

Biochemistry MSci (Hons)



This is a flexible undergraduate Masters degree course (MSci), offering you the opportunity to tailor a bespoke programme of study matching individual interests and goals. In addition to a solid knowledge base, the course emphasises practical work and the development of a wide range of transferable skills. The fourth year is devoted to developing and honing research skills chiefly through an extended research project, in which the MSci students join one of the research groups in the School of Biosciences.

100% satisfaction with teaching for MSci Biochemistry
2014 National Student Survey

We are one of the first universities in the UK to be awarded Society of Biology accreditation for our 4-year undergraduate MSci degree course in Biochemistry, which recognises the levels of laboratory experience provided by the degree, time spent in active research environment, and coverage of key areas of expertise.



[Study here and find out why the University of Birmingham was awarded The Times and The Sunday Times University of the Year 2013-14](http://www.birmingham.ac.uk/news/latest/2013/09/20-sep-Birmingham-announced-as-University-of-the-Year.aspx)
(<http://www.birmingham.ac.uk/news/latest/2013/09/20-sep-Birmingham-announced-as-University-of-the-Year.aspx>)

Course fact file

UCAS code: C703

Duration: 4 years

Places Available: 70 (This figure is for guidance only. The School recruits towards an overall target with flexible quotas for individual courses)

Applications in 2014: 635

Typical Offer: AAA (**[More detailed entry requirements and the international qualifications accepted can be found in the course details \(? OpenSection=EntryRequirements\)](#)**)

Start date: September

Contact

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[School of Biosciences](http://www.birmingham.ac.uk/schools/biosciences/index.aspx) ([/schools/biosciences/index.aspx](http://www.birmingham.ac.uk/schools/biosciences/index.aspx))

Details

At the interface between chemistry, biology and medicine, biochemists seek to explore and understand the molecular underpinnings of living organisms and of disease. Biochemistry makes an impact on many fronts, offering graduates exciting and varied careers.



I studied Biochemistry (MSci),
which was one of the best
decisions I ever made.



Chiedu Ufodiama
Currently studying medicine



([/schools/biosciences/our-students/ufodiama-chiedu.aspx](http://www.birmingham.ac.uk/schools/biosciences/our-students/ufodiama-chiedu.aspx))

A flexible degree course offers ample scope to tailor a programme of study that matches individual interests and goals. This course particularly emphasizes practical training and research skills, as well as the development of transferable skills that can be deployed in a wide range of professional settings. The Masters year, which

Which courses should I apply for?

This course will award an MSci degree in Biochemistry. Students on this course are not able to earn one of the specialist degree titles. However, you can attend any of the modules required for the specialist degree titles, and so achieve the same level of competence in any given area of specialisation. We also note that candidates who fail to meet the higher offer for this course, but meet the standard offer of the three year BSc course will automatically be offered a place on the three year course, with the chance to upgrade to the MSci course if in-course performance targets are met later on.


Why study this course

Biochemistry is a science subject at the interface between Biology, Chemistry and Medicine. If you are fascinated by the molecular world, and wish to pursue a career in an area with a direct and growing impact on key societal issues, Biochemistry is a great place to start.

The Biochemistry degree course, with its specialist degree options, offers a fantastic opportunity to explore living organisms from a molecular and cellular perspective. We start with the foundations of chemistry, cell biology and genetics and lead you right up to cutting-edge research questions in the final year.

With a Biochemistry degree, you will acquire a wide range of skills, with particular emphasis on data analysis, experimental design and problem solving. Skills acquired in this course enable careers not just in the life science, but across a wide range of professions. Most important of all, Biochemistry has many facets. Check out our collection of [related research stories](http://www.birmingham.ac.uk/schools/biosciences/research/showcase/explore.aspx) (<http://www.birmingham.ac.uk/schools/biosciences/research/showcase/explore.aspx>).



