The Hong Kong University of Science and Technology

School of Science

An Example on Student's Pathway (as of 2 August 2021)

<< Declaration of major

School:	**School of Science**	Student's Pathways (i.e. Study Pattern)
Department:	**Division of Life Science**	Pathway 1
Program:	**BSc in Biotechnology**	Background: HKDSE 4 Core + 2 Elec (incl. 1/2x BIOL, 1/2x CHEM) Profile: Normative

Course Offering Dept (course code prefix)	Course Code	Course Title / Courses List	Credits	Major Pre-requisite	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	**Sub-total**	**Remarks**
School Requirements														
SCIE	1000	Science School Induction	0		0	0							0	
COMP COMP COMP COMP	 1021 1022P 2011	Note: COMP 1021 OR COMP 1022P OR COMP 2011 Introduction to Computer Science Introduction to Computing with Java Programming with C++	3-4 3 3 4				3						3	
LANG	2010	English for Science I	3						3				3	
LIFS LIFS	 1901	Note: Students with level 3 or above in HKDSE 1x Biology are exempted from taking LIFS 1901 General Biology I	0-3 3	@	3								3	
LIFS	1902	General Biology II	3	@		3							3	
CHEM	1004	Chemistry in Everyday Life	3										0	
CHEM	1010	General Chemistry IA	3		3								3	
CHEM	1020	General Chemistry IB	3										0	
CHEM	1030	General Chemistry II	3			3							3	
CHEM	1050	Laboratory for General Chemistry I	1		{1}								0	
CHEM	1055	Laboratory for General Chemistry II	1			{1}							0	
LIFS	1030**	Environmental Science	3										0	
LIFS	1903	Laboratory for General Biology I	1		1								1	
LIFS	1904	Laboratory for General Biology II	1			{1}							0	
LIFS	1930	Nature of Life Sciences	3										0	
LIFS	2210	Biochemistry I	3				3						3	
MATH	1012	Calculus IA	4										0	
MATH	1013	Calculus IB	3		3								3	
MATH	1014	Calculus II	3										0	
MATH	1020	Accelerated Calculus	4										0	
MATH	1023	Honors Calculus I	3										0	
MATH	1024	Honors Calculus II	3										0	
MATH	2023	Multivariable Calculus	4										0	
MATH	2121	Linear Algebra	4										0	
MATH	2131	Honors in Linear and Abstract Algebra I	4										0	
OCES	1030	Environmental Science	3										0	
PHYS	1001	Physics and the Modern Society	3				3						3	
PHYS	1111	General Physics I	3										0	
PHYS	1112	General Physics I with Calculus	3										0	
PHYS	1113	Laboratory for General Physics I	1										0	
PHYS	1114	General Physics II	3										0	
PHYS	1115	Laboratory for General Physics II	1										0	
PHYS	1312	Honors General Physics I	3										0	
PHYS	1314	Honors General Physics II	3										0	
Required credits for School / Major Pre-requisite Requirements													28	
Major Requirements														
Major Required Courses and Electives														
LIFS LIFS	 1903	Note: Students with level 3 or above in HKDSE 1x Biology are exempted from taking LIFS 1903 Laboratory for General Biology I	0-1 1		(1)								0	
LIFS	1904	Laboratory for General Biology II	1			1							1	
LIFS	2040	Cell Biology	3					3					3	
LIFS	2070	Introduction to Biotechnology	3				3						3	
LIFS	2080	Plant Biology	3					3					3	
LIFS	2210	Biochemistry I	3				(3)						0	
LIFS	3060	Microbiology	3					3					3	
LIFS	3110	Biotechnological Application of Recombinant DNA Techniques	3						3				3	
LIFS	3140	General Genetics	4						4				4	
LIFS	4150	Plant Biotechnology	3								3		3	
LIFS	4200	Concepts and Issues in Contemporary Biotechnology	3								3		3	
LIFS/SCIE LIFS LIFS LIFS SCIE	 4963 4973 4983 4500	Note: LIFS 4963 OR (LIFS 4973 AND LIFS 4983) OR (SCIE 4500 AND LIFS 4983) (Students following IRE Track can only use (SCIE 4500 AND LIFS 4983) to fulfill the requirement.) Biotechnology Capstone Project Biotechnology Project Research I Biotechnology Project Research II IRE Research Project II	3-7 3 3 4 3								[3]	3	3	
CHEM CHEM CHEM	 1010 1020	Note: CHEM 1010 OR CHEM 1020 General Chemistry IA General Chemistry IB	3 3 3		(3)								0	
CHEM	1030	General Chemistry II	3			(3)							0	
CHEM	1050	Laboratory for General Chemistry I	1		1								1	
CHEM	1055	Laboratory for General Chemistry II	1			1							1	
CHEM CHEM CHEM	 2110 2311	Note: CHEM 2110 OR CHEM 2311 Organic Chemistry I Analytical Chemistry	3 3 3						3	[3]			3	
CHEM CHEM CHEM	 2155 2355	Note: CHEM 2155 OR CHEM 2355 Fundamental Organic Chemistry Laboratory Fundamental Analytical Chemistry Laboratory	1 1 1							1			1	
CENG	1600	Biotechnology and Its Business Opportunities	3				3						3	
LANG LANG LANG	 3024 3027	Note: LANG 3024 OR LANG 3027 (Students following IRE Track should take LANG 3027 to fulfill the requirement.) Science Communication in English (Life Science) Science Communication in English for Research Students (Chemistry, Life Science and Ocean Science)	3 3 3							3	[3]		3	
LIFS/BIPH/BTEC/ OCES/PHYS/BIEN/ CENG		Biotechnology Electives (Courses from the specified elective list; Students following IRE Track are required to take a minimum of 15 credits; while others a minimum of 18 credits. Courses taken as Major/Track Required Courses may not be counted towards the elective requirement.)	15-18					3		6	3	6	18	
Required credits for Major Required Courses and Electives			65-73										59	
University CORE														
CORE	C3 - C12	U CORE - Others	30		3	3	3	6	3	6	3	3	30	
CORE	C1 & C2	U CORE - English Language	6		3	3							6	
Sub-total for University CORE			36										36	
					Term load (excl. free credits)									
					17	14	18	18	16	12	12			
					123#									

<< Declaration of major

Notes:

@ Course that students need to complete before enrolling into respective major/programs.

( ) indicates the reuse of the same course to fulfill more than one requirement.

[ ] denotes the course is also offered in other terms as indicated and students may take the course in one of these terms subject to advice by the program office.

{ } indicates the course overlapping with another requirement will not be necessarily counted towards the School Requirements.

To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirement.

**Remarks on course(s):

- LIFS 1030: The course was last offered in 2020-21 and was deleted subsequently.

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.