

Curriculum Information Record for a Minor

Department of Chemistry Effective from Semester A 2020/21 For Students Admitted to the Minor with Catalogue Term Semester A 2020/21 and thereafter

The information provided on this form is the official record of the minor. It will be used for City University's database, various City University publications (including websites) and documentation for students and others as required.

In specifying the curriculum for a minor, "catalogue term" is used to determine the set of curriculum requirements that a student is following. The catalogue term of minor requirements that students will follow will be the effective term of their declared minor (BUS/04/A5R).

Prepared / Last Updated by

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City University of Hong Kong

Curriculum Information Record for a Minor

Department of Chemistry

Effective from Semester A 2020/21

For Students Admitted to the Minor with Catalogue Term

Semester A 2020/21 and thereafter

Part I Minor Overview

Minor (in English) : Minor in Analytical and Environmental Chemistry
(in Chinese) : 分析及環境化學

Exclusive Majors : Applied Chemistry/Chemistry

*(Students who study those majors
are not allowed to choose this
minor)*

1. Aims of Minor

This minor aims to increase students' understanding of Analytical and Environmental Chemistry at the post-secondary level, hence preparing them for further studies.

2. Intended Learning Outcomes of Minor (MINILOs)

(Please state what the student is expected to be able to do on completion of the minor according to a given standard of performance.)

Upon successful completion of this minor, students should be able to:

No.	MINILOs	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
		A1	A2	A3
1.	comprehend the basic concepts of analytical and environmental chemistry	√		
2.	comprehend the chemical and biochemical phenomena occurring in the environment	√	√	
3.	comprehend the common analytical instruments and methods for chemical, biological, industrial and environmental samples		√	√
4.	comprehend the effects of natural and synthetic compounds such as additives and pesticides on the environment		√	√

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishments of discovery/innovation/creativity through producing/constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Part II Minor Requirement (15 credit units)

(The catalogue term of minor requirement that students will follow will be the effective term of their declared minor.)

1. Core Courses (9 credit units)

Course Code	Course Title	Level	Credit Units	Remarks
CHEM1300	Principles of General Chemistry	B1	3	
CHEM2004A	Principles of Analytical Chemistry	B2	3	
CHEM2005A	Principles of Environmental Chemistry	B2	3	

2. Electives (6 credit units)

Any 2 courses from the following electives.

Course Code	Course Title	Level	Credit Units	Remarks
CHEM2006A	Principles of Inorganic Chemistry	B2	3	
CHEM2007A	Principles of Organic Chemistry	B2	3	
CHEM2008A	Principles of Physical Chemistry	B2	3	
CHEM3027A	Analytical Chemistry	B3	3	
CHEM3038A	Environmental Sampling and Risk Assessment	B3	3	
CHEM4035A	Environmental Measurements	B4	3	

Part III Additional Information

- At least 15 credit units must be taken from the courses shown in the above table. These include 9 credit units of the required courses and at least 6 credit units of electives. Students who enter the programme with a satisfactory result in Chemistry in HKALE or equivalent may apply to take a selected elective as a substitute for CHEM1300.
- An average GPA of 1.7 or above in these courses is required for the award.
- No student is allowed to take 2 minors from the Department of Chemistry simultaneously.
- Students whose major is in the BScAC/BScCHEM programme of the Department of Chemistry are ineligible.
- A student who intends to take the minor should seek approval from his/her parent department and the Department of Chemistry.

Part IV Curriculum Map

(The curriculum map shows the mapping between courses and the MINILOs. It should cover all courses designed specifically for the minor.)

Course			MINILOs				DEC		
Code	Title	Credit	M1	M2	M3	M4	A1	A2	A3
Core Courses									
CHEM1300	Principles of General Chemistry	3	√	√			√	√	
CHEM2004A	Principles of Analytical Chemistry	3	√	√	√		√	√	
CHEM2005A	Principles of Environmental Chemistry	3	√	√		√	√	√	
Electives									
CHEM2006A	Principles of Inorganic Chemistry	3	√	√			√	√	
CHEM2007A	Principles of Organic Chemistry	3		√		√	√	√	
CHEM2008A	Principles of Physical Chemistry	3		√	√		√	√	
CHEM3027A	Analytical Chemistry	3		√	√	√		√	√
CHEM3038A	Environmental Sampling and Risk Assessment	3			√	√		√	√
CHEM4035A	Environmental Measurements	3			√	√		√	√

A1: *Attitude*

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: *Ability*

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: *Accomplishments*

Demonstrate accomplishments of discovery/innovation/creativity through producing/constructing creative works/new artefacts, effective solutions to real-life problems or new processes.