 2013 National Student Survey "100% of students said that overall they were satisfied with the quality of our Biochemistry courses"

Modules

Our modular course programme gives increasing flexibility in choosing modules that resonate with your interests. Following a first year where all modules are compulsory, you take a combination of compulsory and elective modules in the second year, while the third year includes only one compulsory module and a broad choice of elective modules covering areas as diverse as cancer biology, immunology, neurobiology and mechanisms of human disease.

In the final year, the Masters year, research training will take centre stage, with an extended research project and a tailored research training module.

For more detailed descriptions of individual modules, download [Biochemistry Module Descriptions \(PDF 348KB\)](#) ([/Documents/college-les/biosciences/BiochemistryModuleDescriptions\(PDF128KB\).pdf](#)).

First Year

The first year offers a set of modules that explores the full spectrum of biochemistry, from the physiology of living organism to the molecular details of particular biochemical reactions and the enzymes that catalyse these reactions. A key element is the Chemistry module.



First year modules

Biochemistry (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=01331>) - Fundamental biochemical processes taking place inside cells

Cell Biology and Physiology (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23318>) - Tissues, organelles, reproduction and development

Chemistry I (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=04&pgCrse=23617>) - Inorganic and organic chemistry, including practical training.

Skills for Biosciences (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=15847>) - Laboratory skills, transferable skills training including mathematics, IT, literature search and scientific writing.

Genetics I (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23320>) - Storage of genetic information, gene expression and regulation, mitosis and meiosis, gene linkage and chromosome mapping.

Enzymes and Metabolism (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=00808>) - Enzyme catalysis and regulation, metabolism of carbohydrates and vitamins, experimental techniques to study metabolic reactions.

Physical Biochemistry (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=22652>) - The fundamental laws governing biochemical reactions and how we can explore them experimentally.



Nora Miroslavova, Biochemistry graduate "The modules were taught by expert members of staff involved in the research field, which I found very interesting and stimulating."

Second Year

The second year features a combination of core modules that all biochemistry students follow, and two elective modules, where you can start to define your personal direction in the field.

Second year modules

Core modules (taken by all students on the Biochemistry programme)

[Proteins and Enzymes](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23326) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23326>) – Protein structure and evolution, mechanisms of enzyme catalysis, techniques to determine protein structures.

[Membranes, Energy and Metabolism](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23328) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23328>) – Biological membranes and their role in energy metabolism, regulation of metabolism by hormones and other factors

[Molecular Biology and its Applications](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=19822) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=19822>) – Genetic analysis and gene cloning, DNA fingerprinting and forensics, genomics and computational approaches to genetics

[Chemistry II](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23628) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23628>) – Spectroscopic techniques, synthesis of peptides, oligonucleotide and aromatic compounds, determining structures of simple organic molecules.

[Communications and Skills in Biosciences](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=24336) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=24336>) – Science communication in writing and oral presentations, ethics in science, analysis of the scientific literature.

Choose two elective modules from:

[Cell and Developmental Biology](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=24985) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=24985>) – Development of multicellular organisms, interaction between cells and the cellular matrix, regulation of stem cell function.

[Topics in Medical Biosciences](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=18540) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=18540>) – Neurobiology and neurotransmitters, pharmacology and anaesthetics, blood constituents and haemostasis, complement and immunity.

[Genetics II](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=13160) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=13160>) – Organisation of genes and genomes, generation of genetic diversity, gene transmission and analysis of problems in transmission and molecular genetics.

[Microbes and Man](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=22397) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=22397>) – The impact of microbes on humans, bacteria, fungi and viruses, common themes of infectious disease mechanisms.

Third Year

A core component of the third year is a research dissertation, divided up in a literature review, an in-depth analysis of selected research papers and composing a proposal for a new piece of research. The Biochemistry programme also includes one core module focussing firmly on analytical skills. Finally, a diverse spectrum of elective modules allows you to explore individual facets of biochemistry according to your personal preference and interests.

Third year modules

Core content

Research Dissertation

[Experimental Design, Analysis and Interpretation of Biochemical Data](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=24258) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=24258>) – Lectures and practicals focussing on analysing data from biochemical experiments, from considering experimental design, to preparing reagents to composing an experimental report.

