Programme Specification MPharm Pharmacy with Preparatory Year For students entering Foundation year in September 2025

This document sets out key information about your Programme and forms part of your Terms and Conditions with the University of Reading.

Awarding Institution	University of Reading
Teaching Institution	University of Reading
Length of Programme	5 years
Accreditation	General Pharmaceutical Council (GPhC)
QAA Subject Benchmarking Group	N/A

Programme information and content

The programme aims to provide you with a modern, innovative and integrated education in Pharmacy that meets the standards of the University and the MPharm requirements of the General Pharmaceutical Council. The Preparatory Year forms Part 0 of this course and will provide you with the fundamental knowledge and essential study skills to prepare you to succeed on our Masters-level Pharmacy programme. Following completion of Part 0, year 1 of the MPharm (Part 1) through to your final year (Part 4) will teach you to be responsible for the safe manufacture, distribution and use of medicinal products, and will encompass detailed studies of all aspects of drug action, design, formulation and use. You will be trained in aspects of chemistry, biology, therapeutics, statistics, social and clinical pharmacy, and law, that impact on pharmacy. You'll learn about the underlying pathophysiology of many human diseases, and how the use of medicines can halt, slow the progression of, or reverse disease processes. The programme is focussed on the patient and provides you with professional experiences in terms of placement opportunities, interprofessional learning and patient interaction. Some of your learning will take place alongside students from other health care disciplines as part of our interprofessional education and you'll also be given the opportunity to carry out a range of placements in both traditional and role-emerging settings including community and hospital pharmacies, and GP practices and, where capacity allows, specialist health and social care settings. This will provide you with invaluable experience on the front line of health care provision. The programme forms the first stage of professional training towards becoming a pharmacist. It will support you in your development as an independent learner with strong therapeutic and clinical skills and knowledge. Reading MPharm graduates will be well placed to complete a further 12 months Foundation training and will be supported in their preparation for the General Pharmaceutical Council (GPhC) Registration Assessment.

Foundation year: The Preparatory Year provides you with the scientific background required to succeed on the subsequent years of the course. You will acquire a broad foundation in chemistry, biology and scientific calculations. Additionally, our Academic Skills module gives you the skills necessary to excel at University level study. The goal of Part 0 is to provide you with basic core knowledge

	suitable for your chosen pathway and the confidence to transition to Higher Education.
Part 1:	Introduces you to key concepts and is taught in broad discipline themes, where concepts are described, developed and explicitly linked and integrated to the pharmacy profession. During Part 1, we focus on developing your learning skills; our assessment is largely diagnostic and formative as we encourage you to reflect and take responsibility for your own learning. The year is made up of interlinked modules that will provide you with the core biological, chemical and professional knowledge and skills that form the foundation of the degree programme. The year includes a number of laboratory, workshop and tutorial classes that allow you to develop your pharmaceutical science and practice skills, each providing you with appropriate feedback and opportunities for reflection. You will also show competence in pharmaceutical calculation, which will continue throughout the next four years. During Part 1, you will also be required to undertake placements in a community pharmacy setting, and interprofessional learning activities, through which you will start to learn about how pharmacists work as part of a multidisciplinary team. You will put together and submit a Portfolio, which you will continue to work on throughout the next four years of study to demonstrate your engagement with the placements and your growth as a reflective practitioner.
Part 2:	Provides you with an integrated approach to teaching and assessment, whilst also developing core scientific skills needed to be able to understand how science impacts on professional practice and prescribing behaviours. You will gain a full understanding of how to use your science and practice knowledge to support patients and the public, within an industrial and professional practice context. In Part 2, there is a focus on the therapeutic areas of renal, gastrointestinal, cardiovascular and respiratory disease; the normal structure of these systems, pathology of diseases affecting them and how they are managed therapeutically, including clinical decision making and clinical reasoning. You will learn about drug discovery, and how the chemical structure of a drug affects its stability and activity. You will be taught about the safe handling of materials, manufacturing methods (including aseptic preparations) and quality assurance. You will further your knowledge of drug delivery and formulation, with a focus on how drugs are formulated for delivery through the gastrointestinal tract, and the core concepts of pharmacology, toxicology and health-related statistics. You will build upon your knowledge and skills relating to pharmacy practice concepts, for example, interpreting and assessing prescriptions for safety, medicines related legislation and communication and consultation skills. During Part 2, you will be required to undertake placement learning in a community, general practice and/or hospital pharmacy setting, in addition to engaging with interprofessional and patient-focussed learning activities.
Part 3:	Gives you the opportunity to further develop your knowledge and skills relating to scientific and practice aspects of therapeutics and clinical pharmacy. Assessments within this year address topics from across modules and include key professional skills including communication and consultation skills.

