

## Programme Specification: Undergraduate

### For students starting in Academic Year 2023/24

#### 1. Course Summary

<b>Names of programme and award title(s)</b>	Master of Pharmacy (MPharm)
<b>Award type</b>	Single Honours
<b>Mode of study</b>	Full-time
<b>Framework of Higher Education Qualification (FHEQ) level of final award</b>	Level 7
<b>Normal length of the programme</b>	4 years
<b>Maximum period of registration</b>	The normal length as specified above plus 3 years
<b>Location of study</b>	Keele Campus
<b>Accreditation (if applicable)</b>	This subject/programme is accredited by the General Pharmaceutical Council (GPhC). For further details see the section on Accreditation
<b>Regulator</b>	Office for Students (OfS)
<b>Tuition Fees</b>	<p><b>UK students:</b></p> <p>Fee for 2023/24 is £9,250*</p> <p><b>International students:</b></p> <p>Fee for 2023/24 is £25,400**</p>

**How this information might change:** Please read the important information at <http://www.keele.ac.uk/student-agreement/>. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.

\* These fees are regulated by Government. We reserve the right to increase fees in subsequent years of study in response to changes in government policy and/or changes to the law. If permitted by such change in policy or law, we may increase your fees by an inflationary amount or such other measure as required by government policy or the law. Please refer to the accompanying Student Terms & Conditions. Further information on fees can be found at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

\*\* We reserve the right to increase fees in subsequent years of study by an inflationary amount. Please refer to the accompanying Student Terms & Conditions for full details. Further information on fees can be found at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

#### 2. What is an Integrated Master's programme?

Integrated master's awards are delivered through a programme that combines study at the level of a bachelor's degree with honours with study at master's level. As such, a student graduates with a master's degree completing the programme of study. The Integrated Masters programme described in this document builds upon undergraduate-level study by adding a fourth year in which students study modules in Pharmacy at an advanced level.

#### 3. Overview of the Programme

The aim of the MPharm programme is to produce graduates prepared to undertake the foundation training year programme (the post-graduate training year required to register as a pharmacist) with the values and attitudes that will enable them to undertake the roles and duties of a pharmacist in a highly professional manner.

In your programme you will sometimes be expected to role play and engage in simulated clinical scenarios with other

students, such as the practice and observation of practical skills in physical contact with other students. For some specific practices, this may necessitate modification of dress - e.g., to shorts and t-shirt. These activities will be conducted in a professional, safe, respectful and culturally sensitive way, under the supervision of academic staff, according to a defined protocol.

## 4. Aims of the programme

The broad aims of the programme are to:

- enable our students to apply an evidence-based and patient-centred approach to practice;
- provide students with the breadth and depth of appropriate subject knowledge in keeping with an MPharm programme;
- provide high quality teaching in Pharmacy in a dynamic environment that reflects external developments in employers' needs;
- enable students to become reflective learners, and to encourage and develop self-discipline and enthusiasm for continual professional development that continues throughout their careers;
- provide students with the opportunity to gain direct and indirect experience of the work of a pharmacist, enabling an understanding of the profession of Pharmacy as a patient-centred discipline, and the role of the pharmacist in primary and secondary care settings and in the pharmaceutical industry;
- allow students to deepen both their Pharmacy-specific knowledge but also their skills base, by maintaining both a programme of appropriate skills training throughout the course but also by introducing increasing challenges as the programme progresses

In 2021, the General Pharmaceutical Council introduced the Standards for the initial education and training of pharmacists; these introduced a new set of learning outcomes covering the full five years of education and training (including foundation training year).

The Keele MPharm programme has been designed to provide:

- a fully integrated and contextualised course that better prepares students for the future roles of the pharmacist; and
- increased opportunities for students to have contact with patients and to practise their clinical skills.

While designing the course, care has been taken to build in flexibility for whatever model of placements is decided upon by the profession. A programme structure comprising four 120-credit integrated modules allows for the smooth inclusion of enhanced placement opportunities.

## 5. What you will learn

See Section 8 for information about the intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), by level/year. These intended learning outcomes are based on the outcomes in the General Pharmaceutical Council's (GPhC) document 'Standards for the initial education and training of pharmacists.'

Link: <https://www.pharmacyregulation.org/sites/default/files/document/standards-for-the-initial-education-and-training-of-pharmacists-january-2021.pdf>

## Keele Graduate attributes

Engagement with this programme will enable you to develop your intellectual, personal and professional capabilities. At Keele, we call these our ten Graduate Attributes and they include independent thinking, synthesizing information, creative problem solving, communicating clearly, and appreciating the social, environmental and global implications of your studies and activities. Our educational programme and learning environment is designed to help you to become a well-rounded graduate who is capable of making a positive and valued contribution in a complex and rapidly changing world, whichever spheres of life you engage in after your studies are completed.

Further information about the Keele Graduate Attributes can be found here: <http://www.keele.ac.uk/journey/>

## 6. How is the programme taught?

A wide variety of teaching methods are used within the MPharm programme. These include traditional large group teaching sessions, workshops, seminars and tutorials (both face-to-face and on-line) and a variety of practical classes that support the development of scientific and professional skills. However, a feature of the Keele MPharm programme is the use of innovative teaching methods; these include: computer-generated virtual environments where the student can "float" complex molecules to view receptor sites, and a virtual body which can show anatomy and physiology in detail in three-dimensions.

The above scheduled teaching sessions are supported by an extensive programme of one-to-one mentoring by healthcare professionals, a series of clinical placements and regular opportunities to interact with both simulated (actor) and real patients.

Learning and teaching methods used on the programme vary according to the subject matter and level of the module.

Apart from these formal activities, students are also provided with regular opportunities to talk through particular areas of difficulty, and any special learning needs they may have, with their Academic Mentors or module lecturers on a one-to-one basis.