Choose three elective modules* from:

[Structures of Destruction](http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=24258) (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=24258>)

[Action=getModuleDetailsList&pgSubj=03&pgCrse=15851](#)) - Bacterial and viral pathogens explored from the perspective of their molecular structures, protein misfolding and amyloid diseases.

Bacterial Gene Regulation

<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=25343>) - How genes are switched on

or off in response to external stimuli, how control of gene expression can be explored experimentally.

Cellular Signalling (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=25351>) - Signal


transduction in and between cells, G-protein coupled receptors, phospholipid and Ca²⁺ signalling, ligand-gated ion channels and electrical responses.

Mechanisms of Toxicity and Disease – Metabolic detoxification, chemical carcinogenesis, genetic toxicity.

Cancer Biology (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=21893>) – Regulation of cell

division and aberrations in malignant tumours, genetic bases of tumourigenesis, programmed cell death.

Molecular and Cellular Immunology

<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=21894>) |  [Watch video](#)

[\(undergraduate/courses/biosciences/module-bio388-molecular-cellular-immunology.aspx\)](#) - Evolution of the immune system, innate immunity, cell biology of immunity, structural basis of discrimination between self and non-self.

Molecular Basis of Bacterial Infection

<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23344>) |  [Watch video](#)

[\(undergraduate/courses/biosciences/module-bio305-molecular-basis-bacterial-infection.aspx\)](#) - Evolution of bacterial virulence, antibiotics and antibiotics resistance, genomic data in analysing pathogenicity.

Genetics III (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=21783>) - Genetic variation in

humans and model organisms, dynamics of chromosome organisation during mitosis and meiosis, genome instability.

Applied and Environmental Microbiology

<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=23331>) - Microbial communities, how

they compete, and behave socially.

Cellular Neurobiology (<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=14675>) | [Watch](#)


[video \(undergraduate/courses/biosciences/module-bio379-cellular-neurobiology.aspx\)](#) - Neuronal function and neural development, synaptic function, transmitter receptors and ion channels.

Eukaryotic Gene Expression

<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=11221>) - Control of gene transcription,

chromatin structure, pre-mRNA processing, mRNA translation and degradation.

Plant Sciences in the 21st Century

<http://cis67.bham.ac.uk:7782/webhandbooks/WebHandbooks-control-servlet?Action=getModuleDetailsList&pgSubj=03&pgCrse=26100>) |  [Watch video](#)

[\(undergraduate/courses/biosciences/module-bio398-plant-science-21st-century.aspx\)](#) - Plant growth and development in relation to food supply, biofuels and climate change. Research-based module with emphasis on analysis of the current research literature.

* Modules run either in Semester 1 or Semester 2. Particular combinations of modules may not be advisable, especially if all 3 choices were to run in the same semester.

Fourth year (Masters year)

The final year is devoted to developing and honing research skills. The central element to achieve competence in research is the research project, which extends over both semesters of the year and which takes up the majority of your work effort. In addition, you will attend a research training module, as well as a taught module drawn from the specialist modules of the third year.

The programme involves mandatory attendance at research seminars given by external researchers visiting the School, which are documented through extended summaries, and data handling and problem solving sessions, including the development of a grant proposal and business plan.



Dr Eva Hyde, Leader of the Undergraduate Masters programme "The MSci course was inaugurated in October 2009 and, with my colleagues, I have tried to create a course in which individual students can largely pursue their own biological interests. At the same time, we aim to further develop skills that are important not only for scientific research but in a wide range of careers."

Fees and funding

Standard fees (<http://www.birmingham.ac.uk/students/ug/courses/fees/standard>) apply

Learn more about **fees and funding** ([undergraduate/fees/loans.aspx](#))

Scholarships

Learn more about our [scholarships and awards \(/undergraduate/fees/funding/index.aspx\)](#)

Entry requirements

Number of A levels required: 3

Typical offer: AAA

Required subjects and grades: Chemistry A level and one other from Biology/Human Biology, Computer Science, Environmental Studies, Geography, Geology, ICT, Maths, Physics, Psychology or Sports Studies/PE. Five GCSEs at grade C (minimum) in Double Award/Integrated Science, English and Mathematics.

