The Hong Kong University of Science and Technology

School of Science

An Example on Student's Pathway (as of 25 July 2023)

<< Declaration of major

School:		**School of Science**			Student's Pathways (i.e. Study Pattern)									
Department:		**Department of Ocean Science**			Pathway 1									
Program:		**BSc in Ocean Science and Technology**			Background: HKDSE 4 Core + 2 Elec Profile: Student to graduate with option									
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														
COMP		Note: COMP 1021 OR COMP 1022P OR COMP 2011	3-4											
COMP	1021	Introduction to Computer Science	3											COMP 1021 is an OST Major required course.
COMP	1022P	Introduction to Computing with Java	3				3						3	
COMP	2011	Programming with C++	4											
LANG	2010	English for Science I	3					3					3	
OCES	1001	The Earth as a Blue Planet	3	@	3								3	OCES 1001 is NOT a Science Foundation course and CANNOT be used to fulfill School Requirements.
OCES	1010	Principles and Applications of Environmental Science	3	@		3							3	
CHEM	1008	Introductory Chemistry	3										0	
CHEM	1020	General Chemistry I	3		3								3	
CHEM	1030	General Chemistry II	3			(3)							0	
CHEM	1050	Laboratory for General Chemistry I	1										0	
CHEM	1055	Laboratory for General Chemistry II	1										0	
LIFS	1030**	Environmental Science	3										0	
LIFS	1901	General Biology I	3			3							3	
LIFS	1902	General Biology II	3				3						3	
LIFS	1903	Laboratory for General Biology I	1			1							1	
LIFS	1904	Laboratory for General Biology II	1										0	
LIFS	1930	Nature of Life Sciences	3										0	
LIFS	2210	Biochemistry I	3										0	
MATH	1012	Calculus IA	4										0	
MATH	1013	Calculus IB	3		3								3	
MATH	1014	Calculus II	3			3							3	
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	
PHYS	1101	Introductory Physics	4										0	
PHYS	1111	General Physics I	3										0	
PHYS	1112	General Physics I with Calculus	3		3								3	
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													31	
Major Requirements														
Major Required Courses and Electives														
OCES	2001	Survey of Ocean Science	3				3		[3]				3	
OCES	2002	Marine Chemistry	3					3					3	
OCES	2003	Descriptive Physical Oceanography	3					3					3	
OCES	2100	Conservation Field Trips	1				1						1	
OCES	3001	Coastal Environmental Monitoring	3							3		[3]	3	
OCES	3003	Field Methods in Marine Studies	3**						3		[3]		3	
OCES	3130	Marine Biology	3						3		[3]		3	
OCES	3160	Ecology	3						3		[3]		3	
OCES	4001	Ocean and Climate Change	3							3			3	
OCES/SCIE		Note: OCES 4964 OR (OCES 4974 AND OCES 4984) OR (SCIE 3500 AND SCIE 4500) (Students following IRE Track can only use (SCIE 3500 AND SCIE 4500) to fulfill the requirement.)	3-6											
OCES	4964	Ocean Science and Technology Capstone Project Research	3								3		3	
OCES	4974	Ocean Science and Technology Research Project I	3											
OCES	4984	Ocean Science and Technology Research Project II	3											
SCIE	3500	IRE Research Project I	3											
SCIE	4500	IRE Research Project II	3											
CHEM	1020	General Chemistry I	3		(3)								0	
CHEM	1030	General Chemistry II	3			3							3	
LIFS		Note: Students with level 3 or above in HKDSE 1x Biology are exempted from taking LIFS 1901	0-3			(3)							0	
LIFS	1901	General Biology I	3											
LIFS	1902	General Biology II	3				(3)						0	
MATH		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7											
MATH	1012	Calculus IA	4											
MATH	1013	Calculus IB	3											
MATH	1014	Calculus II	3		(3)	(3)							0	
MATH	1020	Accelerated Calculus	4											
MATH	1023	Honors Calculus I	3											
MATH	1024	Honors Calculus II	3											
PHYS		Note: PHYS 1111 OR PHYS 1112 OR PHYS 1312	3											
PHYS	1111	General Physics I	3											
PHYS	1112	General Physics I with Calculus	3		(3)								0	
PHYS	1312	Honors General Physics I	3											
COMP	1021	Introduction to Computer Science	3				(3)						0	
LANG		Note: LANG 3025 OR LANG 3027 (Students following IRE Track should take LANG 3027 to fulfill the requirement.)	3											
LANG	3025	Science Communication in English (Environmental Science)	3						3				3	
LANG	3027	Science Communication in English for Research Students	3											
OCES/LIFS/MATH		Ocean Science and Technology Electives (Courses from the specified elective list. Students taking the Marine Ecology Option must use OCES 4203 and OCES 4301 to count towards this elective requirement, while those taking the Oceanography Option must use MATH 2350 and OCES 3301. Courses taken to fulfill the Track/Option requirements may not be counted towards this elective requirement.)	12						3	3	3	3	12	
Required credits for Major Required Courses and Electives			62-71										46	
Option Requirements														
Marine Ecology Option														
OCES		Marine Ecology Electives (2 courses from the specified elective list)	6								3	3	6	
Required credits for Marine Ecology Option			6										6	
University CORE														
CORE	C3 - C10	U CORE - Others	24		1	2	6	3		3	3	6	24	
CORE	C1 & C2	U CORE - English Language	6		3	3							6	
Sub-total for University CORE			30										30	
					Term load (excl. free credits)									
					16	18	16	12	15	12	12	12		
					107 (w/o option) | 113 (w/ option)#									

<< 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.

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.
- OCES 3003: The credit value will be changed to 4 starting from Spring, 2024-25.

>> 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 for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.