## 7. Teaching Staff

The staffing within the School of Pharmacy and Bioengineering includes professors and a complement of readers, senior lecturers, lecturers and academic-related and technical support staff, all of which contribute to a supportive environment for study. A number of staff have dual roles, in that they have contracts with the University but also hold contracts with other relevant stakeholders, including the NHS. Several of the current staff also have extensive experience of working within the pharmaceutical industry and are able to provide context and perspective to all aspects of the programme.

All current permanent academic staff are members of, or are working towards, membership of the Higher Education Academy. All current permanent academic staff hold academic qualifications up to at least Post-graduate diploma level or significant equivalent experience within practice and the majority hold a PhD qualification in a discipline firmly rooted in pharmacy. The staff group has extensive experience of teaching at undergraduate and postgraduate level and includes individuals with expertise in learning and teaching, and research. The work of all research-active staff has been published widely and shared via conference presentations, for example.

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave, fall ill or go on research leave, may result in changes to the programme's content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

## 8. What is the structure of the programme?

The academic year runs from September to June and is divided into two semesters. The number of weeks of teaching will vary from course to course, but you can generally expect to attend scheduled teaching sessions between the end of September and mid-December, and from mid-January to the end of April.

Our degree courses are organised into modules. Each module is usually a self-contained unit of study and each is usually assessed separately with the award of credits on the basis of 1 credit = 10 hours of student effort. An outline of the structure of the programme is provided in the tables below.

The programme is planned as four 120-credit modules - one for each year of study. During each year teaching material is delivered within themes that are designed to integrate the physical and social sciences within the context of patient care and public health. Placements are designed to enhance students' learning experience and provide learning in the 'real-world' environment.

Shown on the following pages are the learning outcomes for each level of study. Further details of the mapping of learning outcomes to themes are provided in the module guides for each level of study.

Language modules: You are able to take up to 60 credits across your degree programme as Faculty Funded additional Modern Language modules in order to graduate with the Enhanced Degree Title. [Please see [link](#) for more information on Enhanced degree titles.]

For further information on the content of modules currently offered please visit:

<https://www.keele.ac.uk/recordsandexams/modulecatalogue/>

Year	Compulsory	Optional		Electives	
		Min	Max	Min	Max
Level 4	120	0	0	0	0
Level 5	120	0	0	0	0
Level 6	120	0	0	0	0
Level 7	120	0	0	0	0

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## Module Lists

## Level 4

Compulsory modules	Module Code	Credits	Period
MPharm Programme Stage 1	PHA-10014	120	Semester 1-2

## Level 5

Compulsory modules	Module Code	Credits	Period
MPharm Programme Stage 2	PHA-20009	120	Semester 1-2

## Level 6

Compulsory modules	Module Code	Credits	Period
MPharm Programme Stage 3	PHA-30010	120	Semester 1-2

## Level 7

Compulsory modules	Module Code	Credits	Period
MPharm Programme Stage 4	PHA-40120	120	Semester 1-2

## Learning Outcomes

The table below sets out what students learn in the programme and the modules in which that learning takes place. Details of how learning outcomes are assessed through these modules can be found in module specifications.

## Level 4

Subject Knowledge and Understanding	
Learning Outcome	Module in which this is delivered
Describe the structure and function of healthcare provision in the UK, including the regulation of healthcare professionals	MPharm Programme Stage 1 - PHA-10014
Recognise, and describe the skills, attitudes and values of healthcare professionals	MPharm Programme Stage 1 - PHA-10014
Describe and apply the underpinning legal framework for the sale and supply of human medicines in the UK	MPharm Programme Stage 1 - PHA-10014
Demonstrate an understanding of the roles and responsibilities of the different members of the prescribing team and the responsibilities of a pharmacist prescriber	MPharm Programme Stage 1 - PHA-10014
Describe the legal, policy, professional, ethical and clinical governance frameworks for accountability and responsibility in relation to pharmacist prescribing	MPharm Programme Stage 1 - PHA-10014
Describe the basic architecture, metabolic processes and cellular diversity of prokaryotic and eukaryotic cells	MPharm Programme Stage 1 - PHA-10014
Describe the different types of inter- and intracellular signalling systems in eukaryotic cells	MPharm Programme Stage 1 - PHA-10014

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
Describe the roles of thermodynamics, chemical kinetics and electrochemistry in biological systems	MPharm Programme Stage 1 - PHA-10014
Describe the cellular and molecular interactions involved in the formation and function of tissues	MPharm Programme Stage 1 - PHA-10014
Describe the structure and function of common receptor types and how drugs interact with these	MPharm Programme Stage 1 - PHA-10014
Interpret pharmacological data to identify drug-target interactions	MPharm Programme Stage 1 - PHA-10014
Describe the normal anatomy and physiology of the major body systems	MPharm Programme Stage 1 - PHA-10014
Interpret common pathological symptoms associated with abnormal functions in body systems	MPharm Programme Stage 1 - PHA-10014
Describe the role of genes in living organisms and how inheritance of genes affects human body systems	MPharm Programme Stage 1 - PHA-10014
Determine the purity and composition of compounds using appropriate practical and analytical techniques	MPharm Programme Stage 1 - PHA-10014
Recognise and describe the structures and functions of molecules and their reactivity	MPharm Programme Stage 1 - PHA-10014
Describe how functional groups affect the physicochemical properties of molecules	MPharm Programme Stage 1 - PHA-10014
Describe how the physicochemical properties of molecules affect their formulation into medicines and the route of administration to patients	MPharm Programme Stage 1 - PHA-10014
Describe the relationship between dosage forms and the interaction of drug substances with human physiology	MPharm Programme Stage 1 - PHA-10014
Describe the process of drug design and development from identification of target to formulation	MPharm Programme Stage 1 - PHA-10014
Demonstrate competency in laboratory skills and apply a knowledge of the skills necessary for the successful completion of appropriate manipulative practical exercises	MPharm Programme Stage 1 - PHA-10014
Demonstrate competence in pharmaceutical calculations appropriate for this level of study	MPharm Programme Stage 1 - PHA-10014
Communicate effectively, both orally and in writing in a manner that reflects professional practice appropriate for this level of study	MPharm Programme Stage 1 - PHA-10014
Demonstrate an ability to make sound and informed decisions in accordance with basic ethical principles	MPharm Programme Stage 1 - PHA-10014
Obtain informed consent before providing care and pharmacy services	MPharm Programme Stage 1 - PHA-10014
Describe the concepts of health, illness, public health and the development of health policy, including the role of medicines in society	MPharm Programme Stage 1 - PHA-10014

