Annex IV

THE UNIVERSITY OF HONG KONG

Credit Unit Statement (CUS) of Taught Programmes

Faculty / Offering Unit:	Faculty of Science, Department of Chemistry
Programme title:	Master of Science in the field of Chemical Technologies for Health and Materials
Applicable student cohort(s):	2024-25 and thereafter

The chemical industry plays a fundamental role in sustaining social and economic progress worldwide. Spanning almost every goods-producing sector globally, the industry contributes significantly to both national and international development. The industry also drives over half of the United Nations' Sustainable Development Goals, demonstrating its importance in enabling sustainability. The Master of Science in the field of Chemical Technologies for Health and Materials programme equips graduates with subject expertise, transferable skills, and innovative mindsets enabling workplace and research breakthroughs. The programme covers frontier development in health and materials such as drug design/synthesis, quality assurance, modern analysis techniques, energy harvesting/conversion/storage, and technology transfer.

Lecture-based courses with hands-on laboratory sessions and projects provide an immersive learning experience. Graduates of this program will be equipped with strong scientific foundations, analytical mindset, synthetic skills, creative thinking, and entrepreneurial abilities.

The general guideline for student learning/ contact hours requirement in the MSc programme

- A 6-credit course has around 120 total study hours, including contact hours, lab sessions, demonstrations, assignments, reading and study time.
- About 30% of the total study hours are actual contact hours in the form of lectures, lab, tutorial and discussion hours.
- For the capstone course, students are expected to devote about 9 months (Jan to Sep) in a research laboratory to carry out independent research project under the supervision of HKU academic staff.
- The total contact hours, including lectures, tutorials, discussions, and laboratory work is 232-348 hours.
- The total student learning hours, including project work, for the MSc curriculum is 1500-2000 hours.

There are __2__ categories of courses in this programme, as outlined below:

1. Core and Elective Courses (6 credits per course)

Contact hours: 24-36 hours of lectures. For some courses with laboratory component, there is a 12-24 hours of laboratory sessions or demonstrations in addition to the lectures. These courses are taught predominantly through lectures and tutorials. Where applicable, laboratory sessions are included to enhance the experiential learning experience.

Output requirement: Assessment is by a combination of examination (0-50%) and continuous assessment (50-100%). Continuous assessment tasks include written outputs, such as essays, literature reviews, project proposals, project/research reports with no less than 2500 words, and oral presentations.

2. Capstone Course (24 credits per course)

This course aims at providing students with an opportunity to pursue their own research interests under the supervision of an academic staff in HKU for about 9 months in a research laboratory. The teacher will meet with the student regularly to discuss the project progress. It requires a total of 500-700 student learning hours, inclusive of project or laboratory work, and 40-60 contact hours (discussions and group meetings). The capstone course is 100% continuous assessment. Assessment includes an interim report, a Master's Dissertation totalling no more than 20,000 words, and an oral examination.