

Pharmacy and Biomolecular Sciences

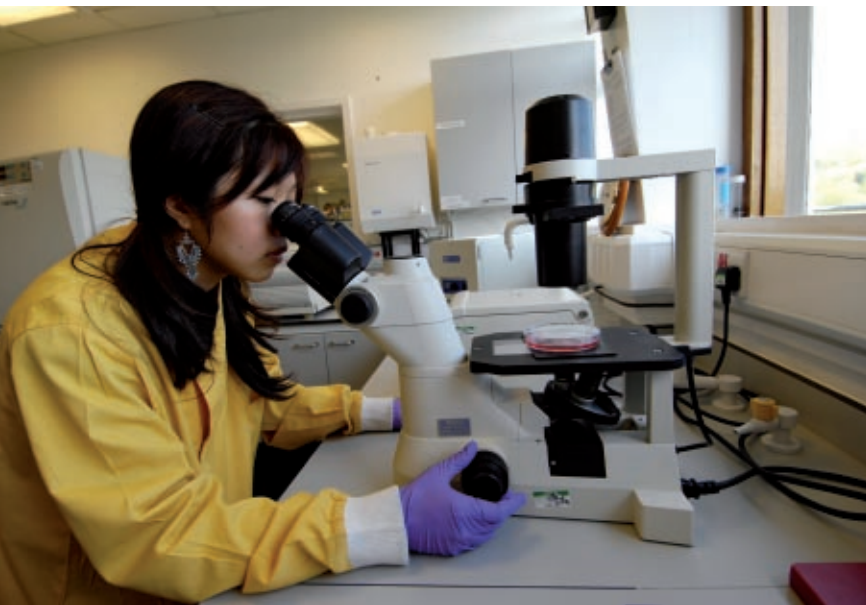
Masters courses leading to MSc and MRes qualifications



University of Brighton

Why choose the University of Brighton?

Find out why we have a reputation as one of the UK's leading post-1992 universities.



▲ Cockcroft Building, Moulsecomb campus, Brighton.

Career-focused study

The University of Brighton offers many professional and vocationally orientated courses, focusing on transferable skills to prepare you for employment. Work placements form a part of many of our courses.

Respected amongst employers

The university has one of the best graduate employment records in the UK. More than 90 per cent of our students are in relevant employment or further studies six months after graduating.

Excellence in teaching and research

We are proud of the high quality of our teaching and research as evidenced by the Quality Assurance Agency teaching assessment results and Research Assessment Exercise ratings.

Great facilities

We offer excellent teaching, library, computer and sports facilities for all students on all our campuses. The School of Pharmacy and Biomolecular Sciences offers a state-of-the-art equipment and learning environments, including over 20 laboratories.

English language support

The university offers a range of English language courses if you need to improve your English before you start your course. Free English language support sessions are also offered throughout your chosen course of study.

Friendly and supportive

We provide excellent international student support in the form of guaranteed first year accommodation in halls of residence and a free orientation programme (subject to conditions being met), a specialist welfare service, career and work placement advice, and a full and varied social programme.

Scholarship opportunities

The university offers a generous range of international student scholarships.

Vibrant and diverse city

Brighton & Hove is Britain's liveliest seaside city offering an exciting mix of shops, restaurants, pubs, clubs and theatres.

Outstanding location

Brighton is surrounded by beautiful countryside and tends to enjoy warmer weather than many other parts of the UK. There are quick and easy transport links into London and to major airports.

Which masters course is right for me?

MSc or MRes?

We run two types of masters courses; MSc and MRes. Both types of degrees are ideal in preparing you for higher degrees and careers outside of academia.

- MSc degrees are taught postgraduate courses involving a research project.
- MRes degrees place greater emphasis on an extended research project that is taken in addition to some taught modules.

Choosing the right type of masters degree for you depends on your previous experience. If you find the prospect of embarking on a year-long research project appealing, then the MRes might be the best option for you.

Alternatively, if you would rather pick up a range of skills through taught modules, then the MSc may be better suited to your requirements. If you want further information and guidance, you can discuss with the course leader or admissions tutor.