Therapeutic areas covered in this year include dermatology, men's & women's health, endocrinology, musculoskeletal disorders, the central and peripheral nervous systems. Each topic includes aspects of physiology, pathology, disease management and prevention, patient management, prescribing and promoting public health. You will build upon your knowledge of medicines design and delivery, considering a range of different options for the management and treatment of the therapeutic conditions. During Part 3, you will be required to attend and undertake placement learning in a community, general practice and/or hospital pharmacy setting, in addition to engaging with interprofessional and patient- focussed learning activities.

Within Part 4, you will develop your knowledge of generic and disciplinespecific research methods, clinical therapeutics (in which you will apply your learning to more complex therapeutic and practice-based topics), and professional skills that will help you complete your preparation to become 'prescriber ready'. The topics covered in the therapeutics module include prescribing and medicines use in pregnancy and breastfeeding, paediatrics, emergency and critical care, caring for the older person, and palliative care. Within Part 4, you will engage in our interprofessional education symposium, in which you will learn alongside a range of other healthcare trainees and work as part of a multidisciplinary team. Part 4 also provides the opportunity to choose an optional module where you will be able choose an aspect of pharmacy to study in greater depth. Optional modules offered will vary but may include advanced clinical topics in specialist areas of pharmacy practice, a Part 4: pharmaceutical and clinical research project, key skills for the pharmaceutical industry or pharmaceutical innovation and product development. In order to successfully complete Part 4, you will be required to demonstrate satisfactory knowledge and understanding of legal and ethical issues relating to pharmacy, and clinical and communication skills, ensuring patient safety and safe, sustainable and ethical clinical reasoning, decision making and prescribing practice. As you come to the end of your undergraduate studies, you will have developed the knowledge and skills required in order to become 'prescriber ready' and work as an effective and patient focussed member of the healthcare team, as you prepare to move into your Foundation training year to complete the rest of your pharmacy and prescribing training.

Programme Learning Outcomes - MPharm Pharmacy with Preparatory Year

During the course of the Programme, you will have the opportunity to develop a range of skills, knowledge and attributes (known as learning outcomes) For this programme, these are:

Learning outcomes

Work in partnership with people to support the safe and effective use of medicines,
 including promoting healthy lifestyles, whilst not compromising person-centred care.

2	Demonstrate effective communication skills at all times, adapting your approach and style to a variety of settings, whilst respecting diversity, cultural difference, dignity and respect.
3	Demonstrate the values, attitudes and behaviours of a pharmacy professional at all times (as stipulated by the GPhC Standards for Pharmacy Professionals), and use professional judgement alongside legal and ethical reasoning to ensure safe and accurate provision of services.
4	Apply the science behind pharmacy in all activities (chemistry, biology, physiology, pharmacology and pharmaceutics) and recognise the role of technologies in developing advanced medicine and improving clinical outcomes and patient safety.
5	Demonstrate the ability to take responsibility for legal, safe and efficient supply, prescribing and administration of medicines and devices, using a thorough assessment process including the use of physical examinations and completing appropriate records.
6	Apply the principles of clinical therapeutics, pharmacology and genomics in accordance with local and national guidance to make effective and safe use of medicines supported by a sound evidence base.
7	Apply principles of effective monitoring of medicines including anticipating and recognising adverse drug reactions alongside medical emergencies and first aid.
8	Demonstrate effective leadership and management skills as part of a multi- disciplinary team, using individuals' skills to manage resources whilst considering risk and identifying strategies to improve quality of care.
9	Reflect upon, identify and proactively address learning needs and supervise the learning and development of others.
10	Demonstrate how research activities, audit, service evaluation and quality improvement are used to improve care and services.
11	Demonstrate achievement of the learning outcomes specified in the GPhC Standards for the Initial Education & Training of Pharmacists.
Yo	u will be expected to engage in learning activities to achieve these Programme learni

You will be expected to engage in learning activities to achieve these Programme learning outcomes. Assessment of your modules will reflect these learning outcomes and test how far you have met the requirements for your degree.

To pass the Programme, you will be required to meet the progression or accreditation and award criteria set out below.

