# **FACULTY OF SCIENCE**

## DEPARTMENT OF PURE AND APPLIED CHEMISTRY

# **APPLIED CHEMISTRY**

Bachelor of Science with Honours in Applied Chemistry 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 <u>General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.</u>

# **Status of the Programme**

1. All students are normally admitted in the first instance to the degree of MSci in Applied Chemistry and Chemical Engineering.

### Curriculum

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

# First Year

All students shall undertake modules amounting to 130 credits as follows:

### **Compulsory Modules**

Module Code	Module Title	Level	Credits
CH106	Chemistry: Principles and Practice 1	1	20
CH107	Chemistry: Principles and Practice 2	1	20
CP101	Basic Principles in Chemical Engineering, Thermodynamics and Maths Bridging	1	20
CP102	Chemical Engineering: Fundamentals, Techniques and Tools	1	20
MM111	Mathematics 1B	1	20
MM112	Mathematics 2B	1	20
	Elective Module		10

### **Second Year**

All students shall undertake modules amounting to 130 credits as follows:

## **Compulsory Modules**

Module Code	Module Title	Level	Credits
CH208	Fundamental Organic Chemistry	2	20
CH212	Physical Chemistry 1	2	20

CP220	Process Safety Fundamentals	2	10
CH221	Practical Skills for ACCE	2	10
CP204	Fluid Flow and Heat Transfer	2	20
CP207	Process Analysis and Statistics	2	20
MM211	Mathematics 3B	2	20
	Elective Module		10

# Third Year

All students shall undertake modules amounting to 120 credits as follows:

# **Compulsory Modules**

Module Code	Module Title	Level	Credits
CH306	Practical Preparative and Physical Chemistry	3	20
CH324	Inorganic Chemistry	3	20
CH325	Intermediate Organic Chemistry and Spectroscopy	3	20
CP302	Mass Transfer and Separation Processes	3	20
CP316	Reactors	3	10
CP326	Chemical Engineering Practice2 (ACCE)	3	10
CP327	Chemical Process Design and Simulation	3	20

# Fourth Year

All students shall undertake modules amounting to 120 credits as follows:

# **Compulsory Modules**

Module Code	Module Title	Level	Credits
CH435	Applied Chemistry Project	4	40
CH460	Physical Chemistry 2	4	20
CH461	Inorganic Chemistry, Structures and Spectroscopy	4	20
CP425	Chemical Engineering Conceptual Design (BSc Applied Chemistry)	4	20
CP303	Materials Processing and Applications	4	20
Or other modules as approved by the Programme Director.			

### **Curriculum (Part-time study)**

3. Students studying on a part-time basis will normally take modules amounting to 60 credits in each year.

### **Progress**

- 4. In order to progress to the second year of the programme in addition to satisfying the requirements of the <u>General Academic Regulations Undergraduate, Integrated Master and Professional Graduate Degree Programme Level</u>, a student must also gain non-compensated passes in the following modules: CH106 Chemistry: Principles and Practice 1 and CH107 Chemistry: Principles and Practice 2.
- 5. In order to progress to the third year of the programme, see <u>General Academic</u>
  <u>Regulations Undergraduate, Integrated Master and Professional Graduate Degree</u>
  <u>Programme Level.</u>
- 6. In order to progress to the fourth year of the programme, see <u>General Academic</u> <u>Regulations Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.</u>

### **Final Honours Classification**

- 7. On successful completion of the fourth year, a candidate will be awarded 120 Level 4 credits under module code CH430.
- 8. The final classification for the degree of BSc with Honours in Applied Chemistry will normally be based on the first assessed attempt at compulsory and specified optional modules taken in the third and fourth year.

#### **Award**

- 9. BSc with Honours: In order to qualify for the award of the degree of BSc with Honours in Applied Chemistry, see <u>General Academic Regulations Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.</u>
- 10. BSc: In order to qualify for the award of the degree of BSc in Chemistry, see <u>General Academic Regulations Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.</u>
- 11. Diploma of Higher Education: In order to qualify for the award of a Diploma of Higher Education in Chemical Sciences, see <u>General Academic Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u>.
- 12. Certificate of Higher Education: In order to qualify for the award of a Certificate of Higher Education in Chemical Sciences, see <u>General Academic Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u>.