General Studies: We do not accept General Studies, Critical Thinking, Citizenship Studies, Applied Science, Communication and Culture, Critical Studies, Global Perspectives, Science in Society and World Development.

Additional information:

The typical offer for the MSci course is higher than that for the corresponding three-year BSc degree programmes. However, all candidates who firmly accept the offer, as their first choice, will automatically be offered a place on the corresponding BSc course if they fail to meet the MSci offer while meeting the standard offer.

BTEC Level 3 Extended Diploma (Applied Science) is accepted only in combination with a science subject at GCE A2 level at grade A. Other qualifications are considered – learn more about [entry requirements \(http://www.birmingham.ac.uk/students/ug/requirements\)](#)

International students:

International Baccalaureate Diploma: 36 points excluding bonus points from TOK and Extended Essay. 6, 6, 6 at HL to include Chemistry and one other science at HL. 5 points in each of SL English and Maths if not offered at GCSE or equivalent.

Standard English language requirements apply

Learn more about [international entry requirements \(http://www.birmingham.ac.uk/students/ug/requirements/international\)](#)

Depending on your chosen course of study, you may also be interested in the Birmingham Foundation Academy, a specially structured programme for international students whose qualifications are not accepted for direct entry to UK universities. Further details can be found on the [foundation academy web pages \(http://www.birmingham.ac.uk/students/foundation-academy/Pathways/index.aspx\)](#).

How to apply

Apply through UCAS at [www.ucas.com \(http://www.ucas.com/\)](#)

Learn more about [applying \(http://www.birmingham.ac.uk/students/ug/courses/apply\)](#)

NB. You should apply through UCAS for your preferred four-year option at the outset. You will still retain the flexibility of switching your registration to one of our three-year BSc degree courses during the second year.

Key Information Set (KIS)

Key Information Sets (KIS) are comparable sets of information about full- or part-time undergraduate courses and are designed to meet the information needs of prospective students.

All KIS information has been published on the Unistats website and can also be accessed via the small advert, or 'widget', below. On the [Unistats website \(http://unistats.direct.gov.uk\)](#) you are able to compare all the KIS data for each course with data for other courses.

The development of Key Information Sets (KIS) formed part of HEFCE's work to enhance the information that is available about higher education. They give you access to reliable and comparable information in order to help you make informed decisions about what and where to study.

The KIS contains information which prospective students have identified as useful, such as student satisfaction, graduate outcomes, learning and teaching activities, assessment methods, tuition fees and student finance, accommodation and professional accreditation.

Related links

[Biochemistry BSc \(Hons\) \(/undergraduate/courses/biosciences/biochemistry.aspx\)](#)

[Undergraduate courses - School of Biosciences - Study here for your Bsc degree \(/schools/biosciences/courses/undergraduate/index.aspx\)](#)

[Biochemistry Module Descriptions \(PDF 128Kb\) \(/Documents/college-les/biosciences/BiochemistryModuleDescriptions\(PDF128KB\).pdf\)](#)

Learning and teaching

As a Birmingham student you are part of an academic research elite and will learn from world-leading experts. From the outset you will be encouraged to become an independent thinker, discussing, analysing and evaluating various aspects of Biology in partnership with the staff who will be involved in every step of your learning.



100% satisfaction with teaching for MSci Biochemistry
2014 National Student Survey

- Lectures** - Your learning will take place in a range of different settings, from scheduled teaching in lectures and small group tutorials, to self-study and peer group learning. As well as traditional whiteboard and pen, our lecture theatres are equipped with the latest technology including movies and animations, molecular graphics and 'ask the audience' style electronic voting systems. Student interaction with staff is encouraged before, during and after lectures particularly using social media.

