

## Programme Regulations: 2021/22

### Programme Title: Degree of Master of Chemistry with Honours in Chemistry with Industrial Training - UCAS Code: F106

#### 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 plus intercalating year degree, BSc Honours in Chemistry with Industrial Training (F102) or the three year degree BSc Honours in Chemistry (F100) or the four year degree MChem with Honours in Chemistry (F103), they may transfer to that programme at any time before the beginning of the placement year. All modules are delivered in Linear mode unless stated otherwise as Block, eLearning or distance learning.*
- (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

All candidates shall take the following compulsory modules:

Code	Descriptive title	Total Credits	Credits Sem 1	Credits Sem 2	Level
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 Sem 1	Credits Sem 2	Level
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 Sem 1	Credits Sem 2	Level
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:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>
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

To progress to Stage 2 of this degree programme, candidates are required to obtain an average over all modules taken at Stage 1 of at least 60.

**2. Stage 2**

**(a) Candidates who commenced their studies prior to September 2020:**

- (i) All candidates shall take the following compulsory modules:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>
CHY2001	Professional Development and Employability Skills	20	15	5	5
CHY2003	Topics in Chemistry	10	10		5
CHY2101	Organic Chemistry	20	10	10	5
CHY2102	Bioactive Natural Products	10		10	5
CHY2201	Physical Chemistry	20		20	5
CHY2301	Inorganic Chemistry	20	10	10	5
CHY2401	Structural Chemistry	20	20		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.

**(b) Candidates who commenced their studies from September 2020:**

- (i) All candidates shall take the following compulsory modules:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>
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:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>
BIO2017	Microbiology	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 (Industrial Training Year)

All candidates shall take the following compulsory modules:

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>
CHY3105	Advanced Organic Chemistry (Distance Learning)	20	10	10	6
CHY3305	Advanced Inorganic Chemistry (Distance Learning)	20	10	10	6
CHY8310	Project in Industry	80	40	40	7

In order to progress to Stage 4 candidates must pass each module and all components of modules CHY3105 and CHY3305 at the first attempt.

### 4. Stage 4

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

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>
CHY3201/ CHY3210	Advanced Physical Chemistry (Code will change to CHY3210 for students who commenced their studies from September 2020)	20	20		6
CHY8430	Advanced Problem Solving	10	10		7
CHY8511	Research Project (70)	70	10	60	7

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

<i>Code</i>	<i>Descriptive title</i>	<i>Total Credits</i>	<i>Credits Sem 1</i>	<i>Credits Sem 2</i>	<i>Level</i>
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 of Applications	10	10		7
CHY8425	Exploring d and f block chemistry: applications and structural methods	10	10		7
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.