



**QUEEN'S
UNIVERSITY
BELFAST**

SCHOOL OF
PHARMACY

ADVANCING LIFE



WELCOME TO QUEEN'S UNIVERSITY BELFAST

A member of the
Russell Group of 24
leading UK research
intensive universities





Queen's University Belfast is a world class international university, supporting exceptional students and staff and conducting leading-edge education and research, focused on the needs of our society.

Students who choose to become part of the Queen's family, enjoy access to our world-class campus, with award-winning student accommodation, and outstanding sporting facilities. Our vibrant Students' Union has over 200 clubs and societies, and a wide range of volunteering opportunities for our students.

Over the last 170 years, Queen's, a member of the Russell Group of 24 leading UK research-intensive universities, has produced Nobel Laureates, leading global academics, and national and international leaders. Today we continue to offer many life-changing opportunities for our students, who come from over 80 countries.

Through our links with more than 200 partner institutions across the world at which to study during your time with us, and our ongoing links with over 3,000 employers worldwide, we help our students develop into global citizens who will make an impact on society.

TOP 10 REASONS

to study in the School of Pharmacy at Queen's University Belfast



1. WE'RE ONE OF THE BEST IN THE UK

Our School has been ranked as one of the best Schools in the UK and is currently 5th in the UK for Pharmacology and Pharmacy (The Times, 2018)



2. YOU'LL BE HIGHLY EMPLOYABLE

99% of our MPharm graduates are in employment 6 months after graduation. There's never been a better time to study Pharmacy or Pharmaceutical Sciences, with both career areas having a wealth of employment opportunities. Our degrees will put you well on the way to a successful career!

3. OUR FACILITIES ARE WORLD CLASS

We have labs and clinical spaces tailor-made for our students. From a fully-functional community pharmacy and a hospital ward with robotic patients, to state-of-the-art chemistry labs, we provide a safe and realistic training experience for all of our students.



4. OUR GRADUATES ARE EXCEPTIONAL

Around 80% of our MPharm students graduate with a First Class or Upper Second Class degree. An outstanding course with talented teaching staff will allow our students to reach their full potential.



5. LEARN MORE ON PLACEMENT

Our degrees let you gain vital experience at an undergraduate level. Our MPharm students will benefit from built-in community and hospital pharmacy placements during each level of the course, whilst our BSc students have the option of taking a placement (of up to a year) between their second and third years – providing them with vital work-based experience!



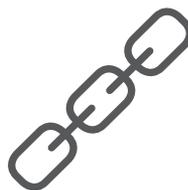
8. WE'LL GIVE YOU CAREERS ADVICE

We integrate careers advice and employer engagement into our courses. Throughout your degree, we'll give you advice and assistance so you can successfully apply and interview for jobs. We'll also give you lots of opportunities to meet employers, and find out more about how to begin your career with them.



6. WE HAVE A STRONG HERITAGE

Queen's has been teaching pharmacists for nearly 90 years. First introduced in 1929, our course is one of the most established in the UK – so we have lots more valuable experience than most!



9. WE HAVE STRONG AND SUCCESSFUL LINKS

We work closely with major local, national and international players. Through our courses and research, we work with some of the largest pharmaceutical companies in the world. We also have an expansive network of hospital pharmacists who help us to deliver our courses and train our Pharmacy students.



7. OUR RESEARCH IS OUTSTANDING

According to REF 2014, our research environment is 100% world leading. Our research staff are amongst the best in the world at what they do – and they teach our MPharm and BSc students. If you'd like to learn from the best, there's nowhere better than the School of Pharmacy at Queen's!



10. OUR STUDENTS ARE SATISFIED

We perform very well in student surveys. According to the last National Student Survey, we had an overall student satisfaction of 94%.

PHARMACY

MPharm Honours (4years)

SUMMARY ENTRY REQUIREMENTS

A level requirements
AAB including A-level Chemistry and at least one other A-level from Biology, Mathematics or Physics + GCSE Biology grade C or GCSE Double Award Science grades CC + GCSE Mathematics grade C

or...

34–35 points in the International Baccalaureate Diploma (IB) including 6,6,5 at higher level

Note: Biology to at least AS preferred.

English language: IELTS score of 6.5 with a minimum of 6.0 in each component.

OVERVIEW OF COURSE

Pharmacy is concerned with the design, evaluation, production and use of medicines and is based on the chemical, biological and medical sciences as the foundation for clinical and community practice.

Pharmacists also have the ability and opportunity to monitor and optimise the therapeutic use of medicines by patients. In order to communicate confidently and effectively with patients, pharmacists must also have a knowledge of the social and behavioural aspects of health care.

COURSE CONTENT

Level 1

All students take six modules: The first provides an introduction to pharmaceutical microbiology including aspects of disinfection and sterilisation with a second module providing an introduction to the principles of physical and analytical chemistry of importance in pharmaceutical systems.

The third module is split into two parts, the first providing a foundation in the essential skills for the practice of Pharmacy and the second part providing an introduction to the development of a pharmaceutical product from concept to clinic and the roles of the pharmacist in this process.

