Programme Specification

BSc Chemistry with Cosmetic Science **UCAS Code: F111**

For students entering Part 1 in September 2020 **UFCHECOS**

UFCHECOSWY

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	3 years
Length of Programme with placement/year abroad	BSc Chemistry with Cosmetic Science with a Year in Industry - 4 years (UCAS Code: F112)
Accreditation	N/A

Programme information and content

The programme aims to provide you with a broad coverage of the core disciplines within Chemistry and Cosmetic Science. You will study Analytical, Inorganic, Organic and Physical Chemistry as part of the three year BSc chemistry programme as well as core contents required within the cosmetics industry.

Throughout the course there will be opportunities to work individually or as part of a team, this may take the form of a practical experiment or an oral presentation or a group exercise.

The course is designed as a progression, with years 1 and 2 being core knowledge that is fundamentally important to enable you to progress to more challenging topics in your final year. The course is vertically integrated, and requires students to apply material learnt across all years of their degree in their studies. The culmination is the final year research project, which acts as a capstone. In order that more advanced courses can be fully understood and that the student becomes adept at problem solving.

Part 1:	Introduces you to the basic underpinnings of Inorganic, Organic, Physical Chemistry and relevant biology. This is through material that will begin as a revision of A-level topics, and will progress rapidly and present this familiar material in a new light. The goal of year 1 is to give each student the tools necessary to help them become an independent learner, provide the necessary background to enable rationalisation and predictions for unseen processes and reactions.
Part 2:	Provides you with more in-depth study of Inorganic, Organic and Physical Chemistry, as well as the chemical basis of key cosmetic processes to explicitly link with the chemistry learnt thus far in the programme. The second year sees the introduction of a dedicated stream of Analytical chemistry that is also reflected in the content of the practical class. The material covered in the second year is challenging; it builds on the content

	of year 1 and extends the complexity and depth of study to allow study and analysis of real world problems. Much of the material introduced in year 2 is still regarded as fundamental and a thorough understanding of the content is required for study in year 3.
Placement/Study abroad year:	The programme has an equivalent programme which features a placement year or year abroad component. All students are included in all of the sessions that run to encourage and prepare students to seek placements and/or study abroad opportunities. These begin in part one and are run by the Department and the Careers and Placements services. If you decide that you wish to undertake a placement or study abroad opportunity and are successful in finding a placement or study abroad opportunity, you should discuss transferring to the BSc Chemistry with Cosmetic Science and a Year in Industry programme with your Academic Tutor.
Part 3:	Gives you the opportunity to begin to see the application of Chemistry in the cosmetics industry at the forefront its applications. The content is deliberately broad, covering all streams of the discipline. This material builds upon the chemistry and cosmetic science outlined in Part 2, and you will experience this through study of a series of smaller self-contained units within your core modules. An important component of final year study is the research project. Whether in a team or as an individual researcher, you will work with an assigned academic supervisor who will advise and encourage you to develop a piece of research work that is your own. You will be given a choice of the area in which you undertake your project work, more details of this can be found in the project handbook.

Module information

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

Part 1 Modules:

Module	Name	Credits	Level
BI1BEC1	Building Blocks of Life	20	4
CH1IN1	Fundamentals of Atomic Structure and the Periodic Table	20	4
CH1OR1	Shape, Structure and Reactivity in Organic Chemistry	20	4
CH1PH1	Physical Processes and Molecular Organisation	20	4
CH1PRA	Laboratory Skills for Chemists	20	4

The following module is compulsory for students who do not have an A-level pass in Mathematics:

Module	Name	Credits	Level
CH1M	Chemistry M	20	4

The following modules are compulsory for students who have an A-level pass at grade C-E in Mathematics and optional for those with a grade A-B:

Module	Name	Credits	Level
CH1M2	Mathematics M2	10	4

Students who are required to take CH1M will not be able to select any other optional modules. Students who select module CH1M2 will be able to select a 10-credit optional module from outside the department. Student who opt to take neither CH1M/CH1M2 will select module(s) equalling 20 credits from outside the Department, or CH1CC2.

