Template C4

Programme Specification

Title of Course: *MPharmSci Pharmaceutical Science*

Date first produced	09/04/2019
Date last revised	09/04/2025
Date of implementation of current version	01/09/2025
Version number	12
Faculty	Faculty of Health, Science, Social Care & Education
Cross-disciplinary	
School	School of Life Sciences, Pharmacy and Chemistry
Department	Department of Chemical & Pharmaceutical Sciences
Delivery Institution	Kingston University

This Programme Specification is designed for prospective students, current students, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes and content of each modules can be found in the course VLE site and in individual Module Descriptors.

SECTION 1: GENERAL INFORMATION

Award(s) and Title(s):	MPharmSci Pharmaceutical Science
Exit Award(s) and Title(s):	CertHE Pharmaceutical Science DipHE Pharmaceutical Science
Course Code *For each pathway and mode of delivery*	UFPSC1PSC02
UCAS code *For each pathway*	TBC

Awarding Institution:	Kingston University
Teaching Institution:	Kingston University
Location:	Penrhyn Road
Language of Delivery:	English
Delivery mode:	Primarily campus based (up to 20% of scheduled L&T hours delivered online)
Learning mode(s):	Full-time With professional placement
Minimum period of registration:	Full-time - 4 With professional placement - 5
Maximum period of registration:	Full-time - 6 With professional placement - 8
Entry requirements	Kingston University typically uses a range of entry requirements to assess an applicant's suitability for our courses. Most course requirements are based on UCAS Tariff points, usually stipulated as a range, and are sometimes coupled with minimum grades in specific relevant subjects. We may also use interview, portfolio and performance pieces to assess an applicant's suitability for the course. We recognise that every person's journey to Higher Education is different and unique and in some cases we may take into account work experience and other non-standard pathways onto University level study. Additionally, all non-UK applicants must meet our English language requirements.

	Please see our course pages on the Kingston University website for the most up to date entry requirements
Regulated by	The University and its courses are regulated by the Office for Students
Programme Accredited by:	N/A
Approved Variants:	None
Is this Higher or Degree Apprenticeship course?	No

SECTION 2: THE COURSE

A. Aims of the Course

The main aims of the programme taken by MPharm Sci students are:

- to provide all students who take the pharmaceutical science course, including those on the regulatory affairs pathway, with an in-depth knowledge and understanding of the core areas of pharmaceutical science.
- to introduce students to the design, synthesis, and development of drugs through the study of appropriate examples.
- to enable students to develop their independent learning skills using primary and secondary literature sources.
- to enable students to develop subject related practical skills.
- to provide students with the opportunity to develop their digital, written, and oral communication skills.
- to prepare students for graduate employment, both scientific and otherwise, and study for a higher degree, whether taught or by research, by developing their intellectual, problem-solving, teamwork and analytical skills.
- Provide students with a comprehensive understanding of the pivotal role pharmaceutical science plays in addressing worldwide health challenges, by encouraging the students to be champions of change.
- To enable students to complete a period of work experience in an area of pharmaceutical science which is related to their studies and to enhance, using this experience, their knowledge of career opportunities in the academic, pharmaceutical and related areas.
- To provide students with an in-depth knowledge and understanding of core pharmaceutical regulatory affairs and their application in pharmaceutical manufacturing, enabling students to apply regulatory requirements and guidance to medicines and medicinal products.

Additionally, for those MPharm Sci students following the professional placement programme:

- to enable students to complete a period of work experience in an area of pharmaceutical science which is related to their studies and to enhance, using this experience, their knowledge of career opportunities in the academic, pharmaceutical, and related areas.

B. Programme Learning Outcomes

The programme learning outcomes are the high-level learning outcomes that will have been achieved by all students receiving this award. They have been aligned to the levels set out in ‘Sector Recognised Standards in England’ (OFS 2022).

Programme Learning Outcomes					
	Knowledge and Understanding On completion of the course students will be able to:		**Intellectual Skills** On completion of the course students will be able to		**Subject Practical Skills** On completion of the course students will be able to
A1	Demonstrate a good knowledge and understanding of the core areas of pharmaceutical science including organic chemistry, bioanalysis, pharmaceutical chemistry, introductory biology, pharmacology, toxicology and immunology, pharmaceutics and drug delivery.	B1	Critically analyse and appraise both primary and secondary sources, with an appreciation of the appropriate use of AI.	C1	Carry out laboratory work in chemistry, life science and related subjects in a safe, competent and professional manner
A2	Possess the mathematical, statistical and computational skills necessary for working in a scientific capacity in an academic, commercial or industrial context.	B2	Apply subject knowledge, understanding and empathy in the collaborative solving of global challenges by using inclusive and innovative methods.	C2	Carry out COSHH safety assessments for any experiment and perform laboratory techniques safely and effectively.
A3	Competently and safely use a variety of modern scientific instruments and computers with dedicated software to areas of pharmaceutical science	B3	Learn independently and autonomously.	C3	Plan, conduct and report on complex experiments
A4	Demonstrate a good knowledge and understanding of the regulations applicable to the development, testing and marketing of pharmaceutical products	B4	Undertake rigorous data analysis from a variety of sources to discern and establish connections and contradictions.	C4	Use a range of scientific instruments, understand the principles of their operation and obtain reproducible experimental results

