



Be one of the first to experience the new undergraduate science programme at a university leading the way in biomedical teaching and research

Biomedical Sciences (BC98)

BA in Cell and Systems Biology
BA in Neuroscience



www.medsci.ox.ac.uk/study/bms



Biomedical science is an exciting and rapidly-moving subject area, highly relevant to major issues facing society today. The University of Oxford is an internationally recognised centre of excellence for biomedical research and teaching, and studying here will give you the firm foundation you will need for your future.

Why Biomedical Sciences at Oxford University?



“The Oxford method of teaching is special. Students are taught to think beyond the facts to understand how they were established and their significance. The style of teaching means that it is very easy to become immersed in areas that you would never dream of being interested in while still at school. With its particularly strong emphasis on the role of research and experiment, my course at Oxford has helped me to explore for myself topics that fascinate me, and to extend and deepen my study. This has been academically fulfilling, and has equipped me with the skills to succeed after my degree.”

Oxford boasts excellent facilities for biomedical sciences students, which include outstanding libraries and a purpose-built teaching centre that houses superbly equipped computing and laboratory facilities. Our teaching style is aimed at supporting and developing you as an individual, so that you can maximise your full potential.

The course will provide an intellectually stimulating education in biomedical sciences. Our broad and flexible programme ranges from genetics and molecular and cellular biology to integrated systems physiology, neuroscience and psychology. Students will be educated by academics who are experts in their fields. At the heart of the education we provide is the tutorial system, which offers you the chance to review theories with tutors and further explore ideas that arise in discussion with them.

Throughout the course, you will be encouraged to take an enquiring and critical approach to your studies. As the course progresses, increasing emphasis will be placed on relating knowledge to scientific research. You will be introduced to the principles underlying experimental research and encouraged to think independently and analytically, carefully assessing evidence and interpreting data.

You will have the opportunity to specialise more deeply as you progress through the programme, and will choose to ultimately graduate with either a **BA in Neuroscience** or a **BA in Cell & Systems Biology**.

Is this course for me?

If you are a highly motivated student who is passionate about your subject, the University of Oxford offers an unsurpassed environment in which to study. Additionally, the design of the course will enable you to tailor your studies, as you progress, to match your particular interests and ambitions. The course will introduce topics that may be completely new to you: since your interests may change over time, it is sufficiently flexible that you do not need to decide immediately the areas in which you will ultimately specialise.

You will be well-suited to our course if you are:

- studying mainly science subjects at A level;
- excited by the prospect of extending the science you have covered at school, and learning how this can be applied in research and clinical practice;
- eager to learn about the processes underlying cell and systems biology and neuroscience;
- intrigued by the interdisciplinary nature of the subject;
- analytical and have good numerical skills.

You will graduate with not only an excellent foundation for future study or research, but also with a range of strong transferable skills applicable to any number of career paths.



The course is structured to offer a high degree of flexibility. In the earlier stages of the course you will explore the breadth of the subject to determine where your interests lie, in order to inform your specialist choices later on.

How is the course structured?

In the third term of your second year you will join one of the University's research laboratories to work on an experimental research project of your choosing. Students can identify the topic that they wish to research, with many research groups within the University's biomedical sciences departments welcoming students to their laboratories. The project will help to deepen your understanding of science and research methods, and enable you to learn first-hand from research scientists.

