

Biochemistry with Professional Placement MSci (Hons)

The point where chemistry, biology and medicine meet, biochemistry deals with the molecular nuts and bolts of living organisms and diseases. Advances in the biosciences are having a profound impact on our daily lives, from human health to conservation, making it a hugely rewarding area to study and work in. Biochemistry provides the foundation for many disciplines, including botany and zoology, genetics, surgery as well as anatomy, pharmacology and pathology, opening up huge potential for your future career path. Studying at Birmingham means you'll benefit from high-technology facilities and teaching from world-renowned experts in their field. You'll also be able to tailor your course to match your own interests and goals, and have the unprecedented opportunity to join one of our research groups, working on live research projects.

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

We are proud to have been awarded formal **Accreditation by the Society of Biology** for the 4-year **MSci Biochemistry course** ([/undergraduate/courses/biosciences/biochemistry-msci.aspx](http://www.birmingham.ac.uk/undergraduate/courses/biosciences/biochemistry-msci.aspx)). This recognition rests on the same elements of training that are integral to the Biochemistry with Professional Placement degree.



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>)

Course fact file

UCAS code: C702

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 \(/schools/biosciences/index.aspx\)](http://www.birmingham.ac.uk/schools/biosciences/index.aspx)

Details

Our flexible degree programme offers you the opportunity to specialise in areas such as medical biochemistry, genetics, biotechnology and molecular cell biology. We put a particular emphasis on practical training and developing transferable skills that will be invaluable in a wide range of professional settings. We are also proud to have been awarded formal Accreditation by the Society of Biology for our four-year MSci Biochemistry course, the foundations of which are the same elements that are integral to our three-year BSc Biochemistry degree.



“ My BSc qualification and knowledge proved a vital stepping stone to my postgraduate qualification in Engineering. ”

Kylee Goode
Lorien Engineering Solutions



[\(/schools/biosciences/our-students/goode-kylee.aspx\)](http://www.birmingham.ac.uk/schools/biosciences/our-students/goode-kylee.aspx)

The Placement year, which is intercalated between the second and final years of the course, is invaluable in providing opportunities for networking, on-the-job training and honing professional skills early on.

Why study this course

We have a large and internationally recognised School of Biosciences offering expertise that is the foundation of our research-led teaching.

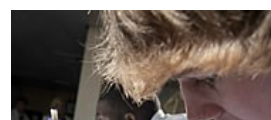
You will encounter a broad range of topics on our courses, ranging from studies on the three-dimensional structure of individual molecules through to the study of whole ecosystems. We pride ourselves in our 'enquiry-based learning' strategy that will equip you with the skills to achieve full potential in your future career.

We increasingly incorporate new areas of science relating to biology, such as bioinformatics, and the School has major high-technology facilities for research in genomics, structural biology and optical imaging.

You also have the opportunity to study part of the course in industry.

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



ganisms 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 final 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.

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.

For more details on individual modules, follow the links or download a document with short module descriptions for the Biochemistry courses here: ([link to Biochemistry module descriptions](#)).

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>) - 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>) - 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>) - Genetic analysis and gene

cloning, DNA fingerprinting and genomics and computational approaches to genetics

Chemistry II (<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>) - 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>) - 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>) - 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>) - 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>) - The impact of microbes on humans, bacteria, fungi and viruses, common themes of infectious disease mechanisms.

Third year (Placement year)

We have a large database of organisations that accept placement students, and are frequently approached by companies or organisations offering placement opportunities in the UK and elsewhere in Europe. The companies and organisations you might be able to work for during your placement include:

Industry

- GlaxoSmithKline
- AstraZeneca
- Basilea Pharmaceutica, Basel, Switzerland
- Forensic Science Laboratory
- Celltech

Medical/Research

- Campden and ChorleyWood Food Research Association
- DSTL, Porton Down

Ecology/Field work

- Horticulture Research International
- The Field Studies Council
- YorkshireWater



Dr Pete Lund, Leader of the Professional Placement Programme "I am keen to offer students the opportunity to experience, first hand, how their chosen degree relates to the work environment and to acquire skills valued by employers."

Final Year

The core component of the final year is the Project, which covers 40 of 120 final year credits. In dialogue with a lecturer or professor, you will do your own research and be led to independence as a biochemist. 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.

You may choose between a laboratory project, a two-part library research or a computing-based project. Students choose their project from an extensive list near the end of their 2nd year. Some even arrange a project independently in collaboration with an academic member of staff. Whichever path you choose, you will find that the project is particular highlight of your academic training and experience.

Final year modules

Core content

Project

Experimental Design, Analysis and Interpretation of Biochemical Data

(<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=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.

Fees and funding

Standard fees (<http://www.birmingham.ac.uk/students/ug/courses/fees/standard>) apply - a standard fee for year in industry is set for 2012/13 new entrants at £2,500. 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 Professional Placement course is higher than that for the corresponding three year BSc degree course. However, all candidates who firmly accept the offer as their first choice will be automatically offered a place on the corresponding three year course should they miss the higher, but meet 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 \(http://www.birmingham.ac.uk/students/ug/requirements/international\)](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 \(http://www.birmingham.ac.uk/students/foundation-academy/Pathways/index.aspx\)](http://www.birmingham.ac.uk/students/foundation-academy/Pathways/index.aspx).

How to apply

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

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

NB. You should apply through UCAS for their preferred four-year option at the outset. Students will retain the flexibility of changing their registration to one of our three-year 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 \(http://unistats.direct.gov.uk\)](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 MSci \(Hons\) \(/undergraduate/courses/biosciences/biochemistry-msci.aspx\)](http://www.birmingham.ac.uk/students/ug/courses/biosciences/biochemistry-msci.aspx)

[Undergraduate courses - School of Biosciences - Study here for your Bsc degree \(/schools/biosciences/courses/undergraduate/index.aspx\)](http://www.birmingham.ac.uk/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.

- **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.
- **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.
- **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 (final year)** - A core component of your final year is the project, which principally comes in two forms: as a laboratory-based project or as an extended dissertation. In both situations, a lecturer or professor will guide and advise you. But the principal aim is to lead you to independence as a future graduate in your field.

You will join one of the research groups in the School for the laboratory-based project, 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.

The dissertation project asks you to explore the research literature in a narrowly defined area of scholarship, with three aims: one, to write a comprehensive review of that area, two, to explore analyse a small set of articles in depth, and three, to develop a new research proposal from your review and in-depth analysis.

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 \(https://intranet.birmingham.ac.uk/as/libraryservices/asc/index.aspx\)](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



Take a virtual tour of one of our teaching labs
(<http://www.birmingham.ac.uk/schools/biosciences/lab.aspx>)

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/almf.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 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.

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



■ Working (46.2%)
■ Studying (35.6%)
■ Looking for work (5.7%)
■ Work/Study (8.9%)
■ Other (1.6%)

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

93% Students agreed staff are good at explaining things

BSc (Hons) Biochemistry with Professional Placement
Full time
Sandwich year



To see more details and compare with other courses

Visit

UNISTATS ▶

Official data collected by HEFCE