In addition to the learning outcomes stated above if you are on a placement or study abroad programme you will have the opportunity to develop the following learning outcome:

Additional Learning outcomes N/A

Module information

Each part comprises 120 credits, allocated across a range of compulsory and optional modules as shown below. Compulsory modules are listed.

Foundation modules:

Module	Name	Credits	Level
BI0BF1	Foundation Programme: Biology	40	0
CH0CHE	Chemistry	40	0
IFORAS	Foundation in Academic Skills	20	0
PM0PHS	Foundation in Pharmaceutical and Health Sciences	20	0

Part 1 Modules:

Module	Name	Credits	Level
PM1PY1	Professional Practice 1	40	4
PM1PY2	Fundamentals of Cell Biology	20	4
PM1PY3	Fundamentals of Pharmaceutical Science	20	4
PM1PY4	Introduction to Medicines Design	20	4
PM1PY5	Introduction to Microbiology, Immunology and Physiology	20	4

All Part 1 modules are compulsory.

Part 2 Modules:

Module	Name	Credits	Level
PM2PY1	Professional Practice 2	40	5
PM2PY2	Clinical Therapeutics 1	40	5
PM2PY3	Clinical Therapeutics 2	40	5

All Part 2 modules are compulsory.

If you take a year-long placement or study abroad, Part 3 as described below may be subject to variation.

Part 3 Modules:

Module	Name	Credits	Level
PM3PY1	Professional Practice 3	40	6
PM3PY2	Clinical Therapeutics 3	40	6
PM3PY3	Clinical Therapeutics 4	40	6

All Part 3 modules are compulsory.

Part 4 modules:

Module	Name	Credits	Level
PM4PY1	Professional Practice 4	60	7
PM4PY2	Research Skills	20	7
PM4PY3	Clinical Therapeutics 5	20	7

The remaining 20 credits will be made up of an optional module, chosen from a list of approved modules that will be provided by the School.

Placement opportunities

Placements:

You will be required to complete placements in a range of settings, which may include community and hospital pharmacies, GP practices and, where capacity allows, specialist health and social care settings. This will provide you with invaluable experience on the front line of health care provision. The time spent on placement will form an important part of meeting the MPharm programme and module learning outcomes. The MPharm will provide a set number of placement weeks that you must complete, as specified in the relevant module descriptions. Arrangements of placements will conform to the guidelines set by the General Pharmaceutical Council (GPhC), Health Education England (HEE) and the 'University Code of Practice on Placement Learning'.

Study Abroad:

Study Abroad is not allowed for this programme.

Optional modules:

The optional modules available can vary from year to year. An indicative list of the range of optional modules for your programme can be found online in the Course Catalogue. Details of optional modules for each part, including any additional costs associated with the optional modules, will be made available to you prior to the beginning of the Part in which they are to be taken and you will be given an opportunity to express interest in the optional modules that you would like to take. Entry to optional modules will be at the discretion of the University and subject to availability and may be subject to pre-requisites, such as completion of another module. Although the University tries to ensure you are able to take the optional modules in which you have expressed interest this cannot be guaranteed.

Teaching and learning delivery:

You will be taught through lectures, seminars, tutorials, workshops and practical classes. You will also undertake directed and self-directed study, and digitally-enabled learning activities to supplement and enhance your learning from the taught sessions. There will be an expectation that you will attend all taught sessions and attendance will be monitored. You will be required to complete a series of placements and visits to community, hospital and general practice healthcare organisations and will also take part in interprofessional learning activities, which will develop your understanding of the workplace, and the role of the pharmacist as part of the multidisciplinary team.

Elements of your programme will be delivered via digital technology.

The scheduled teaching and learning activity hours and amount of technology enhanced learning activity for your programme will depend upon your module combination.

Total study hours for each Part of your programme will be 1200 hours. The contact hours for your programme will depend upon your module combination; an average for a typical set of modules on this programme is Part 1 - 600 hours, Part 2 - 621 hours, Part 3 - 621 hours and Part 4 - 620 hours. In addition to your scheduled contact hours, you will undertake some self-scheduled teaching and learning activities, designed by and/or involving staff, which give some flexibility for you to choose when to complete them. You will also be expected to undertake guided independent study. Information about module study hours including contact hours and the amount of independent study which a student is normally expected to undertake for a module is indicated in the relevant module description.

