

# FACULTY OF SCIENCE

## DEPARTMENT OF PURE AND APPLIED CHEMISTRY

### CHEMISTRY WITH DATA SCIENCE

Master of Chemistry in Chemistry with Data Science  
Bachelor of Science with Honours in Chemistry with Data Science  
Bachelor of Science in Chemistry  
Diploma of Higher Education in Chemical Sciences  
Certificate of Higher Education in Chemical Sciences

*These regulations are to be read in conjunction with [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#).*

#### Place of study

1. In accordance with the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#), some off-campus work may be required.

#### Curriculum

2. All students shall undertake an approved curriculum as follows:

#### First Year

##### Compulsory Modules

Module Code	Module Title	Level	Credits
CH106	Chemistry: Principles and Practice 1	1	20
CH107	Chemistry: Principles and Practice 2	1	20
CH108	Practical and Transferable Skills	1	20
MM116	Mathematics 1C	1	20
CH117	Python 101 for Chemists	1	20

##### Optional Modules

Students should select 20 credits chosen from:

Module Code	Module Title	Level	Credits
	Elective module(s)		20

Or other modules approved by the Programme Director. Not all optional modules will be available in each academic year.

#### Second Year

##### Compulsory Modules

Module Code	Module Title	Level	Credits
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CH202	Inorganic Chemistry	2	20
CH205	Practical Physical and Applied Chemistry	2	20
CH208	Fundamental Organic Chemistry	2	20
CH212	Physical Chemistry 1	2	20
CH214	Practical Organic and Inorganic Chemistry	2	20
CH220	Chemical Informatics 1	2	20

**Third Year**  
**Compulsory Modules**

Module Code	Module Title	Level	Credits
CH309	Physical Chemistry 2	3	20
CH313	Practical Physical, Applied, Forensic and Analytical Chemistry	3	20
CH315	Practical Organic and Inorganic Chemistry	3	20
CH325	Intermediate Organic Chemistry and Spectroscopy	3	20
CH326	Inorganic Chemistry, Structures and Spectroscopy	3	20
CH336	Chemical Informatics 2	3	20

**Fourth Year**  
**Compulsory Modules**

Module Code	Module Title	Level	Credits
CH450	Distance Learning	4	40

Students should select one of the following optional modules:

**Optional Modules**

Module Code	Module Title	Level	Credits
CH451	Industrial Placement	4	80
CH452	Research Placement	4	80
CH462	Knowledge Exchange Placement	4	80

**Fifth Year**  
**Compulsory Modules**

Module Code	Module Title	Level	Credits
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*CH543	MChem in Chemistry with Data Science	5	120
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\*C543 consists of the following modules

CH591	Core Chemistry	5	20
CH592	MChem Project and Dissertation	5	60
CH539	Chemistry with Data Science Specialisation	5	40

### Progress

- In order to progress to the second year of the programme in addition to satisfying the requirements of the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#), a student must also gain non-compensated passes in the following modules: CH106 Chemistry: Principles and Practice 1, CH107 Chemistry: Principles and Practice 2 and CH108 Practical and Transferable Skills.
- In order to progress to the third year of the programme, the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#) shall apply.
- In order to progress to the fourth year of the programme, the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#) shall apply.
- In order to progress to the fifth year of the programme, the [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level](#) shall apply.

### Final Honours Classification

- The final award will be based on the student's performance in their assessments.

### Award

- Degree of MChem with Honours:** In order to qualify for the degree of MChem with Honours in Chemistry with Data Science, see [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.](#)
- Degree of BSc with Honours:** In order to qualify for the award of the degree of BSc Hons in Chemistry with Data Science see [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.](#)
- Degree of BSc:** In order to qualify for the award of the degree of BSc in Chemistry see [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.](#)
- Diploma of Higher Education:** see [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.](#)
- Certificate of Higher Education:** (see [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.](#))

### Transfer

- See [General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.](#)
- A student who fails to satisfy the progress or award requirements for the degree of MChem may be transferred to the BSc with Honours of the aligned degree programme.

15. A student who at the end of fourth year fails to satisfy the progress requirements or who does not wish to progress to fifth year may be transferred to the BSc with Honours in Chemistry (Professional Experience).