- **(/schools/biosciences/teaching/teaching-lab.aspx) Practical classes-** Laboratory-based practical work is an integral part of our degree. A typical practical session will last 3 hours allowing you to complete the work at your own pace. In addition to gaining important transferable skills, experience of practical work is essential if you wish to move into a research career and is valued by a wide range of employers. You will engage with academic and postgraduate researchers who will help you during these practical sessions. [Take a virtual tour of one of our teaching labs \(/schools/biosciences/teaching/teaching-lab.aspx\)](/schools/biosciences/teaching/teaching-lab.aspx)
- **Tutorials-** A personal tutorial system is an essential feature of our degree programme and your tutors will help you in three important areas: supporting your academic progress, developing transferable skills and helping with any welfare issues. From the outset, you will be assigned your own Personal Tutor who will get to know you as you progress through your studies, providing academic and welfare advice, encouraging you and offering assistance in any areas you may feel you need extra support to make the most of your potential and your time here at Birmingham.
- **Project (Masters year)-** A core component of your Masters year is the laboratory project, where a lecturer or professor will guide and advise you, with the principal aim to lead you to academic independence. You will join one of the research groups in the School, and you will work on a topic or question that draws on current research activity. You will receive training in relevant lab techniques and you will have to document your work and its results in a thesis-like report.



To begin with you may find university level education challenging, but we will support you to enable you to make this transition. You will have access to a comprehensive support system in the School, including personal tutors and welfare tutors, who can help with both academic and welfare issues throughout your course. You will have a formal transition review during your first year to check on your progress and identify areas where you may need some additional support, and the School's academic small group tutorial system will provide you with skills based support throughout the course.

Our **Academic Skills Centre** (<https://intranet.birmingham.ac.uk/as/libraryservices/asc/index.aspx>) also offers you support with your learning. The centre is a place where you can develop your mathematical, academic writing and general academic skills. It is the centre's aim to help you to become a more effective and independent learner through the use of a range of high-quality and appropriate learning support services. These range from one-to-one support with mathematics and statistics based problems from experienced mathematicians, to workshops on a range of topics including note taking, reading, writing and presentation skills.

Assessment methods

Studying at degree-level is likely to develop in different ways from your previous experience of learning and teaching. As well as remembering biochemical facts you will learn how to demonstrate real understanding as you apply your knowledge to analyse and evaluate scientific information. Our ultimate aim is to help you develop into a skilled and creative biochemist. Each module is assessed separately and you will be assessed in a variety of different ways. All modules contain some continuous assessment, that is, assessment taking place during the teaching period. Continuous assessment generally accounts for over one-third of the mark for a given module, while the remainder are contributed by the end-of-year examination in the summer term. A subset of modules are assessed through course work, without an end-of-year examination.

At the beginning of each module, you'll be given information on how and when you'll be assessed for that particular programme of study. You'll receive feedback on each assessment within four weeks, so that you can learn from and build on what you have done. You'll be given feedback on any exams that you take; if you should fail an exam we will ensure that particularly detailed feedback is made available to enable you to learn for the future.

More information about assessment methods and feedback is given below:

- **Feedback** - Feedback - You will be able to track how your learning is developing by using a wide range of types of feedback. These include: written feedback on your scripts, formative tests (these do not count in your final degree mark), class feedback question sessions, discussions with each other and your tutor. .
- **Examinations** – The formal end-of-year examinations (in May/June of each year) are complemented by course work in the form of essays or reports, data handling or interpretation exercises, poster presentations, seminar presentations, group work and lab reports.
- **Projects and dissertations** – You will choose the topic of your project from a wide range of titles. We offer a range of projects including practical work in the laboratory, field work, computer based projects, or literature reviews. Projects allow you to demonstrate the full range of academic and transferable skills you have developed and provide a stepping stone to into research and other careers.

Employability

Top career prospects for our Biosciences Graduates - Only Cambridge can offer better!