Accreditation details

To ensure the safety of students, patients and the public, students undertaking the MPharm programme will be required to have satisfactory police (Disclosure and Barring Service - DBS) and occupational health clearance. As part of this health check, you will be required to show that you have the relevant immunisations/immunity checks as stated in the Declaration of Health guidance document found in the MPharm admissions requirements page.

Both DBS and occupational health checks must be completed as part of the enrolment process and be maintained throughout the programme as an annual update and declaration. The DBS check may require renewal during the programme. You will be unable to attend experiential learning visits without satisfactory completion of DBS and health checks.

Students are required to inform the School of Pharmacy of any change in circumstances that may affect their ability, or suitability, to continue their studies; this includes circumstances relating to health and conduct. Students are also expected to maintain behaviours associated with a healthcare professional and must abide by University regulations, the School of Pharmacy Fitness to Practise policy and the General Pharmaceutical Council's Standards for Pharmacy Professionals. Deviation from these standards may lead to the instigation of University Academic Misconduct and/or Fitness to Practise processes.

Assessment

The programme will be assessed through a combination of written examinations, coursework (including class tests), workplace-based assessments, and oral examinations. Further information is contained in the individual module descriptions.

Progression

*Part 0 Preparatory Year*To achieve a threshold performance in Part 0, a student will normally be required to:(i) Obtain an overall average of 40% over 120 credits taken in Part 0;

(ii) Have no more than 40 credits of modules at Part 0 with marks below 35%; and(iii) Achieve a mark of at least 40% in the Academic Skills module.

In order to progress from Part 0 to Part 1 and be eligible for transfer to MPharm Pharmacy, a student must achieve a threshold performance; and

(iv) at least 40% in both the 20 credit Academic Skills module (one of IF0RAS or IF0ACA) and the 20 credit subject skills module (one of BI0MF1, PY0FIR, EN0SFS or PM0PHS);

and achieve the following in the remaining 80-credits

(v) a module mark of at least 60% in CH0CHE Chemistry and BI0BF1 Foundation Programme: Biology;

(vi) a module mark of at least 40% in PM0PHS;

(vii) a mark of at least 50% in the PM0PHS written examination.

The achievement of a threshold performance at Foundation Year qualifies a student for a Certificate of Completion if they leave the University before completing the subsequent Part.

Part 1

To achieve a threshold performance at Part 1, a student will normally be required to: (i) Obtain an overall average of 40% over 120 credits taken in Part 1;

(ii) Obtain a mark of at least 40% in individual modules amounting to not less than 80 credits taken in Part 1; and

(iii) Obtain marks of at least 30% in modules amounting to 120 credits.

In order to progress from Part 1 to Part 2, a student must achieve a threshold performance; and

(iv) a mark of at least 40% (or a pass for a 'pass/fail' assessment) in all assessments at Part 1.

The achievement of a threshold performance at Part 1 qualifies a student for a Certificate of Higher Education if they leave the University before completing the subsequent Part.

Transferring from a Joint Honours to a Single Honours programme

Students are able to transfer from a Joint Honours to a Single Honours programme in one of their joint subject areas at the end of Part 1, subject to fulfilling the Part 1 University Threshold Standard, achieving marks of at least 40% in at least 40 credits of modules in the subject to which they wish to transfer, and fulfilling any programme-specific progression rules for the Part 1 Single Honours Programme to which they wish to transfer.

Students who transfer from a Joint Honours to a Single Honours programme may not have taken all of the Part 1 modules listed in the Single Honours Programme Specification. The modules which they have taken will be shown on their Diploma Supplement.

Part 2

To achieve a threshold performance at Part 2, a student shall normally be required to:

(i) Obtain a weighted average of 40% over 120 credits taken in Part 2; and(ii) Obtain marks of at least 40% in individual modules amounting to at least 80 credits taken in Part 2; and

(iii) Obtain marks of at least 30% in individual modules amounting to at least 120 credits, except that a mark below 30% may be condoned in no more than 20 credits of modules owned by the Department of Mathematics and Statistics.

In order to progress from Part 2 to Part 3, a student must achieve a threshold performance; and

(iv) a mark of at least 40% (or a pass for 'pass/fail' assessments) in all assessments at Part 2.

The achievement of a threshold performance at Part 2 qualifies a student for a Diploma of Higher Education if they leave the University before completing the subsequent Part.