Sneha Awate
Pharmaceutical and
Biomedical Science MRes

I have thoroughly enjoyed my one year of MRes in the School of Pharmacy and Biomolecular Sciences, University of Brighton. It was an exciting year filled with new experiences and lots of learning.

In this one year I have explored various new things and come across numerous challenges, however with the help of very experienced and helpful staff I was able to overcome these difficulties and gain the experience and confidence to carry out independent research.

I have enjoyed working in state of the art laboratories in the school. I believe that everything I have learnt in this one year will be valuable throughout my life.

I would like to take this opportunity to thank the staff and my fellow friends at the School of Pharmacy and Biomolecular Sciences for their constant support and excellent guidance.



Biomedical Sciences

MSc (PGDip PGCert)



Stuart James
Course leader

I am a principal lecturer in immunology and course leader for the Biomedical Science MSc. Prior to moving to the University of Brighton, I worked in areas of immunological research, chiefly associated with antibody production and antibody-based assays.

My teaching has focused on immunology, which I deliver to students studying biology, pharmacy and medicine programmes, as well as biomedical science.

I currently co-supervise a number of PhD students and post-docs mostly working on novel approaches to tissue engineering and tissue regeneration.

Our masters degree in Biomedical Sciences aims to enhance your knowledge of the scientific basis of pathological processes and resulting disease states, and insight into laboratory diagnostic processes.

You will develop an informed and critical appreciation of recent scientific developments in relation to a range of subject areas within biomedical science. As well as biomedical science, the core modules contain an element of pharmacology, as a cognately related area. Options are available to gain additional further knowledge in areas such as diabetes, applied immunology and medical genetics.

For the final part of the course you will have the chance to put your skills into practice and undertake a substantial research project.

Course structure

This course is one calendar year, full-time, involving 30 weeks of taught modules divided into two 15-week semesters, and a project which is largely carried out during the remaining time.

Subjects taught include:

- Topics in Biomedical Sciences and Pharmacology
- Topics in Cell Pathology
- Applied Molecular Biology

Examples of optional modules include;

- Diabetes
- Oxidative Stress in Disease
- Diet and Disease

Specialist disciplines within the field of biomedical science include;

- microbiology
- haematology
- clinical immunology
- medical genetics

To qualify for the MSc award you need to carry out a research project during the UK summer period and then submit a 10,000-word dissertation. This is supported by a research methods module.

Who is this course for?

This course is designed for those students who wish to further their knowledge of the biomedical sciences, without necessarily committing to a career in the hospital laboratory service. The degree is expected to gain IBMS accreditation so that part, or all of the course can be used for professional purposes.

Entry requirements

The normal academic standard for entry is a good UK honours degree, or an equivalent overseas qualification, in biomedical sciences or appropriate life science (eg biology, pharmacy), though applications are welcomed from those with qualifications in related subjects and will be considered on an individual basis.

All our MSc programmes require an IELTS score of 6.5 (with no component below 6.0) or equivalent, if English is not your first language.

Bioscience

MRes

Our Bioscience MRes is a research-focused programme that will enhance your knowledge-base and develop your practical skills related to whole-organism biology. The degree can prepare you for a career in biological research in industry, the public sector or in academic life.

The Biosciences MRes encompasses a broad range of interrelated disciplines that involve the study of living systems at all levels of complexity, linked via an acceptance of Darwin's theory of evolution by natural selection.

Course structure

The course is one year full-time (two years part-time). Successful completion of the MRes award requires 180 M-level credits. 80 credits are obtained through specialist modules providing the basic skills for planning, writing and communicating science and which are assessed by assignments and coursework.

The remaining 100 credits are obtained through a research project in a specialised subject. Research fields include genetics, ecology, evolutionary biology, environmental science, neuroscience, ageing, host-microbe interactions.

Examples of taught modules offered include:

- Ecology Field Skills
- Geographic Information Systems and Environmental Assessment
- Analytical Techniques
- Medical Genetics
- Work-in-progress seminars

Who is this course for?