A5	For those on the Regulatory Affairs pathway: Interpret and use relevant guidelines for example those from the ICH, EMA, and MHRA	B5	Plan, execute and report on an individual research project and review and evaluate others' work in the subject area	C5	Demonstrate a wider range of practical skills and knowledge acquired from industrial experience or from a broader choice of option modules.
A6	Demonstrate the skills and methodologies for undertaking an advanced original research programme	B6	Demonstrate awareness of the structure and function of the employing company/organization in relation to the scientific professional environment (Professional Placement route)	C6	Communicate effectively both orally and in writing by discussing and reflecting on their experience of working in a professional environment (Professional Placement route)
A7	Undertaking More advanced material relating to the field of pharmaceutical science				
A8	Develop interpersonal and time management skills via group work to achieve organisational goals (Professional Placement route)				

C. Future Skills Graduate Attributes

In addition to the programme learning outcomes, the programme of study defined in this programme specification will engage students in developing their Future Skills Graduate Attributes:

1. Creative Problem Solving
2. Digital Competency
3. Enterprise
4. Questioning Mindset
5. Adaptability
6. Empathy
7. Collaboration
8. Resilience
9. Self-Awareness

Our integrated masters in pharmaceutical science degree embeds the United Nations Sustainable Development Goals (UNSDGs) to prepare students for impactful careers in the pharmaceutical sector particularly UNSDG 3 - Good Health and Wellbeing, 10 - Reduced Inequalities, 12 – Responsible Consumption and Production and 17 – Partnership for the Goals. Through curricula incorporating aspects of global health / social & environmental sustainability / and ethical approaches to pharmaceutical science practices, students gain a comprehensive understanding of the critical role pharmaceutical science plays in addressing worldwide challenges in health. This approach equips graduates with the knowledge and skills to contribute to sustainable solutions in drug development and healthcare delivery.

D. Outline Programme Structure

Each level comprises four modules each worth 30 credit points. Typically a student must complete 120 credits at each level. All students will be provided with the University regulations and specific additions that are sometimes required for accreditation by outside bodies (e.g. professional or statutory bodies that confer professional accreditation).
For level 3 modules, see Programme Specification for Foundation Year in Science.
Full details of each module will be provided in module descriptors and in the module canvas pages.

MPharmSci Pharmaceutical Science

Level 4							
MPharmSci Pharmaceutical Science							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**

Academic Skills for Molecular Sciences	CH4004	30	4	Year long		1	
Chemical Foundations: From Atoms to Pharmaceuticals	CH4010	30	4	Year long		1	
Introduction To Biosciences and Pharmaceutics	CH4008	30	4	Year long		1	
Pharmaceutical Concepts, Analysis, and Ethics	CH4009	30	4	Year long		1	

Exit Awards at Level 4

Students exiting the course at this point who have successfully completed 120 credits at level 4 or above are eligible for the award of Certificate of Higher Education.

Level 5							
MPharmSci Pharmaceutical Science							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Analytical Techniques for Molecular Science	CH5014	30	5	Year long		2	
Organic and Medicinal Chemistry with Global Medicine and Personalised Healthcare	CH5010	30	5	Year long		2	
Pharmacology, Formulation and Pharmaceutics	CH5009	30	5	Year long		2	
Practical and Research Skills in Pharmaceutical Science	CH5007	30	5	Year long		2	
Optional Modules							

Sandwich Year Placement	LS5000	120	5	Year long		2	2

Exit Awards at Level 5

The successful completion of LS5000 will be required for the award of the professional placement credits. If a student does not secure a placement or does not complete the professional placement, they will automatically be transferred to the without placement route.
Students exiting the programme at this point who have successfully completed 120 credits at level 5 or above are eligible for the award of Diploma of Higher Education.

Level 6							
MPharmSci Pharmaceutical Science							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Advanced Analytical Techniques and Applications	CH6011	30	6	Year long		3	
Advanced Drug Delivery and Formulation in Pharmaceutical Science	CH6014	30	6	Year long		3	
Drug Development – Bench to Bedside	CH6012	30	6	Year long		3	
Organic and Natural Product Chemistry	CH6001	30	6	Year long		3	

Exit Awards at Level 6

Students exiting the programme without completing the full 120 credits but have successfully completed 60 credits at level 6 or above are eligible for the award of an Ordinary Degree.