Optional module:

Module	Name	Credits	Level
CH1CC2	Chemical Concepts and Skills 1	20	4

Part 2 Modules:

Module	Name	Credits	Level
CH2AN3	Analytical Chemistry	10	5
CH2CC2	Chemical Concepts and Skills 2	10	5
CH2CCS1	Core Cosmetic Science 1	10	5
CH2IN1	Further Inorganic Chemistry	20	5
CH2OR1	Further Organic Chemistry	20	5
CH2PH1	Further Physical Chemistry	20	5
CH2PRAC	Extended Laboratory Skills for Chemists	30	5

Modules during a placement year or study year (if applicable):

Module	Name	Credits	Level
CH3PIN	BSc Industrial Placement	120	6

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
CH3FCS1	Further Cosmetic Science 1	20	6
CH3I1	d and f block chemistry	10	6
CH3O1	Advanced Organic Chemistry - Synthesis of Complex Targets	10	6
CH3P1	Advanced Topics in Physical Chemistry 1	10	6
CH3PR	BSc Chemistry Project	40	6

Students must complete either CH3LP1 *Launching a product* (10 credits) or PM3IPD1 *Innovation and Product Development* (20 credits) in Part 3. Students who select CH3LP1 must select a further 30 credits of optional credits at Part 3, while students who select PM3IPD1 must select a further 20 credits of optional credits at Part 3.

Optional modules:

The optional modules available can vary from year to year. An indicative list of the range of optional modules for your Programme is set out in the Further Programme Information. 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.

Additional costs of the programme

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

For textbooks and similar learning resources, we recommend that you budget between £50 to £150 per year. The core textbook(s), which most students normally purchase, cost(s) £65 new, and there may be other books/resources which you would find it convenient to buy. The core chemistry textbook is available in e-book format from the University library. Some books may be available second-hand, which will reduce costs. A range of resources to support your curriculum, including textbooks and electronic resources, are available through the library. Reading lists and module specific costs are listed on the individual module descriptions.

Printing and photocopying facilities are available on campus at a cost of £0.05 per page. Costs will be, on average, £10 per year. As Chemistry is a practical subject, you will be provided with the relevant personal protective equipment at the outset of your course (laboratory coat and safety glasses). If you need to replace these item, they can be purchased from the Chemistry laboratory technical staff: £10 for a laboratory coat and £2 for safety glasses.

Costs are indicative and may vary according to optional modules chosen and are subject to inflation and other price fluctuations.

The estimates were calculated in 2019.

Placement opportunities

N/A

Teaching and learning delivery:

You will be taught through lectures, tutorials, workshops and laboratory classes. Assessment takes a variety of formats; tutorials are assessed by submission of written work prior to the date of the tutorial meeting, Laboratory classes are primarily assessed via a write-up of the laboratory work and results, lecture material for most modules is assessed via an end of year examination. You will also be assessed carrying out oral presentations, group work and team work exercises.

The contact hours for your Programme will be approximately 15 hours per week and will depend upon your module combination; however information about module contact hours can be located in the relevant module description.

Accreditation details

N/A

Assessment:

The programme will be assessed through a combination of written examinations, coursework, oral examinations, practical examinations.

Progression:

The University-wide rules relating to 'threshold performance' as follows

Part 1

To gain a threshold performance at Part 1 a student shall normally be required to achieve:

(i) an overall average of 40% over 120 credits taken in Part 1, and

(ii) a mark of at least 30% in individual modules amounting to not less than 100 credits.

In order to progress from Part 1 to Part 2, a student shall normally be required to achieve a threshold performance at Part 1 and

(iii) achieve a minimum of 40% in CH1PRA.

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.

Part 2

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

(i) obtain a weighted average of 40% over 120 credits taken at Part 2; and

(ii) obtain marks of at least 40% in individual modules amounting to at least 80 credits; and

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

In order to progress from Part 2 to Part 3 in **the 3 year programme**, a student must achieve a threshold performance.

In order to progress from Part 2 to Part 3 in **the 4 year programme**, a student must achieve a threshold performance and obtain a pass in the professional/work placement or study abroad year.

Students who fail the professional/placement year transfer to the non placement year version of the programme.

The achievement of a threshold performance at Part 2 qualifies a student for a Diploma of Higher Education if he or she leaves the University before completing the subsequent Part.

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:

Three year programmes

Part 2: one-third

Part 3: two-thirds

Four year programmes, including professional/work placement or study abroad: Part 2: one-third Placement/Study Abroad Year: not included in the classification Part 3: two-thirds

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

BSc Chemistry with Cosmetic Science for students entering Part 1 in session 2020/21
12 October 2022