FACULTY OF SCIENCE

DEPARTMENT OF PURE AND APPLIED CHEMISTRY

CHEMISTRY

Master of Chemistry in Chemistry
Master of Chemistry in Forensic and Analytical Chemistry
Master of Chemistry in Chemistry with Teaching
Bachelor of Science with Honours in Chemistry
Bachelor of Science with Honours in Chemistry with Teaching
Bachelor of Science with Honours in Chemistry with Teaching (International)
Bachelor of Science with Honours in Forensic and Analytical Chemistry
Bachelor of Science in Chemistry
Bachelor of Science in Chemistry (Education)
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. The MChem programmes include an Industrial placement normally out with the campus. For Chemistry with Teaching students the School Experience modules will involve placements in schools. To be eligible to undertake School Experience, a student must apply and become a member of the PVG (Protecting Vulnerable Groups) Scheme or, if already a member, must apply for an update by the end of the third year. Chemistry (Education) students will undertake Year 1 and Year 4 of study at Capital Normal University.

Curriculum

2. **First Year** all programmes except Chemistry (Education)

Compulsory Modules

Module Code	Module Title	Level	Credits
CH106	Chemistry: Principles and Practice 1	1	20
CH107	Chemistry: Principle and Practice 2	1	20
CH108	Practical and Transferable Skills	1	20
MM116	Mathematics 1C *	1	20

*Or in exceptional circumstances alternative mathematics module(s) approved by the programme director.

Optional Modules

No fewer than 40 credits chosen from:

Module Code	Module Title	Level	Credits

CH116*	Foundation Science: Big Ideas for Chemists *	1	20
BM109**	Cells and Their Molecules	1	20
	Elective Modules		20

*Students without Physics at Higher (or equivalent) grade B or above must select CH116 as one of their module choices.
** Students who wish to select CH323 in Year 3 are required to take BM109 in Year 1.

Chemistry (Education)
Students undertake their first year of study at Capital Normal University

Module Code	Module Title	Level	Credits
	CNU Chemistry (Education) 1	1	120

3. Second Year
All students, except Chemistry with Education, shall undertake modules amounting to 120 credits as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
CH205	Practical Physical and Applied Chemistry	2	20
CH208	Fundamental Organic Chemistry	2	20
CH212	Physical Chemistry 1	2	20
CH213	Forensic Trace Analysis and Analytical Chemistry	2	20
CH214	Practical Organic and Inorganic Chemistry	2	20
CH202	Inorganic Chemistry	2	20

Chemistry (Education) students shall undertake modules amounting to 130 credits as follows:

Module Code	Module Title	Level	Credits
CH205	Practical Physical and Applied Chemistry	2	20
CH208	Fundamental Organic Chemistry	2	20
CH212	Physical Chemistry 1	2	20
CH213	Forensic Trace Analysis and Analytical Chemistry	2	20
CH214	Practical Organic and Inorganic Chemistry	2	20

X9172	Understanding Education in the 21st C	1	20
PH104	Physics summer school	1	10

4. Third Year

All students, except Chemistry (Education), shall undertake modules amounting to 120 credits as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
CH309	Physical Chemistry 2	3	20
CH313	Practical Physical, Applied, Forensic and Applied Chemistry	3	20
CH315	Practical Organic and Inorganic Chemistry	3	20
CH325	Intermediate Organic Chemistry and Spectroscopy	3	20
CH326	Inorganic Chemistry, Structure and Spectroscopy	3	20
Together with optional modules appropriate to the chosen programme			

Chemistry, Chemistry with Teaching and Chemistry with Teaching (International)

20 credits from:

Module Code	Module Title	Level	Credits
CH316	Analytical Chemistry and Drugs of Abuse	3	20
CH323	Chemical Biology *	3	20

*students are required to have taken BM109 in Year 1 before they can select CH323.

Chemistry with Forensic and Analytical Chemistry

Module Code	Module Title	Level	Credits
CH316	Analytical Chemistry and Drugs of Abuse	3	20

Chemistry (Education) students shall undertake modules amounting to 120 credits as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
CH309	Physical Chemistry 2	3	20
CH313	Practical Physical, Applied, Forensic and Applied Chemistry	3	20

CH315	Practical Organic and Inorganic Chemistry	3	20
CH316	Analytical Chemistry and Drugs of Abuse	3	20
CH325	Intermediate Organic Chemistry and Spectroscopy	3	20
X7211	Education and Learning	3	20

5. Fourth Year
MChem students

MChem Chemistry and Chemistry with Forensic and Analytical Chemistry
All MChem Chemistry and Chemistry with Forensic and Analytical Chemistry students shall undertake modules amounting to 120 credits as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
CH450	Distance Learning Assignment	4	40
And either			
CH451	Industrial Placement	4	80
Or			
CH452	Research Placement	4	80
Or			
CH462	Knowledge Exchange Placement	4	80