Graduates of the University of Birmingham are highly regarded among employers in the UK, and a Biochemistry degree from Birmingham is an excellent qualification for securing your future career in a diverse range of industries and employment sectors. Whether you have a clear idea of where your future aspirations lie or want to consider the broad range of opportunities available once you have a Birmingham degree, our Careers and Employability Service can help you achieve your goal

Advances in the biosciences are having a profound impact on our daily lives in areas from human health to conservation. Biotechnology, biological pharmaceuticals, and personalised medicine are key growth areas in the health sector. Over the next decade our increasing understanding of how genomes are regulated will revolutionise how we interact with the natural world. Environmental remediation, climate change and related themes pose multi-faceted challenges for the coming decades. Expert knowledge in biology and the life sciences will be in high demand for the foreseeable future, with excellent prospects for exciting and rewarding careers in research, education, media, industry, the NHS and the public sector.

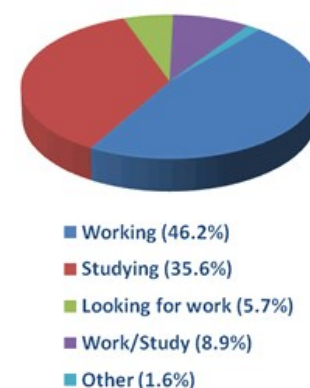
A significant number of our graduates choose to take a further degree, a Masters or PhD. For many career paths, a further degree is an essential stepping-stone, including (but not limited to) careers in research. While many of our graduates remain in Birmingham and join one of our prestigious research groups, they are also highly sought after by universities around the world.

In order to help you build an attractive CV, bursaries from the University can help fund a summer internship in a research laboratory or in a company. Also, you can apply for one of the highly prestigious (and competitive) **Alumni Leadership Mentoring** (<http://www.birmingham.ac.uk/generic/internships/mentoring/alm.aspx>) or **Global Challenge programmes** (<http://www.birmingham.ac.uk/generic/internships/opportunities/globalchallenge/index.aspx>) of the University, which provide unique opportunities to see top notch organisations from an inside perspective. Furthermore, the Personal Skills Award (PSA) scheme gives formal recognition to skills you acquired outside the course, for instance when volunteering for a charity or taking on responsibility within the Guild of Students. We also offer 4-year course options (MSci, Professional Placement, Year Abroad) which are key to giving you a professional edge in a highly competitive job market.

Helping you find the right career

The University and the School of Biosciences provide a range of services to support you in finding a career and to build a CV that stands out from the crowd. Our skills modules and tutorials develop your career skills and are fully integrated with Careers Network, the University's careers advice service. During term time, professional career advisers hold weekly drop-in sessions, discussing with you how to prepare a CV and cover letters, the graduate application process and how to explore possible

First destinations of University of Birmingham Biosciences graduates six months after graduation



Destinations of Leavers of Higher Education report (DHLE) 2012/13

career paths. Talks and presentations by external life sciences professionals are embedded in academic modules. These individuals are either Birmingham alumni or have professional links to the University, and you will learn about their career path and experience.

Our unique careers guidance service is tailored to your academic subject area. Our team source exclusive **work experience opportunities** (<http://www.birmingham.ac.uk/students/careers/work-experience.aspx>) to help you stand out amongst the competition, with **mentoring** (<http://www.birmingham.ac.uk/generic/internships/mentoring/index.aspx>), **global internships** (<http://www.birmingham.ac.uk/generic/internships/index.aspx>) and placements available to you. Once you have a career in your sights, one-to-one support with CV's and job applications will help give you the edge. In addition, our employer-endorsed award-winning **Personal Skills Award (PSA)** (<http://www.birmingham.ac.uk/students/careers/psa.aspx>) recognises your extra-curricular activities, and provides an accredited employability programme designed to improve your career prospects.

An added plus is the Accreditation of the MSci Biochemistry degree course by the Society of Biology, which provides employers with assurance over the levels of laboratory experience, and coverage of specialist expertise provided by the degree.

Professional accreditation

We are one of the first universities in the UK to be awarded Society of Biology accreditation for our undergraduate MSci degree course in Biochemistry.



93% Students agreed staff are good at explaining things



To see more details and compare with other courses

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