The course equips graduates with the skills and the knowledge to carry out research in a manner that maximises their personal and professional potential and to achieve the greatest benefits for the organisations employing them. The research project provides a real intellectual challenge, enabling the student to demonstrate creativity, initiative and, where appropriate, provide a foundation for doctoral study.

Entry requirements

Applicants should possess a good UK honours degree in pharmacy, pharmaceutical sciences, chemistry, chemical engineering or a related subject. Equivalent overseas qualifications will also be accepted.

All our MRes programmes require an IELTS score of 6.5 (with no component below 6.0) or equivalent, if English is not your first language.



Andrew Overall
Course leader

I am a senior lecturer in genetics and the course leader for the Bioscience MRes. My research interests centre on the application of population genetics to human disease, forensic science and the conservation of mammal populations.

I have worked in research groups in London, Cambridge and Edinburgh universities principally employing genetic fingerprinting techniques, which I continue to use at the University of Brighton.

I have supervised masters and PhD students researching diverse subjects ranging from the gene flow in flat periwinkles through to the genetic basis of anxiety in mammals.

Industrial Pharmaceutical Sciences

MSc (PGDip PGCert)

Our masters degree in Industrial Pharmaceutical Sciences is designed for physical and chemical science graduates who wish to embark on a career in pharmaceutical research, manufacturing, or government agencies. The programme provides essential knowledge and practical experience of medicine manufacture, mode of action, design and quality assurance.

This programme provides a good background in basic pharmaceutical sciences followed by advanced training in drug discovery, drug product design, drug delivery, pharmacology, microbiology and regulatory processes. The course aims to emphasise both fundamental processes and introduction to novel technologies. The programme offers advanced practical experience, supervised training, together with an in-depth research project within an active research group.

Course structure

This course is one calendar year, full-time, involving 30 weeks of taught modules divided into two 15-week semesters, and a project which is largely carried out during the remaining time.

Modules taught include:

- Drug Discovery and Drug Design, Pharmacology and Microbiology
- Advanced Drug Delivery, Industrial Pharmacy and Regulatory Affairs.

Students may have the opportunity to undertake a short industrial placement (optional) during their second semester. A four-month research project is integrated into the second semester, on completion of which you will be required to submit a 10,000 word dissertation. The assessment of each taught module includes coursework and a written examination paper at the end of semester two.

Who is this course for?

This course equips graduates to pursue careers in the pharmaceutical industry, NHS, academic centres, research institutions or with government agencies such as drug licensing authorities. Our graduates will be well placed to apply for a PhD.

Entry requirements

Applicants to the course should possess a good UK honours degree in pharmacy, pharmaceutical sciences, chemistry, chemical engineering or a related subject. Equivalent overseas qualifications will also be accepted.

All our MSc programmes require an IELTS score of 6.5 (with no component below 6.0) or equivalent, if English is not your first language.



Ananth Pannala Course leader

I am a senior lecturer in pharmaceuticals and course leader for Industrial Pharmaceutical Sciences MSc.

Before moving to the University of Brighton, I worked in the pharmaceutical industry in formulation development (novel drug delivery systems), characterisation and manufacture for new chemical entities. The different medical conditions for which novel formulations were developed included treatment of skin and breast cancer, atopic dermatitis and onychomycosis, to name a few.

My teaching has focused on pharmaceuticals, especially formulation development, which I deliver to students studying pharmacy and chemistry programmes. I currently supervise research projects involving development of novel drug delivery systems.

Pharmaceutical and Biomedical Sciences MRes

Our Pharmaceutical and Biomedical Sciences MRes is a research-focused programme that aims to enhance your knowledge base and develop your practical skills related to pharmaceutical and biomedical sciences. The Pharmaceutical and Biomedical Sciences MRes provides a foundation for careers in research in industry, the public sector or the academic life.

Course structure

The course is one-year full-time (two years part-time). Achievement of the MRes award requires the attainment of 180 M-level credits. 80 credits will be obtained via specialist modules providing the basic skills for planning, writing and communicating science to be assessed by assignments and coursework.