## **Level 5**

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
Apply the principles of risk management to clinical care to ensure patient safety	MPharm Programme Stage 2 - PHA-20009

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
Apply an integrated approach to the therapeutic management of patients with specified disease states	MPharm Programme Stage 2 - PHA-20009
Interpret nationally and locally produced guidelines in the selection and recommendation of appropriate therapeutic regimens for patients	MPharm Programme Stage 2 - PHA-20009
Respond appropriately to medical emergencies, including the provision of first aid	MPharm Programme Stage 2 - PHA-20009
Explain how disease pathophysiology is affected by the pharmacological agents used to treat diseases, and how differences in the pharmacodynamic and pharmacokinetic properties of these agents can affect the patient-centred choice of agent, including the role of pharmacogenomics	MPharm Programme Stage 2 - PHA-20009
Identify and describe the mechanisms of common drug-drug, drug-patient and drug-food interactions and their consequences for patient care	MPharm Programme Stage 2 - PHA-20009
Explain the relationship between absorption, distribution, metabolism and elimination of drugs and their physicochemical properties and formulation	MPharm Programme Stage 2 - PHA-20009
Describe in detail the metabolic interrelationships of the various tissues and organs of the human body, including the role of hormones in the integration of metabolism and the maintenance of homeostasis	MPharm Programme Stage 2 - PHA-20009
Explain the common techniques used in the analysis of biological data to arrive at safe and appropriate drug selection for a patient	MPharm Programme Stage 2 - PHA-20009
Compare and evaluate the efficiency and safety of different routes of drug administration	MPharm Programme Stage 2 - PHA-20009
Explain the concepts in physical chemistry and materials science which underpin drug formulation, including small-molecule and biological-based medicines	MPharm Programme Stage 2 - PHA-20009
Evaluate and select processes and formulations appropriate to the manufacture of specified drug products	MPharm Programme Stage 2 - PHA-20009
Describe and apply the processes involved in the quality assurance of all aspects of pharmaceutical drug development, formulation and the manufacturing process	MPharm Programme Stage 2 - PHA-20009
Describe and apply the processes and legal framework governing the production and supply of aseptic products	MPharm Programme Stage 2 - PHA-20009
Select and justify choice of analytical techniques employed to assure quality and safety during the drug development process and the quality, safety and efficacy of the finished drug products, including small-molecule and biological-based medicines	MPharm Programme Stage 2 - PHA-20009
Demonstrate the relationship between the design of drug product formulation, properties of the formulation, in vitro behaviour and in vivo performance	MPharm Programme Stage 2 - PHA-20009
Demonstrate competence in pharmaceutical calculations related to pharmacology, pharmaceuticals and pharmacy practice	MPharm Programme Stage 2 - PHA-20009
Demonstrate competence in the performance of laboratory techniques in the pharmaceutical sciences and the analysis of data generated therein	MPharm Programme Stage 2 - PHA-20009

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
Communicate effectively, both orally and in writing in a manner that reflects professional practice appropriate for this level of study	MPharm Programme Stage 2 - PHA-20009
Demonstrate competence in appropriate basic physical assessment skills for the purposes of clinical management of patients	MPharm Programme Stage 2 - PHA-20009
Obtain informed consent before providing care and pharmacy services	MPharm Programme Stage 2 - PHA-20009

## **Level 6**

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
Apply a detailed understanding of the statistical and mathematical tools of evidence-based medicine, including epidemiology, to calculate, analyse and draw conclusions from the results of clinical trials and epidemiological studies	MPharm Programme Stage 3 - PHA-30010
Use the principles of evidence-based medicine and systematically apply knowledge of the underpinning pharmaceutical sciences to the process of therapeutic decision making in the management of specified disease states	MPharm Programme Stage 3 - PHA-30010
Demonstrate knowledge of and apply an integrated approach towards patient care which links pharmaceutical science and pharmacy practice	MPharm Programme Stage 3 - PHA-30010
Apply a systematic and integrated knowledge of underpinning pharmaceutical sciences and pharmaceutical care to the interpretation and implementation of clinical and therapeutic guidelines	MPharm Programme Stage 3 - PHA-30010
Review, consolidate and extend knowledge and understanding of the properties and applications of drug delivery systems to maximise the therapeutic benefits for patients	MPharm Programme Stage 3 - PHA-30010
Review, consolidate and extend knowledge and understanding of microbiology, medicinal chemistry, pharmacology and pharmaceuticals in the context of pharmaceutical care and medicines optimisation	MPharm Programme Stage 3 - PHA-30010
Describe and critically evaluate the role of pharmacotherapy in the management of specified disease states	MPharm Programme Stage 3 - PHA-30010
Develop an understanding of the causes, incidence and clinical features, including differential diagnosis, of specified disease states	MPharm Programme Stage 3 - PHA-30010
Apply a systematic and integrated knowledge of underpinning pharmaceutical sciences to the process of therapeutic decision making in specific population groups, including: children, the elderly, pregnant women and breastfeeding mothers, patients with liver and renal impairment	MPharm Programme Stage 3 - PHA-30010
Critically evaluate medical case notes (including laboratory data) as part of a multidisciplinary healthcare team	MPharm Programme Stage 3 - PHA-30010