A chemistry module covers important aspects of organic and bio-organic chemistry including structure determination, chemical reactivity and mechanistic aspects. Finally, two physiology modules cover the principles of general physiology and histology as well as an introduction to systematic pathophysiology.

Level 2

This year provides further development of an understanding of basic sciences related to pharmacy and an introduction to some professional aspects of handling and interpretation of prescriptions.

Six modules are studied: one covers the basic principles of drug action and therapeutics; a second, complementary module provides an introduction to the clinical application of therapeutic substances; and two modules are concerned with medicinal substances and deal with analytical methods used to determine the relationships between structure and function of drug molecules. Finally, a double module deals with formulation/dispensing of drug products, drug stability and some industrial manufacturing processes.

Levels 3 and 4

The professional and clinical aspects of the final two years reflect the increasing involvement of pharmacists in discussing patient medication with doctors in general practice and in hospitals. Students also continue to study pharmaceutical sciences. Level 3 topics include applied pharmaceutical analysis, drug design

and drug delivery, pharmaceutical biotechnology, pharmaceutical legislation, clinical therapeutics, and pharmacy practice.

Level 4 topics include business, government and industry; pharmacist prescribing, advanced pharmaceutical care, responding to symptoms, and social and behavioural aspects of pharmacy. Students also carry out a research project.

SPECIAL FEATURES

Placement: A feature of this MPharm is an increasing experience of the clinical environment through the inclusion of clinical placements in both community and hospital settings.

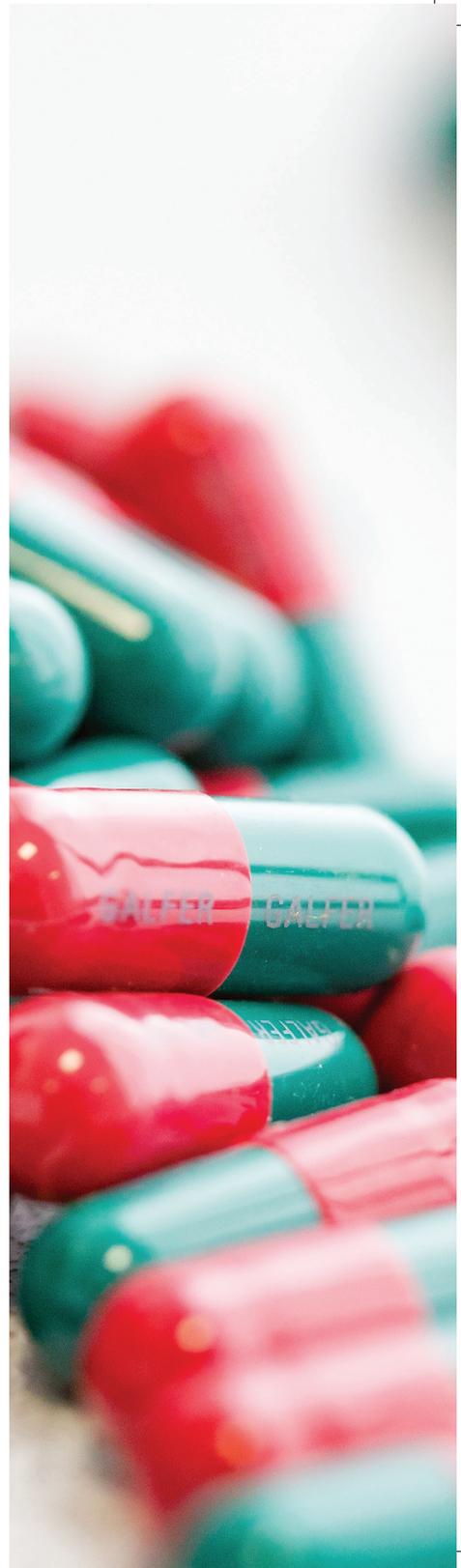
Accreditation: The degree is accredited by the General Pharmaceutical Council (GPhC) in Great Britain and the Pharmaceutical Society of Northern Ireland, as the relevant regulators.

CAREERS AND FURTHER STUDY

Following successful completion of the degree, all graduates intending to register to practise as pharmacists are required to complete satisfactorily a one-year period of preregistration training under conditions approved by the regulator, followed by a registration examination. Pre-registration training may be in GB or NI, with the registration examination of the relevant regulator. Qualified pharmacists may work in the UK, or further afield, once registered with the relevant regulator.

Further study is also an option. Graduates can choose from a wide range of Master's programmes as well as a comprehensive list of research topics; see our School website for further information.

Full entrance requirements available at www.qub.ac.uk
*Fees may be subject to increases during your course.



PHARMACEUTICAL SCIENCES

BSc (Hons) Pharmaceutical Sciences (3 years)

BSc (Hons) Pharmaceutical Sciences with Industrial Placement (4 years)

BSc (Hons) Pharmaceutical Biotechnology (3 years)

BSc (Hons) Pharmaceutical Biotechnology with Industrial Placement (4 years)

SUMMARY ENTRY REQUIREMENTS

A level requirements

BBB including Biology and Chemistry + GCSE
Mathematics grade C

or...

