

The Hong Kong University of Science and Technology

School of Science

An Example on Student's Pathway (as of 31 July 2020)

<< Declaration of major

School:		School of Science			Student's Pathways (i.e. Study Pattern)										Remarks
Department:		Department of Ocean Science			Pathway 1										
Program:		BSc in Environmental Science			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		
School Requirements															
SCIE	1000	Science School Induction	0		0	0							0		
COMP		Note: COMP 1001 OR COMP 1021 OR COMP 1022P OR COMP 1022Q OR COMP 2011	3-4												
COMP	1001	Exploring Multimedia and Internet Computing	3												
COMP	1021	Introduction to Computer Science	3			3							3		
COMP	1022P	Introduction to Computing with Java	3												
COMP	1022Q**	Introduction to Computing with Excel VBA	3												
COMP	2011	Programming with C++	4												
LANG	2010	English for Science I	3					3					3		
LIFS/MATH		Note: [LIFS 1901 AND LIFS 1902] OR [MATH 1012 OR MATH 1013 OR MATH 1023] AND [MATH 1014 OR MATH 1024] OR [MATH 1020] (Students with level 3 or above in HKDSE 1x Biology are exempted from taking LIFS 1901)	3-7												
LIFS	1901	General Biology I	3												
LIFS	1902	General Biology II	3	@	6	3	[3]	3					12		
MATH	1012	Calculus IA	4												
MATH	1013	Calculus IB	3												
MATH	1014	Calculus II	3												
MATH	1020	Accelerated Calculus	4												
MATH	1023	Honors Calculus I	3												
MATH	1024	Honors Calculus II	3												
CHEM	1004	Chemistry in Everyday Life	3										0		
CHEM	1010	General Chemistry IA	3		3		[3]						3		
CHEM	1020	General Chemistry IB	3										0		
CHEM	1030	General Chemistry II	3			3		[3]					3		
CHEM	1050	Laboratory for General Chemistry I	1		1		[1]						1		
CHEM	1055	Laboratory for General Chemistry II	1										0		
LIFS	1030	Environmental Science	3					[3]					0		
LIFS	1903	Laboratory for General Biology I	1										0		
LIFS	1904	Laboratory for General Biology II	1										0		
LIFS	1930	Nature of Life Sciences	3										0		
LIFS	2210	Biochemistry I	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															
ENVS	2003	Introduction to Atmospheric Science	3					3					3		
ENVS	3001**	Pollution Monitoring and Measurement**	3							3		[3]	3		
ENVS	3004**	Global Climate Change**	3							3			3		
ENVS	3005**	Environmental Microbiology	3						3				3		
ENVS	4001**	Environmental Impact and Risk Assessment	3								3		3		
ENVS/SCIE		Note: ENVS 4964 OR (ENVS 4974 AND ENVS 4984) OR (SCIE 3500 AND SCIE 4500) (Students following IRE Track can only use (SCIE 3500 AND SCIE 4500) to fulfill the requirement.)	3-7												
ENVS	4964	Environmental Science Capstone Project Research	3								3	[3]	3		
ENVS	4974	Environmental Science Project Research I	3												
ENVS	4984	Environmental Science Project Research II	4												
SCIE	3500	IRE Research Project I	3												
SCIE	4500	IRE Research Project II	3												
CHEM		Note: CHEM 1010 OR CHEM 1020	3												
CHEM	1010	General Chemistry IA	3		(3)		[3]						0		
CHEM	1020	General Chemistry IB	3												
CHEM	1030	General Chemistry II	3			(3)		[3]					0		
CHEM	1050	Laboratory for General Chemistry I	1		(1)		[1]						0		
CHEM	2311	Analytical Chemistry	3					3		[3]			3		
CHEM	2355	Fundamental Analytical Chemistry Laboratory	1					1					1		
CHEM/LIFS/MATH		Note: CHEM 4310 OR LIFS 3160 OR MATH 2011	3												
CHEM	4310	Environmental Chemistry	3												
LIFS	3160	Ecology	3					3					3		
MATH	2011	Introduction to Multivariable Calculus	3												
LIFS	1030	Environmental Science	3				3						3		
LIFS/MATH		Note: LIFS 3150 OR MATH 2411	3-4												
LIFS	3150	Biostatistics	3							3			3		
MATH	2411	Applied Statistics	4												
OCES	2001	Survey of Ocean Science	3						3				3		
OCES	2100	Conservation Field Trips	1				1						1		
PHYS	1003	Energy and Related Environmental Issues	3				3						3		
LANG	3025	Science Communication in English (Environmental Science)	3										3		
ENVS/CHEM/LIFS/MATH/CENG/ENVR		Environmental Science Electives (Courses from the specified elective list. Students following IRE Track are required to take a minimum of 9 credits; while others a minimum of 12 credits. A maximum of two 1000-/2000-level Environmental Science electives may be used to count towards this requirement. Courses taken as Major/Track Required Courses may not be counted towards the elective requirement.)	9-12					3		3		3	3	12	
Required credits for Major Required Courses and Electives													57-65		
University CORE															
CORE	C3 - C12	U CORE - Others	30		3		6	3	6	3	3	6	30		
CORE	C1 & C2	U CORE - English Language	6		3	3							6		
Sub-total for University CORE													36		
													Term load (excl. free credits)		
													16	15	
													16	19	
													15	15	
													12	9	
													117#		

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):

- COMP 1022Q: The course was last offered in 2019-20 and was deleted subsequently.
- ENVS 3001: The course code will be changed to OCES 3001 starting from Fall, 2021-22.
- ENVS 3001: The course title will be changed to "Coastal Environmental Monitoring" starting from Fall, 2021-22.
- ENVS 3004: The course code will be changed to OCES 4001 starting from Fall, 2021-22.
- ENVS 3004: The course title will be changed to "Ocean and Climate Change" starting from Fall, 2021-22.
- ENVS 3005: The course code will be changed to OCES 4201 starting from Fall, 2021-22.
- ENVS 4001: The course code will be changed to OCES 4203 starting from Fall, 2021-22.

>> 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.