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
Review, consolidate and extend knowledge of the legal, regulatory and governance frameworks of pharmacy practice	MPharm Programme Stage 3 - PHA-30010
Review, consolidate and extend knowledge of the regulation of healthcare professions, including fitness to practise	MPharm Programme Stage 3 - PHA-30010
Demonstrate a systematic understanding of the concepts of public health, health inequalities and health promotion (including the legal and professional framework for accountability) needed to implement and evaluate a health promotion campaign	MPharm Programme Stage 3 - PHA-30010
Apply an in-depth knowledge of decision making processes to complex ethical problems	MPharm Programme Stage 3 - PHA-30010
Compare and critically evaluate research techniques and self- management skills in order to plan a programme of research at a professional level	MPharm Programme Stage 3 - PHA-30010
Identify and explain the differences between audit, service evaluation and research	MPharm Programme Stage 3 - PHA-30010
Critically evaluate current research and advanced scholarship in pharmacy, the pharmaceutical sciences and related fields, and apply a detailed understanding of the research process in planning a research project	MPharm Programme Stage 3 - PHA-30010
Demonstrate an ability to make informed decisions using the available evidence base to solve complex problems	MPharm Programme Stage 3 - PHA-30010
Demonstrate competence in calculations related to evidence-based medicine, clinical pharmacy and pharmaceuticals	MPharm Programme Stage 3 - PHA-30010
Communicate complex concepts effectively, both orally and in writing, in a manner that reflects professional practice	MPharm Programme Stage 3 - PHA-30010

## **Level 7**

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
Apply a systematic understanding of pharmacology, pharmacokinetics and pharmaceuticals to the process of therapeutic decision making and the rationale and role of drug therapy	MPharm Programme Stage 4 - PHA-40120
Demonstrate knowledge of and apply an integrated approach towards patient care which links pharmaceutical science and pharmacy practice	MPharm Programme Stage 4 - PHA-40120
Apply the principles of evidence based medicine to clinical and therapeutic scenarios and critically evaluate complex therapeutic regimens	MPharm Programme Stage 4 - PHA-40120
Apply a systematic knowledge of the current understanding of the epidemiology, aetiology, pathophysiology, clinical features and diagnosis of disease states to solve problems concerning the management of specified diseases and clinical conditions	MPharm Programme Stage 4 - PHA-40120
Apply comprehensive knowledge of pharmaceutical sciences, clinical therapeutics and evidence based principles to the process of diagnosis, clinical management of disease and therapeutic decision making	MPharm Programme Stage 4 - PHA-40120



<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
Critically evaluate patients' responses to therapeutic interventions and modify treatment where appropriate	MPharm Programme Stage 4 - PHA-40120
Apply a systematic understanding of the consultation process including an understanding of compliance and concordance and demonstrate the ability to communicate effectively with patients, carers and other healthcare professionals	MPharm Programme Stage 4 - PHA-40120
Demonstrate an understanding of the roles and responsibilities of the different members of the prescribing team and the responsibilities of a pharmacist prescriber	MPharm Programme Stage 4 - PHA-40120
Demonstrate a comprehensive understanding of the legal, policy, professional, ethical and clinical governance frameworks for accountability and responsibility in relation to pharmacist prescribing	MPharm Programme Stage 4 - PHA-40120
Apply a comprehensive knowledge of the regulation of health care professions and fitness to practice, in particular in relation to pharmacists in their extended roles as consultant pharmacists, independent prescribers, pharmaceutical health specialists and clinical team leaders	MPharm Programme Stage 4 - PHA-40120
Explain in detail how molecular genetics can be applied in clinical research, in the diagnosis of disease states, and in the design of appropriate therapies using pharmacogenomics	MPharm Programme Stage 4 - PHA-40120
Apply a systematic and detailed understanding of the dynamic nature of genes in populations and the possible causes of inherited and acquired genetic diseases	MPharm Programme Stage 4 - PHA-40120
Interpret the impact of recent advances in therapeutics on patient care	MPharm Programme Stage 4 - PHA-40120
Develop an original health promotion service by drawing on a systematic and integrated knowledge of applied therapeutics in the context of public health	MPharm Programme Stage 4 - PHA-40120
Undertake critical appraisal of the impact on pharmacy practice of recent legislative changes (including EC directives) and professional developments	MPharm Programme Stage 4 - PHA-40120
Critically evaluate current research and advanced scholarship and practice in selected specialist topics and accurately undertake data acquisition in a relevant project area if appropriate	MPharm Programme Stage 4 - PHA-40120
Apply a systematic and detailed understanding of the legal, professional and contractual frameworks governing healthcare and use these to critically evaluate the implications of recent changes in the healthcare environment, particularly in relation to pharmacy	MPharm Programme Stage 4 - PHA-40120
Communicate progress reports and conclusions on work carried out to specialist and non-specialist audiences	MPharm Programme Stage 4 - PHA-40120
Show self-direction and originality in tackling and solving problems	MPharm Programme Stage 4 - PHA-40120
Communicate complex concepts effectively, both orally and in writing, in a manner that reflects professional practice	MPharm Programme Stage 4 - PHA-40120

## 9. Final and intermediate awards

Credits required for each level of academic award are as follows:

<b>Master's Degree</b>	480 credits	You will require at least 120 credits at levels 4, 5, 6 and 7 For the purpose of the Integrated Master's degree with honours classification modules shall contribute to the mean average calculation as follows: <ul style="list-style-type: none"> <li>• Level 5 module: 20%</li> <li>• Level 6 module: 30%</li> <li>• Level 7 module: 50%</li> </ul>
<b>Honours Degree</b>	360 credits	You will require at least 120 credits at levels 4, 5 and 6
<b>Diploma in Higher Education</b>	240 credits	You will require at least 120 credits at level 4 or higher and at least 120 credits at level 5 or higher
<b>Certificate in Higher Education</b>	120 credits	You will require at least 120 credits at level 4 or higher

NB: *Students are only eligible for entry to the foundation training year (and hence to the Register of Pharmacists) when they graduate with the full MPharm degree*

## 10. How is the Programme Assessed?

The wide variety of assessment methods used on this programme at Keele reflects the broad range of knowledge and skills that are developed as you progress through the degree programme. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular and constructive feedback that helps to clarify things you did not understand and helps you to improve your performance.