100 credits will be obtained through completion of a research project in a specialised subject. Research fields include biomaterials, chemistry, pharmacology, pharmaceuticals, microbiology, neuroscience, ageing.

Examples of taught modules offered include:

- Research Processes and Methodologies
- Analytical Techniques
- Bioanalytical Techniques
- Work-in-progress seminars

Who is this course for?

The course is designed to equip graduates with the skills and the knowledge to enable them to carry out research in a manner that maximises their personal and professional potential and achieve the greatest benefits for the organisations employing them.

The research project is designed to provide a real intellectual challenge, thus enabling the student to demonstrate creativity, initiative and, where appropriate, provide a foundation for doctoral study.

Entry requirements

Applicants to the course should possess a good UK honours degree in pharmacy, pharmaceutical sciences, chemistry, chemical engineering or a related subject. Equivalent overseas qualifications will also be accepted.

All our MRes programmes require an IELTS score of 6.5 (with no component below 6.0) or equivalent, if English is not your first language.



Matthew Ingram
Course leader

I studied medicinal chemistry at the University of Leeds, before moving into the pharmaceutical industry via a PhD at the School of Pharmacy and Chemistry at Liverpool John Moores University.

My PhD research was in novel nitric oxide donating anti-inflammatory drugs. I then moved into an academic career and joined the University of Brighton as a senior lecturer.

During my time here I have supervised PhD students, attracted funding for research and been an admissions tutor. I have also acted as an external examiner for masters degrees and PhD degrees both in the UK and overseas.

Pharmacology

MSc (PGDip PGCert)



Prabal 'Charley' Chatterjee
Course leader

I have been a senior lecturer in pharmacology at the School of Pharmacy and Biomolecular Sciences since 2003 and am the course leader for Pharmacology MSc.

Before joining the university, I was a post-doctoral scientist in London for five years specialising in renal research. I now teach undergraduate pharmacy and medical students all aspects of renal physiology and pharmacology.

My research, as lead researcher of the Renal Research Group, involves investigation of the cellular mechanisms underlying the development of renal diseases such as diabetic nephropathy.

I have recently supervised two PhD students and regularly supervise undergraduate research projects.

Our masters degree in Pharmacology is designed for science graduates, and especially for non-pharmacology graduates. It aims to allow students to develop a comprehensive knowledge base in pharmacology and in the design and execution of practical approaches to the investigation of the mechanisms by which drugs act to prevent or treat disease. This is combined with an in-depth research project within an active research group. This programme aims to provide a good background for students wanting a career in the drug research and related industries or in academia.

Course structure

This course is one calendar year, full-time, involving 30 weeks of taught modules divided into two 15-week semesters, and a project which is largely carried out during the remaining time.

The taught component of the programme includes a lecture-based module in systems and cellular pharmacology that is complemented by laboratory-based practical work. Modules include:

- General Pharmacology
- Research Methods
- Drug Discovery, Design and Development
- Regulatory Affairs
- Biomedical Sciences

Included in the course will be the knowledge and procedures necessary to obtain a UK Home Office licence to undertake pharmacological investigations.

Examples of optional modules include:

- Cardiovascular Pharmacology
- Psychopharmacology
- Diabetes Mellitus
- Oxidative Stress and Human Disease
- Pharmacogenomics
- Current Topics in Infection

Project based elements include a research methods module and a laboratory-based practical research project.

