

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

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Part I Minor Overview

Minor	(in English)	:	Chemical Sciences
	(in Chinese)	:	化學科學
Exclusive Major (Students who stud are not allowed to minor)	y those majors	:	Applied Chemistry/Chemistry

1. Aims of Minor

This minor aims to increase students' understanding of Chemical Sciences 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.)

No.	MINILOs	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)				
		A1	A2	A3		
1.	comprehend the roles of chemical sciences in everyday life					
2.	comprehend the basic concepts of analytical, environmental, inorganic, organic and physical chemistry					
3.	comprehend the common analytical methods		\checkmark	\checkmark		
4.	comprehend the chemical reactivity of organic and inorganic materials		\checkmark	\checkmark		
5.	comprehend the structure-properties relationship of compounds		\checkmark	\checkmark		

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

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 (3 credit units)

Course Code	Course Title	Level	Credit Units	Remarks
CHEM1300	Principles of General Chemistry	B1	3	

2. Electives (12 credit units)

Any 4 courses from the following electives.

Course Code	Course Title	Level	Credit Units	Remarks
CHEM2004A	Principles of Analytical Chemistry	B2	3	
CHEM2005A	Principles of Environmental Chemistry	B2	3	
CHEM2006A	Principles of Inorganic Chemistry	B2	3	
CHEM2007A	Principles of Organic Chemistry	B2	3	
CHEM2008A	Principles of Physical Chemistry	B2	3	
CHEM3014A	Inorganic Chemistry	B3	3	
CHEM3015A	Organic Chemistry	B3	3	
CHEM3016A	Physical Chemistry	B3	3	
CHEM3027A	Analytical Chemistry	B3	3	

Part III Additional Information

- a. At least 15 credit units must be taken from the courses shown in the above table. These include 3 credit units of the required courses and at least 12 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.
- b. An average GPA of 1.7 or above in these courses is required for the award.
- c. No student is allowed to take 2 minors from the Department of Chemistry simultaneously.
- d. Students whose major is in the BScAC/BScCHEM programme of the Department of Chemistry are ineligible.
- e. 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	M5	A1	A2	A3
Core Courses						T	1			
CHEM1300	Principles of General Chemistry	3	\checkmark	\checkmark				\checkmark	\checkmark	
Electives	Electives									
CHEM2004A	Principles of Analytical Chemistry	3	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	
CHEM2005A	Principles of Environmental Chemistry	3	\checkmark	\checkmark				\checkmark	\checkmark	
CHEM2006A	Principles of Inorganic Chemistry	3								
CHEM2007A	Principles of Organic Chemistry	3								
CHEM2008A	Principles of Physical Chemistry	3		\checkmark				\checkmark	\checkmark	
CHEM3014A	Inorganic Chemistry	3								\checkmark
CHEM3015A	Organic Chemistry	3							\checkmark	\checkmark
CHEM3016A	Physical Chemistry	3							\checkmark	\checkmark
CHEM3027A	Analytical Chemistry	3								\checkmark

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A2: Ability

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A3: Accomplishments

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