In each Level of the programme a combination of examination (in various formats) and coursework is employed. An outline of the assessment types is provided below.

At all levels, reassessment opportunities for individual components of coursework will be provided during the academic year. Students who have failed to complete any of the assessments above will be given the opportunity to redeem the failure during the August reassessment period, where possible.

### Level 4 (Stage 1)

The two cycles of learning are assessed using a balanced mix of unseen examinations and laboratory, coursework and skills-based assignments. Students also complete a professional development portfolio, given the title of Professional Skills Element, throughout the year.

After completing the two cycles of learning and assessment, students undertake a problem-based learning strand culminating in a group-based competency assessment. The aim of this synoptic assessment is to ensure that students demonstrate understanding of the links and interdependencies between the topics that they have covered during the year.

In order to be awarded credits at Level 4, students are required to pass:

- the end-of-cycle examinations;
- the laboratory skills component;
- the practical skills component

Students must also achieve a satisfactory standard in the Professional Skills Element (which includes competency based assessments) and the final synoptic assessment.

Progression to Level 5 is not permitted until all units of assessment are completed satisfactorily.

### Level 5 (Stage 2)

There are two cycles of learning and assessment in Level 5. Each cycle is assessed using a balanced mix of unseen examinations, and laboratory, coursework and skills-based assignments, alongside the Professional Skills Element that runs throughout the year. As in Level 4, a synoptic assessment allows students to demonstrate understanding of the links and interdependencies between the topics that they have covered; this assessment takes the form of a group-based assignment as at Level 4.

In order to be awarded credits at Level 5, students are required to pass:

- the end-of-cycle examinations;
- the laboratory skills assessments;
- the practical skills assessments

Students must also achieve a satisfactory standard in the Professional Skills Element (which includes competency based assessments) and the final synoptic assessment.

Progression to Level 6 is not permitted until all units of assessment are completed satisfactorily.

For new students starting, or those students repeating Level 4 in full, from September 2023 onwards, the following will apply: students must achieve a threshold mark of 50% averaged across all Level 5 assessments in order to progress.

### **Level 6 (Stage 3)**

Level 6 is assessed by a balanced mix of examinations, coursework and skills-based assignments alongside the Professional Skills Element and synoptic assessment throughout the year.

In addition, at Level 6 Therapeutic Framework assessments are introduced. They are a well-rounded synoptic-type assessment covering all pharmaceutical and patient aspects of various disease states.

Progression to Level 7 is not permitted until all units of assessment are completed satisfactorily; it should be noted that students must achieve a threshold mark of 50% averaged across all Level 6 assessments in order to progress.

### **Level 7 (Stage 4)**

New coursework assessments introduced at Level 7 include the project report and presentation, Shared Decision Making; in addition more complex versions of the Therapeutic Framework assessment are implemented.

As in previous years, students must also achieve a satisfactory standard in the Professional Skills Element (including competency based assessments) and the final synoptic assessment.

\*\*Low Stakes Assessments (LSAs) have been introduced at stages on the course to aid student engagement on the course.

#### *Formative assessments and feedback*

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

#### *Interprofessional Education (IPE)*

At all levels of the programme there will be opportunities to participate in IPE sessions within the Faculty of Medicine and Health Sciences.

## **11. Contact Time and Expected Workload**

This contact time measure is intended to provide you with an indication of the type of activity you are likely to undertake during this programme. The data is compiled based on module choices and learning patterns of students on similar programmes in previous years. Every effort is made to ensure this data is a realistic representation of what you are likely to experience, but changes to programmes, teaching methods and assessment methods mean this data is representative and not specific.

Undergraduate courses at Keele contain an element of module choice; therefore, individual students will experience a different mix of contact time and assessment types dependent upon their own individual choice of modules. The figures below are an example of activities that a student may expect on your chosen course by year stage of study. Contact time includes scheduled activities such as: lecture, seminar, tutorial, project supervision, demonstration, practical classes and labs, supervised time in labs/workshop, fieldwork and external visits. The figures are based on 1,200 hours of student effort each year for full-time students.

### **Activity**

	<b>Scheduled learning and teaching activities</b>	<b>Guided independent Study</b>	<b>Placements</b>
<b>Year 1 (Level 4)</b>	26%	62%	12%
<b>Year 2 (Level 5)</b>	34%	66%	0%
<b>Year 3 (Level 6)</b>	28%	70%	2%
<b>Year 4 (Level 7)</b>	25%	75%	0%

## 12. Accreditation

This programme is accredited by the General Pharmaceutical Council (GPhC). Please note the specific regulations below. Study abroad is not currently permitted on the MPharm programme.

## 13. University Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at: <http://www.keele.ac.uk/student-agreement/>

If this programme has any exemptions, variations or additions to the University Regulations these will be detailed in an Annex at the end of this document titled 'Programme-specific regulations'.