Part 3

To gain a threshold performance at Part 3, a student shall normally be required to achieve:

(i) an overall average of 40% over 120 credits taken in Part 3

In order to progress from Part 3 to Part 4, a student must achieve a threshold performance; and

(ii) a mark of at least 40% (or a pass for 'pass/fail' assessments) in all assessments at Part 3.

Students who do not meet the above requirements for progression to Part 4, but meet the requirements for the award of a Bachelor degree (as described in the Assessment Handbook: <u>Section 17</u>), will be eligible for the award of BSc Pharmaceutical Science. The weighting of the Parts/Years in the calculation of the degree classification for the BSc Pharmaceutical Science is:

Part 2: one-third

Part 3: two-thirds.

Please note that the exit award of BSc Pharmaceutical Science does not confer eligibility for Foundation training or registration with the GPhC as a pharmacist.

Part 4

To obtain the MPharm Degree, a student shall normally be required to have satisfied all of the above progression requirements and to achieve the following in Part 4:

(i) a module mark of at least 50% in individual modules amounting to not less than 120 credits taken in Part 4.

(ii) a mark of at least 50% (or a pass for 'pass/fail' assessments) in all assessments in Part 4.

Students who do not meet the requirements for the award of MPharm described above, but who meet the requirements for the award of an Integrated Masters degree (as described in the Assessment Handbook: <u>Section 18</u>), will be eligible for the award of MSci Pharmaceutical Science. The classification for this exit award will be based upon the following weighting: Part 2: 20%, Part 3: 30%, Part 4: 50%.

Please note that the exit award of MSci Pharmaceutical Science does not confer eligibility for Foundation training or registration with the GPhC as a pharmacist.

Students who do not meet the requirements for obtaining the MPharm or MSci Pharmaceutical Science degree, but who meet the requirements the award of a Bachelor degree (as described in the Assessment Handbook: <u>Section 17</u>), will be eligible for the award of BSc Pharmaceutical Science. The weighting of the Parts/Years in the calculation of the degree classification for the BSc Pharmaceutical Science is:

Part 2: one-third

Part 3: two-thirds.

Please note that the exit award of BSc Pharmaceutical Science does not confer eligibility for Foundation training or registration with the GPhC as a pharmacist.

The GPhC does not accept Aegrotat degrees for entry to Foundation training or the Registration Examination for pharmacists.

Classification

Bachelors' degrees The University's honours classification scheme is based on the following:

Mark Interpretation 70% - 100% First class 60% - 69% Upper Second class 50% - 59% Lower Second class 40% - 49% Third class 35% - 39% Below Honours Standard 0% - 34% Fail

The weighting of the Parts/Years in the calculation of the degree classification is:

Integrated Masters Programmes (MEng, MMath, MChem etc.)

Part 2: 20% Part 3: 30% Part 4: 50%

The classification method is given in detail in <u>Section 18</u> of the Assessment Handbook (see, in particular, section 18.5).

Additional costs of the programme

During your programme of study, you will incur some additional costs.

A range of resources to support your curriculum, including textbooks and electronic resources, are available through the University library. Reading lists and module specific costs are listed on the individual module descriptions. There should not be a need to purchase additional textbooks, but students may want their own copies of some textbooks.

Printing and photocopying facilities are available on campus at a cost of £0.05 per A4 page. Costs may be, on average, £150 per year.

You will also be required to have a lab coat for certain practical classes. These can be purchased for a cost of approximately $\pounds 10$.

As part of ensuring the safety of students, patients and the public, you will be required to undergo police (Disclosure & Barring Service) and health checks are part of your enrolment. The initial DBS check costs approximately £38. You will be required to sign up for the DBS Update service at a cost of £13 per year to ensure that your DBS status is updated throughout your time as a student. The occupational health check will require a screening fee of £38 with further costs incurred depending on whether occupational health referral and vaccinations are required. These costs may range between £280 and £600.

You will be required to complete a series of placements during your programme, for which you might incur travel, and in some cases, accommodation costs.

Costs are indicative and may vary according to optional modules chosen and are subject to inflation and other price fluctuations. Estimates were calculated in 2024.

For further information about your Programme please refer to the Programme Handbook and the relevant module descriptions, which are available at <u>http://www.reading.ac.uk/module/</u>. The Programme Handbook and the relevant module descriptions do not form part of your Terms and Conditions with the University of Reading.

MPharm Pharmacy with Preparatory Year for students entering Foundation year in session 2025/26

14 June 2024 © **The University of Reading 2024**