computer Science with advanced study of Pure Mathematics, and will suit you if you are interested in using computers to solve mathematical or scientific problems, or in the deeper mathematical basis of Computer Science itself.

Our Computer Science and Philosophy degree allows you to study fascinating areas – most obviously artificial intelligence, information ethics, logic, robotics and virtual reality – where the two disciplines meet in fruitful ways. Both Computer Science and Philosophy are intellectually exciting and creative right from the start: in Computer Science, through the design of computer programs, and in Philosophy, through the working out of arguments and systems of thought.

All undergraduate level programmes are offered as three-year (BA) and four-year (Master's) degrees.

➡ For further details on course content, and options visit:

www.comlab.ox.ac.uk/undergradcourses

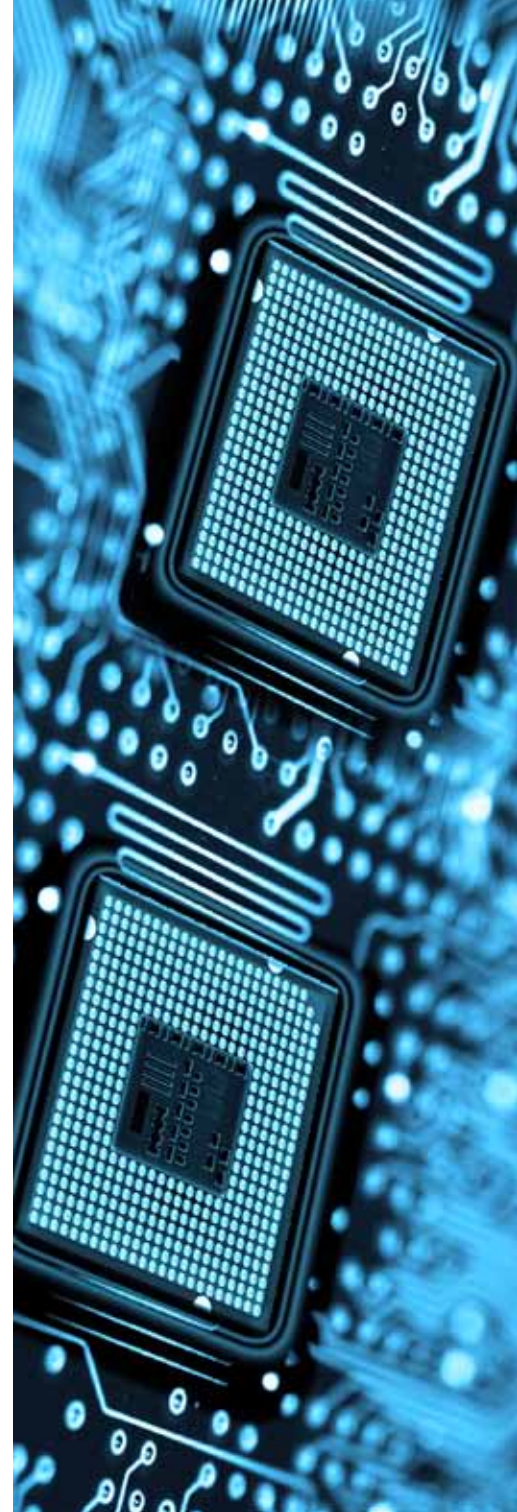
Why Computer Science at Oxford?



Computer Science is about learning and understanding the mathematical, scientific and engineering principles underlying every kind of computing system, from smart phones and games consoles to cloud servers and supercomputers. Practical applications of Computer Science include fighting cancer, protecting endangered species, and automatically translating from one language to another.

But what makes studying Computer Science at Oxford unique?

- **Knowledge that endures** because our courses teach the principles behind whatever technology you are using, rather than just the rules of a particular programming language. By the time you leave Oxford, you will be able to pick up a new language in half a day – skills that will support you throughout your career, no matter what language is fashionable.
- **One-to-one tuition** from internationally-recognised subject experts, through the world famous Oxford tutorial system. Our tutorials are largely given by members of academic staff, not graduate students.
- **The outstanding mix** of people you will meet. Join a community where you live and study alongside people who are as passionate about your subject as you. Learning and debate doesn't stop when you leave the lecture theatre.
- **Computer Science from the start.** You don't have to study another subject alongside. Or you could undertake a joint degree with either Mathematics or Philosophy.
- **Cutting-edge science in a historic setting.** Join the top-ranked Computer Science institution in Europe, according to the latest Academic Ranking of World Universities, and become part of the oldest university in the English speaking world that has been educating world-changing leaders for over 800 years.
- **Excellent facilities** both for academic work and for sporting, artistic, creative and social activities.
- **Generous financial support.** Oxford offers some of the country's most generous financial assistance (that's money you don't pay back) to UK students from lower income households to help with the cost of undergraduate study. A variety of scholarships and prizes are available during the course of the degree.
- **Strong industry links** and our reputation for excellence means our graduates are extremely sought after.



Oxford has one of the longest-established Computer Science departments in the country. Today it is home to a community of world-class research and teaching. Research activities encompass core Computer Science, as well as computational biology, quantum computing, computational linguistics, information systems, software verification and software engineering. The department is home to undergraduates, full-time and part-time Master's students, and has a strong doctoral programme.

The application process and standard offers

To be a successful Computer Science student, you will need a curiosity about how things work, and the ability to use mathematics to solve problems creatively. Computer Science at Oxford starts with the fundamentals of computers and programming, so it is not necessary to have studied Computing or ICT as a formal subject. We do however expect to see evidence of genuine interest and engagement with the subject. (Computer Science & Philosophy students don't need to have studied either subject.)

To apply, first choose which of the three courses you wish to study, and select a college offering this course. Fill in a UCAS form by mid-October. In late October or early November, you will sit an aptitude test for Computer Science. Prospective Computer Science & Philosophy students submit written work in November. Based on all this information we invite most applicants to come for an interview in December.

We will normally make an offer of A*AA on three A-levels including at least an A in Maths. For Computer Science, and Computer Science & Philosophy the A* must be in Maths, Further Maths, Physics or Computing. For Maths & Computer Science the A* must be in Maths or Further Maths. Offers are made in December, and you start your course the following October having met the conditions of your offer.

For further information, including details of the wide range of alternative qualifications we are also happy to accept, visit: ➔ www.comlab.ox.ac.uk/howtoapply

Got a question?

Email us: undergraduate.admissions@comlab.ox.ac.uk

Department of Computer Science, University of Oxford,
Wolfson Building, Parks Road, Oxford, OX1 3QD, England.



DEPARTMENT OF
**COMPUTER
SCIENCE**



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More information

Visit the Computer Science admissions website for detailed information on course content, advice on applying, sample Computer Science aptitude test and interview questions, plus FAQs:

➔ www.comlab.ox.ac.uk/undergradcourses

Learn more about the Oxford admissions process:

➔ www.admissions.ox.ac.uk (not Computer Science specific.)

Attend an open day or schools event:

➔ www.comlab.ox.ac.uk/opendays

Funding and fees:

➔ www.ox.ac.uk/feesandfunding

Help for international students:

➔ www.ox.ac.uk/international