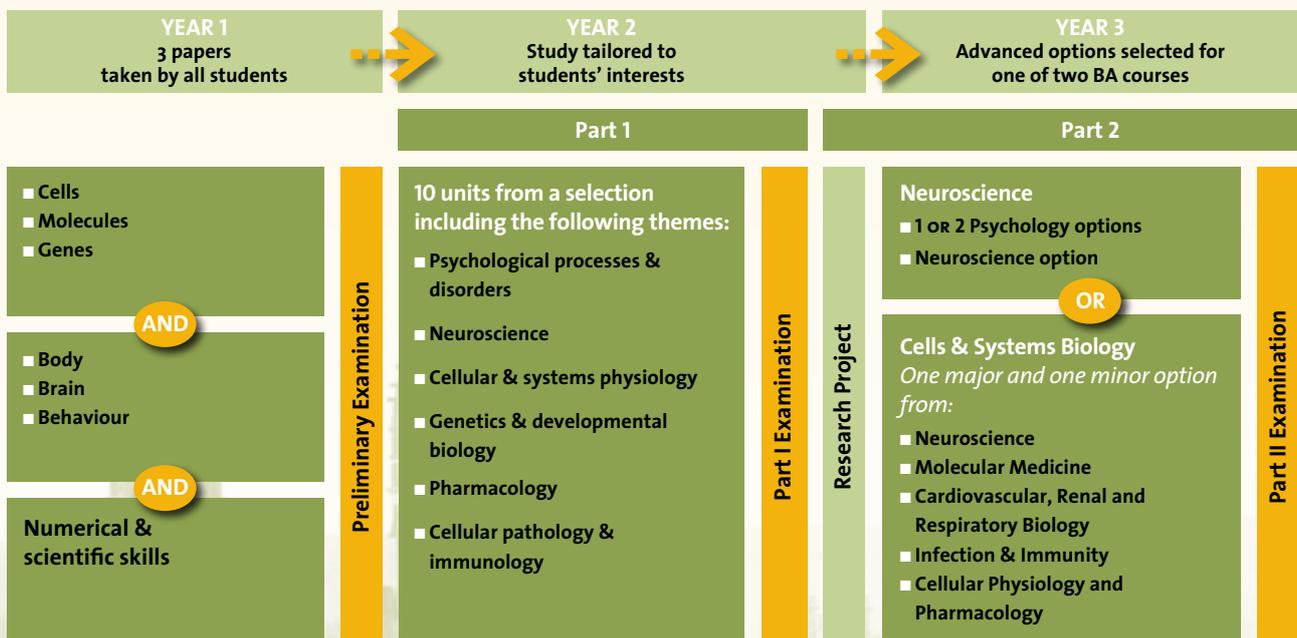
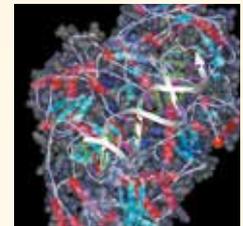
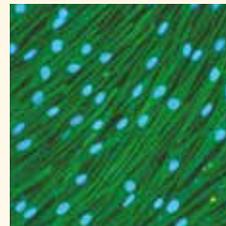
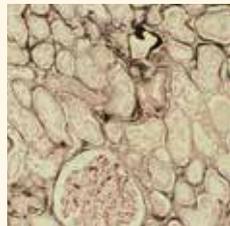
The broad first year will ensure that you receive a strong foundation in all aspects of the subject, and training in relevant study skills. You will attend lectures, practical classes and tutorials that will introduce you to systems science (Behaviour, Brain and Body) and to cell biology (Cells, Molecules, Genes), as well as classes in essential physical, mathematical and statistical concepts to give you the confidence to work with primary literature later in the course.

Entering the second year, you can select from a wide range of options, allowing you to learn in greater depth about biochemistry and genetics, pathological processes, neuroscience and psychology, and physiology and pharmacology. Your choices will to some extent be shaped by the area in which you anticipate you are likely to specialise in your final year, although they will also offer you the chance to explore and confirm where your

interests lie and help you identify just what that area will be.

By the beginning of your third year, you will have chosen whether you wish to graduate from the course with either a BA degree in Cell and Systems Biology or a BA degree in Neuroscience.

Students electing for the pathway in Cell and Systems Biology will study themes from two of five specialised options (Neuroscience; Molecular Medicine; Cardiovascular, Renal and Respiratory Biology; Infection and Immunity; Cellular Physiology and Pharmacology), whereas students electing for Neuroscience will select either one or two from around twenty Psychology advanced courses to study alongside themes from the specialised Neuroscience option. **The course in the third year is intended to encourage both in-depth, focussed study, and also integrative thinking that seeks out connections between different research disciplines.**



PLEASE NOTE: The Faculty reserves the right to limit numbers being admitted to either pathway in the third year.



What do the Colleges do?

College life is one of Oxford University's greatest assets, since a close college community provides a friendly and welcoming home for students. Tutors get to know students individually, enabling them to respond to their particular academic needs. You therefore receive all the benefits of being educated at a large, internationally-recognised university while living and studying in a small, friendly community, where people know you. Colleges provide students with affordable accommodation for at least two (and often for all three) years of the course and act as a social hub: the extracurricular opportunities to be found within colleges are almost limitless and whatever your interests - music, drama, sports, politics - there will be a society for you in Oxford.

The Oxford system combines the best of one-to-one or small-group teaching in college with the wealth of resources in the University. The tutorial system means that you are likely to receive much more personal tuition and greater pastoral support than other universities can offer. Tutorials are central to study at Oxford.