## 14. What are the typical admission requirements for the Programme?

See the relevant course page on the website for the admission requirements relevant to this programme: <https://www.keele.ac.uk/study/>

Applicants who are not currently undertaking any formal study or who have been out of formal education for more than 3 years and are not qualified to A-level or BTEC standard may be offered entry to the University's Foundation Year Programme.

All applicants are required to meet a minimum standard in English language. Applicants are required to have achieved GCSE English Language at C/4 or a University recognised equivalent. Where required, applicants need to have achieved a minimum score of 7.0 in IELTS.

### English for Academic Purposes

Please note: All new international students entering the university will sit a diagnostic language assessment. Using this assessment, the Language Centre may allocate you to an English language module which will become compulsory. This will replace any GCP modules. *NB:* students can take an EAP module only with the approval of the English Language Programme Director and are not able to take any other Language modules in the same academic year.

English Language Modules at Level 4:

- Business - ENL-90003 Academic English for Business Students (Part 1); ENL-90004 Academic English for Business Students (2)
- Science - ENL-90013 Academic English for Science Students
- General - ENL-90006 English for Academic Purposes 2; ENL-90001 English for Academic Purposes 3; ENL-90002 English for Academic Purposes 4

The MPharm Programme does not allow Recognition of Prior Learning (RPL).

## 15. How are students supported on the programme?

There is a wide spectrum of support available to students on the MPharm programme. These range from the institution-level student support services to the specific one-to-one support offered by the academic mentoring system. Every student is allocated to a member of staff to act as an academic mentor at the start of their studies. Academic mentors also act as a first point of contact for students on non-academic issues which may affect their learning and can refer students on to a range of specialist health, welfare and financial services co-ordinated by the University's Student Services. In addition to the provision of pastoral support, academic mentors provide feedback on assessments; this is particularly important in relation to students' first experiences of assessment in Level 4 where early feedback is particularly important in helping students to adjust to higher education.

Students in Levels 4 and 5 are allocated a professional supervisor to support their professional development. Professional supervisors are drawn from members of staff who are registered as healthcare professionals in pharmacy or medicine.

In Level 4 and 5 students are also allocated a "Buddy" - a more experienced student colleague from Levels 7 and 6 of the programme respectively - who provides peer support and guidance.

To support students in finding employment for their post-graduate (foundation training) year, and for vacation employment, careers events are embedded within the course to supplement the opportunities that students have to engage with potential employers on placements. A separate careers section is also available on the KLE to highlight opportunities available.

## 16. Learning Resources

The undergraduate activities of the School of Pharmacy and Bioengineering are largely based within dedicated buildings at the heart of the academic science cluster on Keele campus. These include:

- The Central Science Laboratory (CSL) a new, state-of-the art laboratory facility which houses chemistry and

- pharmaceutics teaching, along with a 160-seat computer laboratory in which online examinations are held.
- Facilities located in the Lennard-Jones Laboratories (chemistry research and analytical laboratories, and the Atrium IT suite), and the Huxley building (microbiology, biochemistry and physiology laboratories).
- The Hornbeam building, which houses the Clinical Skills Suite and 3D Health Cinema, provides further teaching facilities and accommodation for the majority of staff based on campus.

The laboratories in all locations have the necessary equipment for skills development. The Health Cinema can accommodate up to 133 students, and the Clinical Skills Suite up to 25 students (including six dedicated Consultation Rooms). Teaching facilities in the Lennard-Jones Laboratories are designed for maximum occupancy of 64 students, and the Huxley building has space for 120 students (3 x 40-place bays). Additional laboratory space for physiology, pathology and pharmacology work is located on campus within the Undergraduate Medical School (3 x 40-place bays).

## 17. Other Learning Opportunities

External learning opportunities on the Keele MPharm take two forms: observational visits and participatory placements.

In the first year (level 4) of the course, students are given the opportunity to observe practice in primary care (community pharmacy) and secondary care (hospital pharmacy) environments. Students have a three week HEE funded placement in community pharmacy with the opportunity to undertake a three hour placement in hospital pharmacy. These visits are designed to allow the student to contextualise the theoretical learning they have undertaken within the University.

In the second year (level 5), students are provided with opportunity to undertake up to 5 weeks of placement activity or simulation funded by HEE. Students are actively encouraged to seek further work experience. All MPharm students are indemnified by the university to undertake activities within pharmacy working environments meaning that these placements are participatory rather than observational. Also included in the Level 5 programme is a visit to a pharmaceutical company that specialises in the manufacture of liquid formulations so students will be able to experience the manufacture of pharmaceuticals on an industrial scale. These visits allow the students to further build upon and contextualise the material taught within the second year of the MPharm course, including that in pharmaceutics and relating to pharmaceutical manufacturing.

In the third and final years of the MPharm course the emphasis of the placement activity is very much of participation. Ideally students will undertake 9 weeks of placement activity in Stage 3 (level 6) and 12 weeks in Stage 4 (level 7). The placements are expected to be participatory, student-led, remotely supervised. Placements within the secondary care setting start in the first semester of the third year with tutor support provided on the site of the placement. Students are allocated to a ward for a number of placements allowing them to integrate into the wider pharmacy and multi-disciplinary team. Students are provided with a handbook of entrustable professional activities which they are expected to develop competence in over the course of the placements.

Students are responsible for reasonable costs incurred in travelling to local placements and making travel arrangements - in the same way as for travel to and from the University generally. As with all healthcare programmes, there are requirements for occupational health and fitness to practise checks that apply before students can undertake placements in healthcare settings.

**Study abroad** is not currently permitted on the MPharm programme.

## 18. Additional Costs

### Occupational Health and Vaccinations

All students registering on the MPharm programme will require Occupational Health (OH) clearance for commencement of the course. Once you have commenced the course additional OH clearance for attending clinical placements will be required. These processes are completed by the University's Occupational Health Service (OHS).

