FACULTY OF SCIENCE

DEPARTMENT OF PURE AND APPLIED CHEMISTRY

CHEMISTRY WITH ARTIFICIAL INTELLIGENCE

Master of Science in Chemistry with Artificial Intelligence
Postgraduate Diploma in Chemistry with Artificial Intelligence
Postgraduate Certificate in Chemistry with Artificial Intelligence

These regulations are to be read in conjunction with General Academic Regulations – Postgraduate Taught Degree Programme Level.

Admission

1. Notwithstanding the General Academic Regulations – Postgraduate Taught Degree Programme Level applicants shall possess:

    i. a first or second class Honours degree) from a United Kingdom university (in Chemistry, Computing Science, Chemical Engineering, Mathematics or Physics or a closely related subject); or
    ii. a qualification deemed by the Programme Director acting on behalf of Senate to be equivalent to (i) above.

2. In all cases, applicants whose first language is not English, shall be required to demonstrate an appropriate level of English.

Duration of study

3. The General Academic Regulations – Postgraduate Taught Degree Programme Level shall apply.

Mode of study

4. The programme is available by full-time and part-time study.

Place of study

5. In accordance with the General Academic Regulations – Postgraduate Taught Degree Programme Level, some off-campus work may be required.

Curriculum

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

    i. for the degree of MSc no fewer than 180 credits including a 60 credit research project,
    ii. for the Postgraduate Diploma no fewer than 120 credits,
    iii. for the Postgraduate Certificate no fewer than 60 credits.

Compulsory Modules

Module Code	Module Title	Level	Credits
CHxxx	Python 101 for Chemists	5	20
CHxxx	Software Engineering and High Performance Computing	5	10
CHxxx	AI and Machine Learning	5	10

CHxxx	Computational Chemistry	5	10
CHxxx	Time Series Analysis for Chemistry	5	10
CHxxx	Scientific Research Methods	5	10
CS801	Quantitative Methods for AI	5	10
CS802	Deep Learning and Neural Nets	5	20
CS982	Big Data Technologies	5	20

Students for the degree of MSc only:

Module Code	Module Title	Level	Credits
CHxxx	Project	5	60

Progress

7. The General Academic Regulations – Postgraduate Taught Degree Programme Level shall apply.

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

Award

9. **Degree of MSc**: In order to qualify for the degree of MSc in Chemistry with Artificial Intelligence, a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits, of which 60 credits must have been awarded in respect of the research project CHxxx.

10. **Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma in Chemistry with Artificial Intelligence, a candidate must have accumulated no fewer than 120 credits from the programme curriculum.

11. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Chemistry with Artificial Intelligence, a candidate must have accumulated no fewer than 60 credits from the programme curriculum.