BBB including Biology and at least one from
Mathematics or Physics + GCSE Chemistry grade C
or GCSE Double Award Science grades CC + GCSE
Mathematics grade C

or...

BBB including Chemistry and at least one from
Mathematics or Physics + GCSE Biology grade C or
GCSE Double Award Science grades CC + GCSE
Mathematics grade C

or...

34–35 points in the International Baccalaureate
Diploma (IB) including 6,6,5 at higher level

English language: IELTS score of 6.5 with a minimum
of 6.0 in each component.

OVERVIEW OF COURSE

These new Pharmaceutical Sciences and Pharmaceutical Biotechnology degrees are concerned with the design, evaluation, production, and testing of medicines. As such, they are based on the chemical, biological and medical sciences as the foundation for employment within the pharmaceutical and related (eg medical device) industries. All of these facets are addressed and integrated into these three-year undergraduate degrees.

Students will study on the same pathway for the first two years of the degree, before specialising in Pharmaceutical Sciences, Pharmaceutical

Biotechnology or Pharmaceutical Engineering in their final year, which leads to the award of a BSc Honours degree in the chosen subject.

COURSE CONTENT

Level 1

All students take five modules: the first provides an introduction to pharmaceutical microbiology, including aspects of disinfection and sterilisation, with a second module providing an introduction to the principles of physical and analytical chemistry of importance in pharmaceutical systems. The third module addresses the mathematical and statistical skills that are needed by pharmaceutical scientists to work effectively in the industrial and related sectors.

A chemistry module covers important aspects of organic and bio-organic chemistry, including structure determination, chemical reactivity and mechanistic aspects.

Finally, a physiology module covers the principles of general physiology and histology as well as an introduction to systematic pathophysiology.

Level 2

This year provides further development of an understanding of basic/fundamental sciences related to the pharmaceutical sciences. Three modules are studied. The first covers the basic principles of drug action and the second is concerned with medicinal substances and the analytical methods used to determine the relationships between structure and function of drug molecules.

The remaining module deals with the formulation of drug products, drug stability and the industrial manufacturing of pharmaceutical dosage forms.

Level 3

The final year of each of the degree programmes builds upon the disciplines that are covered in the first two years and provide specialisms in key areas needed to work successfully in the industrial sector.

Core modules studied in the final year cover the following areas including advanced delivery systems for large and small molecules and applied pharmaceutical analysis and drug design. Quality assurance and regulatory aspects of pharmaceutical manufacturing are studied by Pharmaceutical Sciences students, while those specialising in Pharmaceutical Biotechnology study detailed aspects of bio-therapeutics. Students also carry out a research project

SPECIAL FEATURES

International links: The School has strong international links as well as a great community spirit.

Placement: A feature of this BSc is the opportunity for experience of the industrial environment. Students have the opportunity to undertake an optional six-week or 48-week placement within the pharmaceutical industry between Years 2 and 3.

CAREERS AND FURTHER STUDY

Studying for the BSc Pharmaceutical Sciences degree at Queen's will assist students in developing the core skills and employment-related experiences that are valued by employers, professional organisations and academic institutions.

Further study is also an option. Graduates can choose from a wide range of Master's programmes as well as a comprehensive list of research topics; see our School website for further information.

Full entrance requirements available at www.qub.ac.uk
*Fees may be subject to increases during your course.





INDUSTRIAL PLACEMENTS WITH GLOBAL COMPANIES

Industrial placements within the pharmaceutical industry are vital for students who want to have a career in this growing global industry. Student studying a BSc programme have the opportunity to undertake an industrial placement for up to one year, typically between year 2 and 3.

Queen's have relationships with global pharmaceutical companies which gives students the opportunity to apply their knowledge and start to gain experience which will help them in their future career.



NORTHERN IRELAND A UNIQUE LOCATION



With a population of only 1.8 million, Northern Ireland is a small country with a big heart. Listen to the voices on the world stage and you'll often hear it lauded. From its sporting heroes and its rich artistic legacy, to historic achievements such as building the Titanic, Northern Ireland is a proud, warm and enthusiastic place to live and study.

Small enough to feel like home, big enough for adventure and exploration, Northern Ireland's world-famous mixture of breathtaking landscapes, contemporary cities and friendly people, makes it the perfect student destination.

Belfast is just
1 hour from
London by air

**SHAPING
A BETTER
WORLD
SINCE 1845**



A UK TOP 10

RESEARCH INTENSIVE
UNIVERSITY
REF 2014



<1HOUR

BY AIR FROM
ENGLAND, SCOTLAND
OR WALES



TOP 1%

OF UNIVERSITIES
IN THE WORLD
QS WORLD UNIVERSITY
RANKINGS UNESCO
2015/16

FACULTY OF
**MEDICINE, HEALTH
AND LIFE SCIENCES**

askmhls@qub.ac.uk
www.qub.ac.uk