As part of your offer letter and accompanying information you will receive a confidential OH questionnaire for you to complete and return confidentially to the OHS. The processing of this questionnaire is explained within the questionnaires covering letter. All OH records are held in line with guidance on confidentiality.

For OH clearance to attend clinical placements, you will require the following vaccinations / immunity checks. Please obtain a copy of your vaccination history with your name and date of birth documented from your GP for proof of vaccination.

- A course of hepatitis B plus a blood test to confirm immunity (a course is 3 or 4 vaccinations)
- MMR Vaccinations - proof of 2 MMR vaccines or blood test confirming immunity to measles and rubella. (Your GP should be able to offer MMR vaccination free of charge if you have not previously had them)
- BCG - documented proof of vaccination or a visible BCG Scar
- TB screening - a Quantum Interferon test for TB (IGRA) may be required.
- Chicken pox / varicella - you must have a definite history of illness or blood test to confirm immunity, if you are non-immune on blood testing you will require evidence of receiving two varicella vaccinations.

Vaccinations and blood tests can be arranged through your GP, however, you may incur charges, local community

pharmacists and travel vaccine centres also offer and charge for vaccinations.

Appointments in OH will be available once you have commenced the course for outstanding vaccines and immunity checks. Charges apply for any vaccination or blood test undertaken by the University's Occupational Health Service.

You will be unable to attend experiential learning visits without a completed University Occupational Health Service health fitness report.

The costing estimate for occupational health clearance can be up to approx. £500.

### **Disclosure and Barring Service (DBS)**

As parts of your course will involve contact with patients who may be children or vulnerable adults, you are required to undergo an appropriate Disclosure and Barring Service check when you enrol on the MPharm course.

Students will be provided with instructions on how to apply for a DBS check, including a link to apply via a company called UCheck. There is also an online DBS update service to sign up for once the DBS certificate has been received, which allows employers to check DBS status and lets students keep their DBS certificates up to date online.

The costs are an initial £45.40 plus £3.80 for a digital ID check (the preferred option) totalling £49.20 for the enhanced DBS check, plus £13 per year for the update service.

### **Travel for placements**

You will be required to attend local hospitals and community pharmacies for placement sessions. Please note, there will be funding for reasonable travel costs.

All placements are allocated at random. Where possible, the School will be mindful of previous allocations re: distance.

### **Protective clothing**

Protective clothing such as laboratory coats and safety goggles will be provided to you by the School of Pharmacy and Bioengineering free of charge in the first instance.

The table that follows provides an estimate of costs, accurate as of Oct 2022 and these may be subject to change.

<b>Activity</b>	<b>Estimated Cost</b>
Travel (as above)	Note, there will be funding for reasonable travel costs.
Other additional costs - Occupational health clearance (first year only)	approx. £500.
Other additional costs - DBS check (first year only)	£49.20 (March 2024, subject to change, this does not include update service which is £13 per year).

These costs have been forecast by the University as accurately as possible but may be subject to change as a result of factors outside of our control (for example, increase in costs for external services). Forecast costs are reviewed on an annual basis to ensure they remain representative. Where additional costs are in direct control of the University we will ensure increases do not exceed 5%.

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, print and graduation. We do not anticipate any further costs for this programme.

## **19. Quality management and enhancement**

The quality and standards of learning in this programme are subject to a continuous process of monitoring, review and enhancement.

- The School Education Committee is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the School.
- Individual modules and the programme as a whole are reviewed and enhanced every year in the annual programme review which takes place at the end of the academic year.
- The programmes are run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Revalidation process.

Student evaluation of, and feedback on, the quality of learning on every module takes place every year using a variety of different methods:

- The results of student evaluations of all modules are reported to module leaders and reviewed by the Programme Committee as part of annual programme review.
- Findings related to the programme from the annual National Student Survey (NSS), and from regular surveys of the student experience conducted by the University, are subjected to careful analysis and a planned response at

- programme and School level.
- Feedback received from representatives of students on the programme is considered and acted on at regular meetings of the Student Staff Voice Committee.

The University appoints senior members of academic staff from other universities to act as external examiners on all programmes. They are responsible for:

- Approving examination questions
- Confirming all marks which contribute to a student's degree
- Reviewing and giving advice on the structure and content of the programme and assessment procedures

Information about current external examiner(s) can be found here:

<http://www.keele.ac.uk/qa/externalexaminers/currentexternalexaminers/>

## 20. The principles of programme design

The programme described in this document has been drawn up with reference to, and in accordance with the guidance set out in, the following documents:

- UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education: <http://www.qaa.ac.uk/quality-code>
- Pharmacy in England: building on strengths - delivering the future (Department of Health 2008)
- A High Quality Workforce: NHS Next Stage review (Department of Health, 2008)
- Life Sciences Blueprint (Department for Business Innovation and Skills, 2009)
- Keele University Regulations and Guidance for Students and Staff: <http://www.keele.ac.uk/regulations>
- Standards for the initial education and training of pharmacists (General Pharmaceutical Council, 2021): <https://www.pharmacyregulation.org/sites/default/files/document/standards-for-the-initial-education-and-training-of-pharmacists-january-2021.pdf>
- Integration and Innovation: working together to improve health and social care for all (Department of Health and Social care 2021): [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/960549/integration-and-innovation-working-together-to-improve-health-and-social-care-for-all-print-version.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/960549/integration-and-innovation-working-together-to-improve-health-and-social-care-for-all-print-version.pdf)

## 21. Annex - Programme-specific regulations

### Programme Regulations: MPharm

<b>Final Award and Award Titles</b>	Master of Pharmacy (MPharm)
<b>Intermediate Award(s)</b>	BSc Honours Degree in Pharmaceutical Studies Diploma in Higher Education Certificate in Higher Education
<b>Last modified</b>	March 2024
<b>Programme Specification</b>	<a href="https://www.keele.ac.uk/qa/programmespecifications">https://www.keele.ac.uk/qa/programmespecifications</a>

The University's Academic Regulations which can be found on the Keele University website (<https://www.keele.ac.uk/regulations/>)<sup>[1]</sup> apply to and regulate the programme, other than in instances where the specific programme regulations listed below over-ride them. These programme regulations list:

- *Exemptions* which are characterised by the omission of the relevant regulation.
- *Variations* which are characterised by the replacement of part of the regulation with alternative wording.
- *Additional Requirements* which set out what additional rules that apply to students in relation to this programme.

