

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 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		
<b>School Requirements</b>															
SCIE	1000	Science School Induction	0		0	0							0		
COMP	1021	Note: COMP 1021 OR COMP 1022P OR COMP 2011	3-4				3						3		
COMP	1022P	Introduction to Computer Science	3												
COMP	2011	Introduction to Computing with Java Programming with C++	4												
LANG	2010	English for Science I	3					3					3		
OCEC	1001	The Earth as a Blue Planet	3	@	3								3		
OCEC/LIFS	1030	Note: OCEC 1030 OR LIFS 1030	3	@		3							3		
OCEC	1030	Environmental Science	3												
LIFS	1030	Environmental Science	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)							0		
CHEM	1050	Laboratory for General Chemistry I	1										0		
CHEM	1055	Laboratory for General Chemistry II	1										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	1001	Physics and the Modern Society	3										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		
<b>Required credits for School / Major Pre-requisite Requirements</b>													31		
<b>Major Requirements</b>															
<b>Major Required Courses and Electives</b>															
OCEC	2001	Survey of Ocean Science	3				3		(3)				3		
OCEC	2002	Marine Chemistry	3					3					3		
OCEC	2003	Descriptive Physical Oceanography	3					3					3		
OCEC	2100	Conservation Field Trips	1				1						1		
OCEC	3002	Remote Sensing, GIS and GPS	3							3		(3)	3		
OCEC	3003	Field Methods in Marine Studies	3							3		(3)	3		
OCEC	3130	Marine Biology	3							3		(3)	3		
OCEC	3160	Ecology	3							3		(3)	3		
OCEC/SCIE		Note: OCEC 4964 OR (OCEC 4974 AND OCEC 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												
OCEC	4964	Ocean Science and Technology Capstone Project Research	3								3		3		
OCEC	4974	Ocean Science and Technology Research Project I	3												
OCEC	4984	Ocean Science and Technology Research Project II	3												
SCIE	3500	IRE Research Project I	3												
SCIE	4500	IRE Research Project II	3												
ENVS	3001**	Pollution Monitoring and Measurement**	3							3		(3)	3		
ENVS	3004**	Global Climate Change**	3								3		3		
CHEM	1010	Note: CHEM 1010 OR CHEM 1020	3												
CHEM	1020	General Chemistry IA	3		(3)								0		
CHEM	1020	General Chemistry IB	3												
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												
LIFS	1901	General Biology I	3			(3)							0		
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	3025	Science Communication in English (Environmental Science)	3							3			3		
OCEC/ENVS/LIFS/MATH/ISDN		Ocean Science and Technology Electives (Courses from the specified elective list. Students taking the Marine Ecology Option must use ENVS 4001 (to be re-coded as OCEC 4203) and ENVS 4301 (to be re-coded as OCEC 4301) to count towards this elective requirement, while those taking the Oceanography Option must use OCEC 3201 and OCEC 3202. Courses taken to fulfill the Track/Option requirements may not be counted towards this elective requirement.)	12								3	3	3	3	
<b>Required credits for Major Required Courses and Electives</b>													65-74		
<b>Option Requirements</b>															
<b>Marine Ecology Option</b>															
OCEC		Marine Ecology Electives (2 courses from the specified elective list)	6									3	3	6	
<b>Required credits for Marine Ecology Option</b>													6		
<b>University CORE</b>															
CORE	C3 - C12	U CORE - Others	30				6	6		6	6	6	30		
CORE	C1 & C2	U CORE - English Language	6			3	3						6		
<b>Sub-total for University CORE</b>													36		
Term load (excl. free credits)															
15   16   16   15   15   15   18   12															
116 (w/o option)   122 (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.  
 {} 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):	
- ENVS 3001:	The course code will be changed to OCEC 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 OCEC 4001 starting from Fall, 2021-22.
- ENVS 3004:	The course title will be changed to "Ocean and Climate Change" 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.