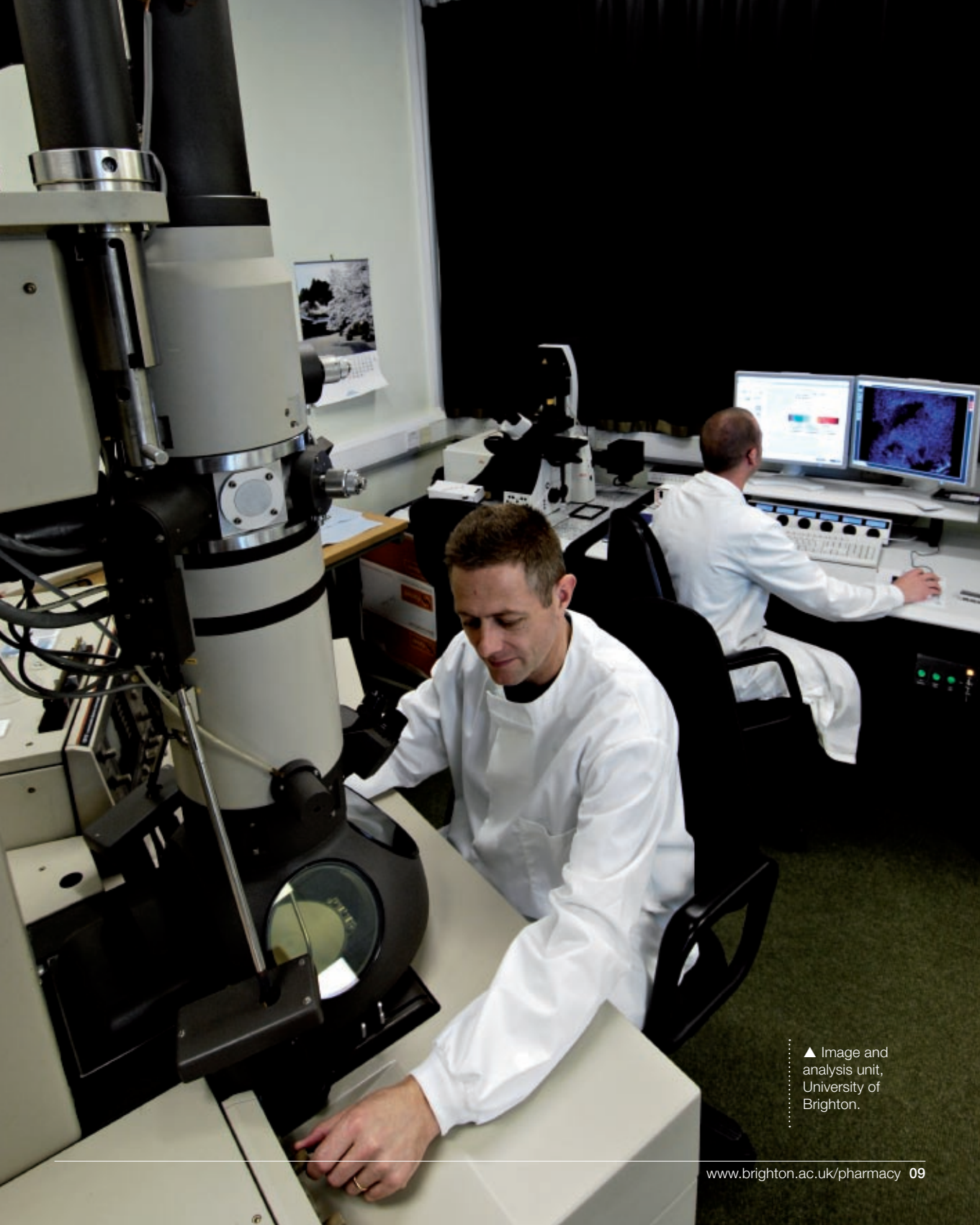
Who is this course for?

This course equips graduates with skills in pharmacology that meet the demands of industry and academic research institutes. Our graduates will be well placed to apply for a PhD.

Entry requirements

The normal academic standard for entry is a good UK honours degree in an appropriate life science, though applications are welcomed from those with qualifications in related subjects and will be considered on an individual basis. Equivalent overseas qualifications will also be accepted.

All our MSc programmes require an IELTS score of 6.5 (with no component below 6.0) or equivalent, if English is not your first language.



▲ Image and analysis unit, University of Brighton.

Our English language programmes

Develop your English skills either before you begin your studies or during your time here.



▲ We offer free English language support to all our international and EU students in their first year of study.

The university provides a range of opportunities for international students to develop their English skills both before they begin their university studies and during their time here.