MChem Chemistry with Teaching
All MChem Chemistry with Teaching students shall normally undertake modules amounting to 140 credits as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
CH458	Distance Learning Assignment	4	20
X7457	Educational Studies, Professional Values	4	20
X7459	Professional Learning Through Enquiry	4	20
X7465	Professional Skills; Curriculum and Pedagogy Chemistry 1	4	40
X7460	Professional Skills; Professional Practice 1	4	40

BSc Hons Chemistry

All BSc Hons Chemistry, Chemistry with Forensic and Analytical students shall undertake modules amounting to 120 credits as follows:

Chemistry

Module Code	Module Title	Level	Credits
CH470	BSc with Honours in Chemistry	4	120

Forensic and Analytical Chemistry

Module Code	Module Title	Level	Credits
CH478	BSc with Honours in Forensic and Analytical Chemistry	4	120

Each of the above modules (CH470, CH478) comprises:

Module Code	Module Title	Level	Credits
CH436	Honours Project and Dissertation	4	40
CH437	Career Skills	4	20

Together with modules appropriate to the chosen programme

Chemistry

Module Code	Module Title	Level	Credits
CH479	Core Topics in Chemistry	4	20
CH480	Chemistry Specialisation Topics	4	40

Forensic and Analytical Chemistry

Module Code	Module Title	Level	Credits
CH479	Core Topics in Chemistry	4	20
CH477	Forensic and Analytical Chemistry Specialisation Topics	4	40

BSc Hons Chemistry with Teaching

All BSc Hons Chemistry with Teaching students shall normally undertake modules amounting to 120 credits as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
X7457	Educational Studies, Professional Values	4	20

X7459	Professional Learning Through Enquiry	4	20
X7465	Professional Skills; Curriculum and Pedagogy Chemistry 1	4	40
X7460	Professional Skills – Professional Practice	4	40

BSc Hons Chemistry with Teaching (International)
All BSc Hons Chemistry with Teaching (International) students shall normally undertake modules amounting to 120 credits as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
X7457	Educational Studies, Professional Values	4	20
X7459	Professional Learning Through Enquiry	4	20
X7465	Professional Skills; Curriculum and Pedagogy Chemistry 1	4	40
X7496	Placement Learning: Community	4	20
X7497	Learning on Placement	4	20

6. Fifth Year
All MChem students shall undertake modules amounting to 120 credits as follows:

Compulsory Modules

Chemistry

Module Code	Module Title	Level	Credits
CH583	MChem in Chemistry	5	120

Chemistry with Teaching

Module Code	Module Title	Level	Credits
CH585	MChem in Chemistry with Teaching	5	120

Forensic and Analytical Chemistry

Module Code	Module Title	Level	Credits
CH584	MChem in Forensic and Analytical Chemistry	5	120

Each of the above modules (CH583, CH585, CH584) comprises:

Module Code	Module Title	Level	Credits
CH591	Core Topics in Chemistry	5	20

CH592	MChem Project, Dissertation and Presentation	5	60
And either			
CH553	Chemistry Specialisation	5	40
Or			
CH554	Forensic and Analytical Chemistry Specialisation	5	40

Curriculum (Part-time study)

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

Progress

8. 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 passes in the following modules: CH106 Chemistry: Principles and Practice 1, CH107 Chemistry: Principles and Practice 2, CH108 Practical and Transferable Skills.

9. 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.

10. In order to progress to the third year of the Chemistry with teaching programme, a student must satisfy the requirements for entering Initial Teacher Education and have accumulated at least 220 credits from the programme curriculum, including normally 100 at Level 2 from Chemistry modules in the second year curriculum.

11. 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 including at least 60 Level 3 credits from third year Chemistry modules.

12. 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 including 120 credits at Level 4 from the fourth year Chemistry modules. For MChem Chemistry with Teaching the General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level shall apply including 140 credits at Level 4.

Final Honours Classification

13. On successful completion of the fourth year, a BSc Hons Chemistry or the BSc Hons in Forensic Analytical Chemistry, candidate will be awarded 120 Level 4 credits under the module code CH470 or CH478 as appropriate.

14. BSc with Honours in Chemistry with Teaching or Chemistry with Teaching (International): In order to qualify for the award of the degree, a candidate must have accumulated no fewer than 480 credits from the programme curriculum including the credits for all the compulsory Education modules taken individually.

15. On successful completion of the fifth year, a candidate will be awarded 120 Level 5 credits under the module code CH583, CH585 or CH584 as appropriate.

16. The final classification for the degree in the chosen programme will be based on the first assessed attempt at compulsory and specified optional modules taken in the third, fourth and fifth years where undertaken.

Award

17. **MChem:** In order to qualify for the award of the degrees of MChem, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

18. **BSc with Honours:** In order to qualify for the award of the degrees of BSc with Honours in the chosen programme, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

19. **BSc:** In order to qualify for the award of the degrees of BSc, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

20. **Diploma of Higher Education:** In order to qualify for the award of a Diploma of Higher Education in Chemical Sciences, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

21. **Certificate of Higher Education:** In order to qualify for the award of a Certificate of Higher Education in Chemical Sciences, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

Transfer

22. 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.

23. 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).