## Programme Regulations: 2022/23 Programme Title: Degree of Master of Chemistry with Honours in Chemistry UCAS Code: F103

### Notes

- (i) These programme regulations should be read in conjunction with the University's Taught Programme Regulations.
- (ii) All optional modules are offered subject to the constraints of the timetable and to any restrictions on the number of students who may be taught on a particular module. Not all modules may be offered in all years and they are listed subject to availability.
- (iii) A compulsory module is a module which a student is required to study.
- (iv) If a candidate meets the requirements for the three year degree, BSc Honours in Chemistry (F100), they may transfer to that programme at any time before the start of Stage 3.
- (v) Programme transfers for Tier 4 students may be restricted by current Tier 4 rules. Please refer to the Visa Team for advice.

### 1. Stage 1

(a) All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
CHY1010	Chemical Skills and Professionalism	10	10		4
CHY1110	Fundamentals of Organic Chemistry	20	10	10	4
CHY1200	General Chemistry	10	10		4
CHY1211	Fundamentals of Physical Chemistry	20		20	4
CHY1310	Fundamentals of Inorganic Chemistry	20	10	10	4
CHY1510	Chemical Laboratory Skills 1	20	10	10	4

### (a) Candidates who have A Level Maths grade C or below:

(i) All candidates shall take the following compulsory module:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
CHY1000	Mathematical Skills for Chemists	10	10		4

## (ii) All candidates shall take 10 credits of optional modules normally selected from the following list:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
ACE1057	Natural Science Research Impact	10		10	4
CEG1601	Earth System Science	10	10		4
CHY1610	Introduction to Scientific Computing for Chemists	10		10	4

### (b) Candidates who have A Level Maths grade B or above:

(i) All candidates shall take 20 credits of optional modules normally selected from the following list:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
ACE1057	Natural Science Research Impact	10		10	4
BIO1021	Diversity of Life: Form and Function	20	10	10	4
CEG1601	Earth System Science	10	10		4
CHY1610	Introduction to Scientific Computing for Chemists	10		10	4

### 2. Stage 2

(a) All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
ACE2077	Sustainable Solutions	10	10		5
CHY2010	Structural Chemistry	10	10		5
CHY2110	Organic Chemistry	20	10	10	5
CHY2210	Physical Chemistry	20	10	10	5
CHY2310	Inorganic Chemistry	20	10	10	5
CHY2510	Chemical Laboratory Skills 2	20	10	10	5

## (ii) All candidates shall take 20 credits of optional modules normally selected from the following list:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
CHY2700	Chemistry of the Atmosphere	10		10	5
CEG2604	Global Element Cycling	10		10	5
CHY2410	Medicinal Chemistry	10		10	5
CHY2610	Scientific Computing for Chemists	10		10	5

To progress to Stage 3 of this degree programme, candidates are required to obtain an average over all modules taken at Stage 2 of at least 55.

### 3. Stage 3

(a) All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
CHY3010	Advanced Structural Chemistry	10	10		6
CHY3012	Professional Development and Employability Skills	10	10		6
	for Chemists				
CHY3111	Advanced Organic Chemistry	20	10	10	6
CHY3210	Physical and Computational Chemistry	20	10	10	6
CHY3310	Advanced Inorganic Chemistry	20	10	10	6
CHY3510	Chemistry Laboratory Skills 3P	20	10	10	6
CHY3511	Analytical Chemistry in Practice	20		20	6

In order to progress to Stage 4, candidates must achieve a module mark of at least 40 in each module at the first attempt.

## 4. Stage 4

(a) All candidates shall take the following compulsory modules:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
CHY8430	Advanced Problem Solving	10	10		7
CHY8511	Research Project	70	10	60	7

# (b) All candidates shall take 40 credits of optional modules normally selected from the following list:

Code	Descriptive title	Total	Credits	Credits	Level
		Credits	Sem 1	Sem 2	
CHY8420	Selectivity and Stereocontrol in Organic Synthesis	10	10		7
CHY8421	Advanced Methods in Drug Discovery	10	10		7
CHY8422	Pericyclic and Radical Reactions	10	10		7
CHY8423	Chemistry far from Equilibrium	10	10		7
CHY8424	Contemporary Catalysis: Principles and Applications	10	10		7
CHY8425	Exploring d and f block chemistry: Applications and	10	10		7
	Structural Methods				
CHY8428	Energy and Materials	10	10		7

With the approval of the Degree Programme Director, an alternative module to those listed above may be selected to the value of 10 credits.

### 5. Assessment methods

Details of the assessment pattern for each module are explained in the module outline.

### 6. Degree classification

Candidates will be assessed for degree classification on the basis of all the modules taken at Stages 2, 3 and 4 with the weighting of the stages being 1:2:2 for Stages 2, 3 and Stage 4 respectively.