

Biology and Chemistry Double Major Programme

Major Programme Requirement

Students are required to complete a minimum of 89 units of courses as follows:

	Units
1. Faculty Package: Group A: LSCI1002 Group B: CHEM1070 Group D: PHYS1002 (preferred) or 1001 or 1111	9
2. Required Courses:	
(a) <u>1st Major: Biology</u> BCHE2030, BIOL2120, 2210, 2410, 2420, 3012, 3022, 3560, 3570, 3610, 3620, 4010, LSCI1012, 2002#	32
(b) <u>2nd Major: Chemistry</u> CHEM1300, 2110#, 2120#, 2200#, 2300#, 2400, 2868, 2878, 3130#, 3220, 3320, 3410	29
3. Elective Courses:	
(a) <u>1st Major: Biology</u> i) One laboratory course from BIOL2213, 2313 ii) At least 5 units chosen from the following: BIOL3310, 3410, 3420, 3510, 3530, 3630, 3710, 4120, 4230, 4240, 4260, 4310, 4420, 4510, 4520, 4610, 4901, LSCI3520#	6
(b) <u>2nd Major: Chemistry</u> i) Two laboratory courses from CHEM3810, 3830, 3860, 3870 ii) At least 5 units chosen from the following, of which at most one CHEM course at 3000 level: CHEM3230, 3340, 3420, 4100, 4110, 4200, 4300, 4303, 4400, 4440, 4630, 4640, 4710, 4780, 4784, 4785, 4788, ENSC4525, 4535	9
4. Research Component/ Capstone Course/ Final Year Project: BIOL4902, 4903	4
Total:	89

Explanatory Notes:

- BIOL courses at 2000 and above level as well as those labeled as # will be included in the calculation of Major GPA for honours classification.
- Subject to approval by the Major Programmes concerned, students may opt out of the Double Major Programme and register for the 1st Major Programme only. The decision to opt out is irrevocable. Students who have opted out are required to complete and fulfill all graduation requirements by following the study scheme of the 1st Major Programme as a single major. Students should be aware that such decision may result in a delay in graduation because the requirements of the single major study scheme differ from those of the Double Major Programme.

	Recommended Course Pattern	Units
First Year of Attendance	1 st term Faculty Package: LSCI1002, PHYS1002/1111 Major Required: CHEM2200 Major Elective(s):	3-6 3
	2 nd term Faculty Package: CHEM1070, LSCI1002 (if not taken), PHYS1001 (if not taken PHYS1002/1111) Major Required: CHEM1300, LSCI1012 Major Elective(s):	3-6 5
Second Year of Attendance	1 st term Major Required: BCHE2030, BIOL2120, CHEM2120, 2868, LSCI2002 Major Elective(s):	12
	2 nd term Major Required: BIOL2210, 2410, 2420, CHEM2400, 2878 Major Elective(s): BIOL2213/2313	10 1
Third Year of Attendance	1 st term Major Required: BIOL3012, 3560, 3610, CHEM2300, 3220 Major Elective(s): 1-2 CHEM laboratory course(s) (CHEM3810, 3830)	11 2-4
	2 nd term Major Required: BIOL3022, 3570, 3620, CHEM2110, 3130 Major Elective(s): 0-1 CHEM laboratory course (CHEM3860) one BIOL course one CHEM course	11 0-2 2-3 2-3
	Summer session Major Elective: 0-1 BIOL course (BIOL4901)	0-2
Fourth Year of Attendance	1 st term Major Required: BIOL4010, 4902, CHEM3320, 3410 Major Elective(s): 0-1 CHEM laboratory course (CHEM3870) one BIOL course one CHEM course	11 0-2 2-3 2-3
	2 nd term Major Required: BIOL4903 Major Elective(s): 0-1 BIOL course 0-1 CHEM course	2 0-3 0-3
Total (including Faculty Package):		89

Course List

<i>Course Code</i>	<i>Course Title</i>	<i>Unit(s)</i>
BIOL2120	Cell Biology	3
BIOL2210	Ecology	3
BIOL2213	Ecology Laboratory	1
BIOL2313	Genetics Laboratory	1
BIOL2410	General Genetics	2
BIOL2420	Population Genetics	1
BIOL3012	Biodiversity Laboratory I	2
BIOL3022	Biodiversity Laboratory II	2
BIOL3310	Human Biology	3
BIOL3410	General Microbiology	3
BIOL3413	Microbiology Laboratory	1
BIOL3420	Advanced Genetics and Epigenetics	3
BIOL3510	Palaeobiology	2
BIOL3530	Plant Physiology	3
BIOL3560	Biology of Fungi and Non-Vascular Plants	2
BIOL3570	Biology of Vascular Plants	2
BIOL3610	Invertebrate Form and Function	2
BIOL3620	Vertebrate Life	2
BIOL3630	Animal Physiology	3
BIOL3710	Marine Biology	3
BIOL4010	Evolutionary Biology	3
BIOL4012	Field and Environmental Biology	2
BIOL4032	Physiological Investigations	2
BIOL4120	Developmental Biology	3
BIOL4230	Global Change Biology	3
BIOL4240	Environmental Impact Assessment	3
BIOL4242	Environmental Impact Assessment Laboratory	2
BIOL4260	Conservation Biology	3
BIOL4310	Human Genetics	3
BIOL4420	Marine Microbial Ecology	2
BIOL4510	Hong Kong Flora and Vegetation	3
BIOL4520	Plant Metabolism and Metabolic Engineering	2
BIOL4610	Foundation for Secondary School Biology Teaching	3
BIOL4901	Senior Experimental Project I	2
BIOL4902	Senior Experimental Project II	2
BIOL4903	Senior Experimental Project III	2
BIOL4906	Internship	2
BIOL4907	Field Study	2
STAR2000	Undergraduate Research in Science I	1
STAR2050	Seminar I	1
STAR3000	Undergraduate Research in Science II	2
STAR3050	Seminar II	1
STAR4000	Undergraduate Research in Science III	3
STAR4050	Seminar III	1