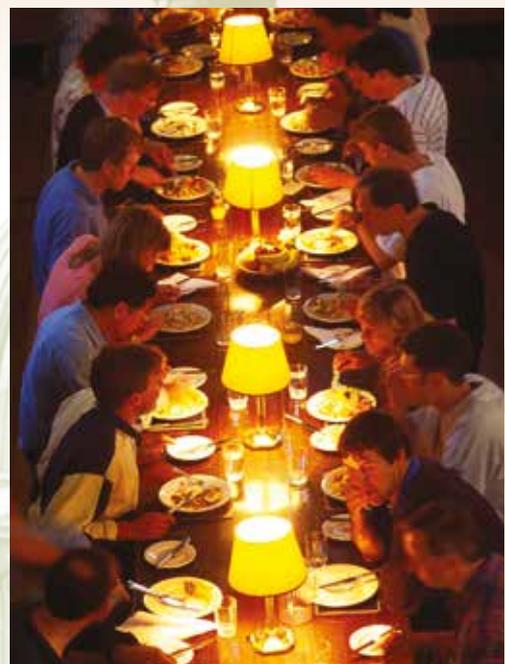
Tutorials are weekly meetings with a tutor and typically one or two other students, to

discuss an essay or other written work. You will consider material that you have studied in advance, review theories and explore ideas that arise in discussion. A tutorial relies on the exchange of ideas between you, your tutor and other students. Tutorials develop your ability to think for yourself, an essential ability for academic success but also a skill that the best employers look for in Oxford graduates. Tutorials give you the chance to discuss your subject with an expert in the field, and will give you the inspiration, confidence, and challenge to get the most out of your course.

Each college has its own particular history, ethos and architecture. However, in terms of the quality of teaching you will receive, all colleges are identical. You can name a college at the application stage, but it is not necessary to do this: be aware that over a third of students happily end up at a college different to the one they originally applied to. Colleges have more in common than they have differences, and all offer excellent facilities.



"For me, the icing on the cake is the tutorial system. Tutorials offer you the chance to both clear up confusing issues and to probe deeper into particular areas of interest - essentially, you get to have absorbing chats with top experts."





The course at Oxford aims to deliver a competitive and up to the minute educational package that will help you both to launch your career and make a leading and life-long contribution to your chosen field.

What sort of student are tutors looking for?

We are looking for academically able and well-motivated students. You should have an aptitude for science and be comfortable with physical and mathematical concepts. You should be able to consider issues from different perspectives, and have a capacity for logical and creative thinking.

Competition for a place for Biomedical Sciences at Oxford is expected to be very strong. To help you to assess your suitability for entry, and chances of securing a place, please take a look at the selection criteria and further detail about the application process: www.medsci.ox.ac.uk/study/bms

Applicants will need to display evidence of a strong academic track-record and to demonstrate that they have particular enthusiasm for biomedical science, strong communication skills and problem-solving ability, and suitability for the style of teaching offered at Oxford. Applications will be considered against set criteria which are common to all colleges.

ALL candidates will need to register for and sit the **Biomedical Admissions Test (BMAT)**. This is usually taken at a local test centre: often at your own school or college. BMAT results will be considered when short-listing candidates for interview. All short-listed candidates will be interviewed at two colleges in Oxford at fixed dates in December each year.

What qualifications do I need?

You should have achieved, or be predicted to achieve, grades **A*AA at A-level**. **Two of these grades must be in Biology, Chemistry, Mathematics or Physics** (alternative qualifications are welcome; see the website for full details and examples of typical offers) before submitting an application.

What will I be qualified to do next?

The Oxford Biomedical Sciences course will provide you with an outstanding education, giving you knowledge and transferable skills that are sought by employers ranging from the National Health Service and other health care organizations to the pharmaceutical and biotechnology sectors. Alternatively, your degree would also prove invaluable for entry to a wider range of careers, and you would be equipped to undertake a postgraduate research programme or taught course in a related field or to consider a graduate-entry course in Medicine.