Our language programmes are accredited by the British Council and many of our English language teachers are experienced examiners for bodies including Trinity College and Cambridge ESOL.

Our courses use the latest online learning techniques. We offer programmes that combine taught classes, mainly in groups of no more than 16 students, online tutor contact, peer discussion and study via our virtual learning environment.

Learn English and prepare for university

We can offer you a number of options to give you more confidence with your English before you begin your degree.

English for Academic Study (EAS)

For students who want to improve their English before applying to university in the UK. Develop your English for up to three terms. Get help with IELTS preparation and university application.

Pre-sessional English courses

For students who have received an offer of a place at the University of Brighton. You can tailor course length and content to match your level of English.

English language support programmes for current students

Once you are a student here you can continue to develop your English with our English language support programme. This is a free programme available to all non-native speakers of English during the first year of both undergraduate and postgraduate courses. The programme aims to ensure that language is not a barrier to success in a student's chosen field of study and consists of a series of lectures, classes and individual and group tutorials.



We offer programmes that combine taught classes, mainly in groups of no more than 16 students, online tutor contact, peer discussion and study via our virtual learning environment.

Support for you

Whether academic or personal, we have a wealth of support to help you make the most out of your time here.

We have dedicated welfare and visa advisors and offer a wide range of services and support.

Visas

If you require a visa, you should make your application at the earliest opportunity. If you are due to start your course in September you can normally apply from June onwards. All applications for a student visa must be made through a UK mission (embassy, high commission or consulate) in your country.

For full details on how to apply for a visa please visit www.brighton.ac.uk/international/visa or contact visas@brighton.ac.uk. We can provide you with advice throughout the entire process of obtaining your visa.

Student welfare and careers service

Information is provided by our counsellors/advisors, normally on a drop-in basis, covering immigration, visas, working, financial advice and personal safety.

International student celebration

Our annual celebration takes place in February each year to formally toast the international and European student community at the University of Brighton.

Mentoring programme

Upon arrival, new international students can be put in touch with current international students at the university. New students can meet and speak with mentors on an informal basis to ask questions and get information about the university and life in the UK.

Accommodation

Halls of residence

We have over 1,500 places in halls of residence in Brighton. Our halls are all mixed gender with catered or self-catered option. The latter would include a shared kitchen and communal areas. Most are equipped with broadband, providing high speed internet access. Many have en suite bathroom facilities. If you are a postgraduate student paying international fees, you will be guaranteed a place in halls of residence. For more information on how to apply visit www.brighton.ac.uk/accommodation.

University-managed housing

An additional 400 places are available in the private sector, but managed by the university. Water rates and personal contents insurance are included in rents and all properties meet with high safety standards.

Renting in the private sector

Private landlords whose accommodation meets our requirements in terms of both price and quality can register their properties with the university accommodation service. A range of different kinds of properties are usually available.

Brightonstudentpad.co.uk provides a searchable database of all kinds of property available to Brighton students, as well as comprehensive advice about housing matters. For more information visit www.brighton.ac.uk/accommodation.



If you are a postgraduate student in the first year of your course and you are paying international fees, you will be guaranteed a place in halls of residence.



▲▲▲ The orientation programme is a chance to meet representatives from clubs, societies and university support services.

▲▲ Orientation week ends with a party for new international students and student ambassadors.

▲ Varley Halls, Brighton.

This brochure was printed in April 2010. The University of Brighton makes every effort to ensure the accuracy of this subject brochure and will take all reasonable steps to provide the courses and services described in it and in supplementary documentation. It cannot, however, guarantee their provision in the event of circumstances beyond its control (such as lack of demand, changes in government policy or industrial actions). Specific course details may be subject to change. At the time of going to press, these new courses are undergoing further development, and are subject to validation.

Transforming Research at Brighton

Cover image: Red Blood Cells. The Biomedical Materials Research Group has worked with clinical and industry partners to develop a new kind of filter that removes the chemical that causes sepsis from the blood.

**This publication is
available in alternative
formats on request.**

University of Brighton

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www.brighton.ac.uk/pharmacy