The following **exemptions**, **variations** and **additional requirements** to the University regulations have been checked by Academic Services and have been approved by the Faculty Education Committee.

Your programme has professional accreditation and there are specific regulations, which you have to agree to abide by, as follows:

## A) EXEMPTIONS

The clause(s) listed below describe where an exemption from the University's Academic Regulations exists:

For the whole duration of their studies, students on this Programme are exempt from the following regulations:

- Regulation C6 2.2: the MPharm programme does not allow Recognition of Prior Learning (RPL).
- University Regulation C6 (7.3) will not apply.
- University Regulation C6 (11.3) will not apply.
- A student who has not satisfactorily completed all required components of assessment to accrue the 120 credits necessary for progression to the next level of study on two occasions shall be required to withdraw from the University. Normally the two assessment attempts would be completed within the same academic year.
- As a temporary addition to these regulations, due to the re-design of the MPharm to meet the latest GPhC standards for Stage 2 students, in 2021-22 an exceptional attempt may be offered between the August reassessment period and the start of the 2022-23 academic year for any students who still have a valid assessment attempt. This is in response to major changes to the Stage 2 curriculum that will commence in 2022-23, consequently, any outstanding assessment attempts will need to be taken in the 2021-22 academic year, where feasible to do so, as an equivalent assessment will not be possible in 2022-23. An exceptional attempt will not be available for students in Stages 1, 3 or 4, however, for the Stage 3 cohort in 2022-23 and the Stage 4 cohort in 2023-24 the same exceptional attempt will be required as the re-designed MPharm programme rolls out in successive years.

## B) VARIATIONS

The clause(s) listed below describe where a variation from the University's Academic Regulations exists:

- All four 120-credit modules in the Keele MPharm programme are core and each 120-credit module must be accrued in order to progress and to graduate. For this reason, aegrotat MPharm degrees will not be awarded.
- The award of MPharm will require the successful completion of 120 credits at Stage 4. University academic regulation C6 (12.1) regarding a Masters award on completion of 90 credits at M-level will not apply. However, a student who fails to satisfy the requirements for the award of MPharm shall revert to BSc Honours Degree candidature and be considered for awards under University Regulation C3. The title of such awards will be Pharmaceutical Studies.
- University Regulation C6 (10.1) - For new students starting, or those students repeating Level 4 in full, from September 2023 onwards, the following will apply: students must achieve a threshold mark of 50% averaged across all Level 5 assessments in order to progress. (This does not apply to students currently in other years of the programme)
- Study abroad is not currently permitted on the MPharm programme. Only placements in the UK will be permitted.

University Regulation D2 (1.1.4, 1.2.4 and 1.6.4) - From the Academic Year 2023/24 onwards, the following will apply: the repeat year options outlined in the regulation will be subject to approval by the Progression and Award Board. In making decisions, the Progression and Award Board will offer repeat options based on the prospect of the student progressing or completing the failed assessments. Students with approved exceptional circumstances will be granted repeat options, subject to the caveat noted below. For students without approved exceptional circumstances, Progression and Award Boards will take the following into account when making decisions: students must have satisfied both of the following criteria:

- Have failed not more than 2 SCIMS components
- Have at least 50% attendance, and an engagement score of "Partial" or above

to be eligible for a repeat year option.

If it is identified that additional support is required, students will be guided towards the Support to Study process.

Where a repeat option requires a clinical placement, this option may be deferred depending on placement capacity and students may be required by the Progression and Award Board to take a leave of absence until such time that the placements can be undertaken.

## C) ADDITIONAL REQUIREMENTS

The programme requirements listed below are in addition to the University's Academic Regulations:

- Graduates from the MPharm programme must carry out a period of assessed pre-registration training in order to register with the GPhC to practise Pharmacy. Consequently, the MPharm degree is viewed as a vocational programme and is a pre-requisite for pre-registration study, and the MPharm course is subject to accreditation by the GPhC.
- Further details concerning progression through the various Stages of the programme and the degree classification scheme can be found in the MPharm Student Handbook and Study Guide.
- There are requirements for occupational health and fitness to practise checks that apply before students can undertake placements in healthcare settings.



[1] References to University Regulations in this document apply to the content of the University's Regulatory Framework as set out on the University website here <https://www.keele.ac.uk/regulations/>.

## Version History

### This document

**Date Approved:** 13 March 2024

### What's Changed

Variation added to the regulations section regarding repeat options

### Previous documents

Version No	Year	Owner	Date Approved	Summary of and rationale for changes
1	2023/24	REBECCA VENABLES	07 March 2023	
1.1	2022/23	REBECCA VENABLES	11 November 2022	Amendment to programme-specific regulations regarding exceptional attempts
1	2022/23	REBECCA VENABLES	14 September 2022	
1.1	2021/22	REBECCA VENABLES		Redundant version - changes rejected
1	2021/22	REBECCA VENABLES	10 February 2021	
1.1	2020/21	REBECCA VENABLES		Redundant version - changes rejected
1	2020/21	REBECCA VENABLES	20 December 2019	
1.1	2019/20	REBECCA VENABLES		
1	2019/20	EDWARD MCCAULEY	02 October 2019	