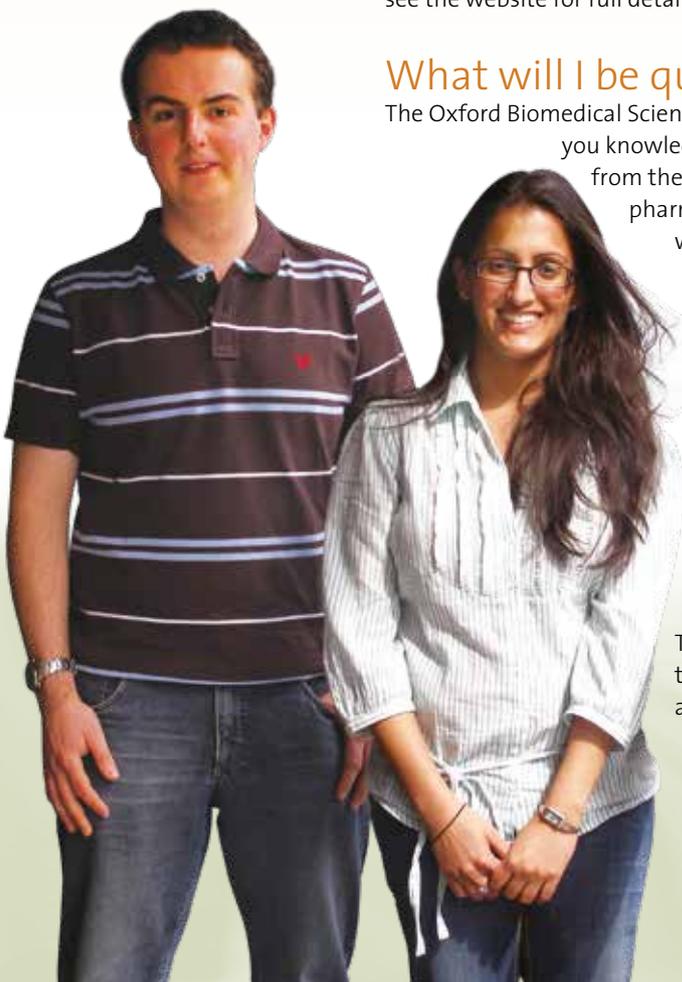
Is Oxford for me?

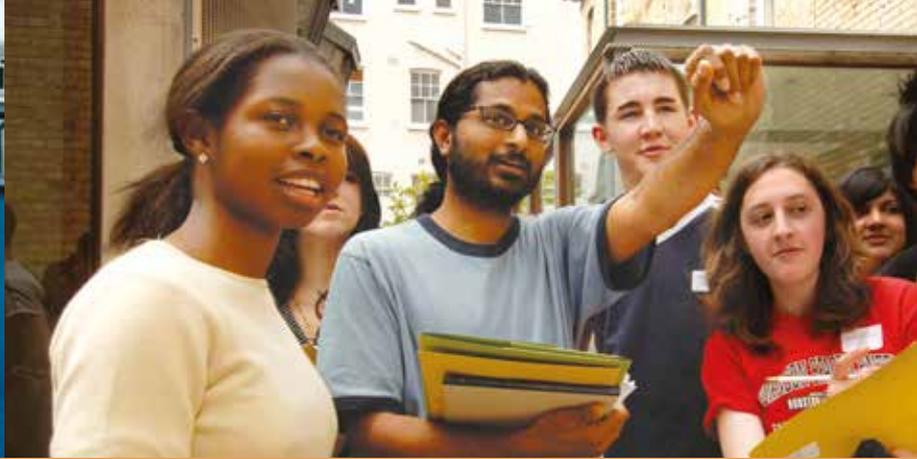
The University and its colleges are committed to admitting students of high academic ability and potential, whoever they might be and whatever their background. The result is a diverse study environment: undergraduate students represent over 130 nationalities as well as all regions of the UK.

The generous Oxford Opportunity Bursary, which has helped thousands of students graduate, ensures that finance should not be a barrier to any UK student who wants to apply to Oxford. Applicants' eligibility is determined solely by funding status and household income. Any UK applicant in receipt of an offer can automatically be assessed for the Bursary.



"I applied to Oxford University because I wanted to study a subject that I love under the supervision of the best tutors in the country. The academic environment, and all round student experience, is rivalled by none and knowing that I am being taught by scientists who are making breakthrough discoveries in exciting fields makes studying here so unlike anywhere else."





What next?

We hold three Open Days each year, details of which can be found on our website.

Visiting Oxford on an Open Day is strongly encouraged, as this will give you the opportunity to find out about the course in greater detail, see our facilities and meet staff and students who can offer their insight and perspective. It is usually also possible to visit one or more colleges on the same day.

The course website (www.medsci.ox.ac.uk/study/bms) contains advice for candidates offering alternative qualifications, guidance about preparing your application and personal statement, details of entry requirements and BMAT, as well as information about the admissions process and responses to frequently asked questions.

If you have further queries, please contact admissions staff at bmsadmissions@medsci.ox.ac.uk

Get in touch...

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South Parks Road
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Email: bmsadmissions@medsci.ox.ac.uk



www.medsci.ox.ac.uk/study/bms