

(For students admitted in 2013-14 under the 4-year degree)

## BSc in Environmental Science

In addition to the requirements of their major programs, students are required to complete the University and School requirements for graduation. For details please refer to the respective sections on this website.

Some courses used to fulfill Major and/or School Requirements can also fulfill University Common Core Requirements. Students may reuse a maximum of 9 credits of these courses to count towards Common Core Requirements.

### Major Requirements

Students **MUST** take the following courses prior to enrollment into the major

#### Major Pre-requisite course(s)

			Credit(s) attained
LIFS/MATH		Note: [LIFS 1901 <u>AND</u> LIFS 1902] <u>OR</u> [(MATH 1013 <u>OR</u> MATH 1023) <u>AND</u> (MATH 1014 <u>OR</u> MATH 1024)] <u>OR</u> [MATH 1020] (Students with level 3 or above in HKDSE 1x Biology are exempted from taking LIFS 1901)	3-6
LIFS	1901	General Biology I	3
LIFS	1902	General Biology II	3
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

#### Required Course(s)

			Credit(s) attained
ENVS	2003	Introduction to Atmospheric Science	3
ENVS	2004	Introduction to Ocean Science	3
ENVS	3001	Pollution Monitoring and Measurement	3
ENVS	4001	Environmental Impact and Risk Assessment	3
ENVS/SCIE		Note: ENVS 4964 <u>OR</u> (ENVS 4974 <u>AND</u> ENVS 4984) <u>OR</u> (SCIE 3500 <u>AND</u> SCIE 4500) [Students following IRE Track can only use (SCIE 3500 <u>AND</u> SCIE 4500) to fulfill the requirement.]	3-7
ENVS	4964	Environmental Science Capstone Project Research	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 <u>OR</u> CHEM 1020	2-3
CHEM	1010	General Chemistry IA	3
CHEM	1020	General Chemistry IB	2
CHEM	1030	General Chemistry II	3
CHEM	1050	Laboratory for General Chemistry I	1
CHEM	2311	Analytical Chemistry	3
CHEM	2350	Analytical Chemistry Laboratory	1
CHEM/LIFS/ MATH		Note: CHEM 4310 <u>OR</u> LIFS 2060 <u>OR</u> MATH 2023	3-4
CHEM	4310	Environmental Chemistry	3
LIFS	2060	Biodiversity	3
MATH	2023	Multivariable Calculus	4
LIFS	1030	Environmental Science	3
LIFS		Note: LIFS 3060 <u>OR</u> LIFS 3160	3
LIFS	3060	Microbiology	3
LIFS	3160	Ecology	3
LIFS/MATH		Note: LIFS 3150 <u>OR</u> MATH 2421 <u>OR</u> MATH 2431	3-4
LIFS	3150	Biostatistics	3
MATH	2421	Probability	4
MATH	2431	Honors Probability	4
PHYS	1003	Energy and Related Environmental Issues	3
LANG	3016	Laboratory Report Writing for Environmental Science Students	1
LANG	4016	English for Environmental Science Capstone Projects	2

## Elective(s)

ENVS/CHEM/ LIFS/MATH/ ENVR		Environmental Science Electives (Courses from the specified elective list. Students following IRE Track are required to take a minimum of 12 credits; while others a minimum of 15 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.)	<b>Minimum credit(s) required</b> 12-15
ENVS	2001	Environmental Conservation and Sustainability in Practice	1
ENVS	2002	Environmental Internship	2-4
ENVS	4301	Environmental Conservation	3
ENVS	4905	Marine Molecular Biology and Ecology	3
CHEM	2110	Organic Chemistry I	3
CHEM	2210	Inorganic Chemistry I	3
CHEM	2410	Physical Chemistry I: Equilibrium Thermodynamics and Statistical Mechanics	3
CHEM	4320	Environmental Analytical Chemistry	3

CHEM	4350	Environmental Chemistry Laboratory	1
CHEM	4355	Instrumental Analytical Chemistry Laboratory	1
LIFS	2011	A Practicum on Wetland Conservation	1
LIFS	3130	Marine Biology	3
LIFS	3260	Microbiology Laboratory	3
LIFS	3330	Marine Biology Laboratory	3
MATH	3423	Statistical Inference	3
MATH	3426	Sampling	3
ENVR	2020	Urban Air Pollution	3
ENVR	3003	Green Buildings and Energy Efficiency	3
ENVR	3110	Sustainable Development	3
ENVR	3220	Energy Resources and Usage	3
ENVR	3420	Environmental Law and Regulations	3
ENVR	4330	Environmental Geographical Information System	3

## Track Study

### International Research Enrichment Track

Students in the IRE Track should also take SCIE 3500 and SCIE 4500 as specified in the major requirements.

#### *Required Course(s)*

			<b>Credit(s) attained</b>
CHEM/LIFS		Note: CHEM 4350 <u>OR</u> LIFS 3260	1-3
CHEM	4350	Environmental Chemistry Laboratory	1
LIFS	3260	Microbiology Laboratory	3