Curriculum for BSc in Chemistry

Major Program Requirements

Core courses

	CHEM 111	Organic Chemistry I	[3-1-0:4]
	CHEM 121	Physical Chemistry I	[3-1-0:4]
	CHEM 131	Inorganic Chemistry I	[3-1-0:4]
	CHEM 141	Analytical Chemistry I	[3-0-0:3]
	CHEM 153	Molecular Characterization Laboratory I	[0-2-5:4]
	CHEM 155	Synthetic Laboratory I	[0-2-5:4]

Required courses

	CHEM 212	Organic Chemistry II	[3-0-0:3]
	CHEM 222	Physical Chemistry II	[3-0-0:3]
	CHEM 232	Inorganic Chemistry II	[3-0-0:3]
	CHEM 244	Analytical Chemistry II	[3-0-0:3]
(1)	CHEM 254	Molecular Characterization Laboratory II	[0-2-5:4]
(1)	CHEM 256	Synthetic Laboratory II	[0-2-5:4]
	CHEM 391	Chemical Information	[1-0-0:1]
	CHEM 392	Chemistry Undergraduate Seminar	[0-1-0:1]
(2)	COMP 101	Exploring Multimedia and Internet Computing	[2-0-2:3]
(3)	MATH 021	Concise Calculus	[3-1-0:4]
	MATH 106	Multivariable Calculus and Basic Probability	[3-1-0:3]
	MATH 150	Introduction to Ordinary Differential Equations	[2-1-0:2]

Elective courses

	Elective types		Minimum no. of courses	Minimum total credits
(4)	CHEM	Chemistry Elective	3	9
	FREE	Free Elective	3	9

General Education Requirements

Electives must be selected from amongst those general education courses that are listed under the section “Designated General Education Courses for Undergraduate Students”.

	Elective types		Minimum no. of courses	Minimum total credits
	GEE(ENGG)	Engineering General Education Elective	1	6
	GEE(SB&M)	Business and Management General Education Elective	1	
(5)	GEE(H&SS)	Humanities and Social Science General Education Elective	4	12

Required Courses in English Communication

LANG	108	English for Science Students	[0-2-0:2]
LANG	208	English Communication for Science Students I	[0-2-0:1]
LANG	209	English Communication for Science Students II	[0-2-0:1]
LANG	308	English Communication for Science Students III	[0-2-0:1]

Other Requirement:

(6)	HLTH	001	Healthy Life Style	[0 credit]

Notes:
(1) Students may seek departmental approval to replace these two courses with CHEM 398 Undergraduate Research plus a Chemistry elective totaling at least eight credits.
(2) This course may be replaced by another COMP course upon approval by the Department.
(3) Students entering with grade D or above in AL Pure Mathematics take a free elective in Fall.
(4) CHEM 398 and CHEM 399 are two possible electives.
(5) Of these courses, at least one course in Humanities and one in Social Science are required.
(6) Students are required to take and pass this course in their first year of study. Details of the course and its requirements are announced on the course website *http://www.ab.ust.hk/sao/HLTH001* managed by the Student Affairs Office.

A minimum of 101 credits is required for the BSc program in Chemistry. Students must take additional course(s) and/or elective(s) of higher-than-required credit value to meet this minimum total of 101 credits.

Recommended Pattern of Study for BSc in Chemistry

1st year	Fall	C	CHEM 111, CHEM 131	
		R	COMP 101, HLTH 001, LANG 108, MATH 021/FREE	(Total: 15 credits)
	Spring	C	CHEM 155	
		R	CHEM 212, CHEM 232, HLTH 001, LANG 108, MATH 106	
		E	GEE(H&SS)	(Total: 18* credits)
2nd year	Fall	C	CHEM 121, CHEM 141	
		R	CHEM 256, LANG 208, MATH 150	
		E	GEE(H&SS)	(Total: 17 credits)
	Spring	C	CHEM 153	
		R	CHEM 222, CHEM 244, CHEM 391, CHEM 392, LANG 209	
		E	GEE(SB&M), GEE(H&SS)	(Total: 19 credits)
3rd year	Fall	R	CHEM 254, LANG 308	
		E	two CHEM, GEE(ENGG), FREE	(Total: 17 credits)
	Spring	E	CHEM, GEE(H&SS), three FREE	(Total: 15 credits)

* *LANG 108 is a two-semester course. The course credits will be earned on completion of the course at the end of 1st year Spring.*

C = core course; R = required course; E = elective course