Level 7							
MPharmSci Pharmaceutical Science							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**

Design, Discovery and Development of Pharmaceuticals	CH7070	30	7	Year long		4	4
Manufacture and Clinical Trials of Medicines	CH7060	30	7	Year long		4	4
Project	CH7001	60	7	Year long		4	4

Exit Awards at Level 7

Students exiting the programme with 60 level 7 credits are eligible for the award of Postgraduate Certificate.
Students exiting the programme with 120 level 7 credits are eligible for the award of Postgraduate Diploma.

E. Teaching, Learning and Assessment

This course uses a range of teaching and assessment methods which have been designed to support students' learning and achievement of the learning outcomes. The course has been developed with reference to the Kingston University Academic Framework which sets-out core principles relating to Course and Credit Structure (including Module delivery Structure and Pattern, and Learning Hours and Learning Formats); Curriculum Design (inclusion Learning Design Principles and Inclusive Curriculum); and Future Skills.

Teaching and Learning on the course consist of Scheduled Learning and Teaching and Guided Independent Study (self-managed time). Scheduled Learning and Teaching includes the following, and the format for each module is set out in the module specification:

- Laboratory Sessions
- Lectures
- Seminars
- Tutorials
- Workshops
- Placements

Guidance for students on the use of independent study time is communicated through the 'Succeed in your module' section on the Canvas Virtual Learning Environment and through other communications during the course.
In addition to the core Scheduled Learning and Teaching activities for the course, the University may offer students additional optional opportunities for learning. Examples of these include Study abroad and Work-based learning.
The course will provide students with the opportunity to develop their knowledge and skills relating to at least two United Nations Sustainable Development Goals (UN

SDGs). We are committed to empowering students with the knowledge, skills and opportunities to understand and address the UN SDGs: each course is thus also required to prepare students for at least two of the SDGs (not including Quality Education, which all courses must deliver).

F. Support for Students and their Learning

Students are supported through a range of services that provide academic and wider support. These include:

- A Module Leader for each module
- A Course Leader to help students understand the course structure
- Personal Tutors to provide academic and personal support
- Technical support to advise students on IT and the use of software
- Student Voice Committee – to ensure the views of students are heard
- Canvas – Kingston University's Virtual Learning Environment
- Student support facilities that can provide advice on issues such as finance, regulations, legal matters, accommodation, international student support
- Disabled student support
- The Kingston Students' Union
- Student Development and Graduate Success
- Careers and Employability Service, including a Faculty employability co-ordinator
- A Placements administrator
- Peer Mentoring Scheme (for which the Course Leader is a Champion)
- The Library, which includes the four on campus libraries as well as an online library and other e-resources
- The Academic Success Centre (ASC) that provide specific academic support on academic writing, study skills and maths
- LinkedIn Learning embedded into the curriculum and as part of the PTS

G. Ensuring and Enhancing the Quality of the Course

The University has policies and procedures for evaluating and improving the quality and standards of its provision. These include:

- Continuous Monitoring of courses through the Kingston Course Enhancement Programme (KCEP)
- Student evaluation including Module Evaluation Questionnaires (MEQs), the National Student Survey (NSS)
- Internal and external moderation of graded assignments
- Academy of Pharmaceutical Science
- The Organisation of Professionals in Regulatory Affairs

H. External Reference Points

- Academy of Pharmaceutical Science

- The Organisation of Professionals in Regulatory Affairs

I. Development of Course Learning Outcomes in Modules

This table maps where programme learning outcomes are **summatively** assessed across the **core** modules for this course. It provides an aid to academic staff in understanding how individual modules contribute to the course aims, a means to help students monitor their own learning, personal and professional development as the course progresses and a checklist for quality assurance purposes.

Module Code		Level 4				Level 5					Level 6				Level 7		
		CH4004	CH4010	CH4008	CH4009	CH5009	CH5010	LS5000	CH5014	CH5007	CH6011	CH6001	CH6014	CH6012	CH7001	CH7070	CH7060
Knowledge & Understanding	A1		S	S			S							S	S	S	S
	A2	S	S	S			S		S				S		S	S	S
	A3				S	S	S		S	S		S		S	S		
	A4			S	S		S			S	S				S	S	S
	A5	S	S	S					S		S				S	S	S
	A6	S			S							S			S	S	S
	A7				S	S							S		S		S
	A8	S			S		S		S			S			S		S
Intellectual Skills	B1		S	S		S	S		S		S				S	S	S
	B2		S	S					S		S		S	S	S	S	
	B3		S		S	S	S				S				S		S
	B4	S								S			S	S	S	S	S

	B5	S	S	S	S				S		S				S	S	S
	B6	S	S									S		S			S
Practical Skills	C1		S	S					S	S					S		S
	C2				S	S	S				S						S
	C3	S	S	S	S	S	S		S	S					S		
	C4			S	S	S			S		S	S	S		S	S	S
	C5				S		S		S	S	S	S		S	S	S	S
	C6		S		S	S			S	S	S	S		S			S

Students will be provided with formative assessment opportunities throughout the course to practise and develop their proficiency in the range of assessment methods utilised.

Additional Information