(For students admitted in 2015-16 under the 4-year degree)

BSc in Biochemistry and Cell Biology

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.

Students may use no more than 6 credits earned from courses offered in pure online delivery mode to satisfy the graduation requirements of a degree program. This 6-credit limit does not apply to credits obtained through the credit transfer procedures of the University.

For students graduating with an additional major, they must take all the requirements specified for that major, within which they must complete at least 20 single-counted credits. These 20 credits cannot be used to fulfill any other requirements for graduation except for the 120-credit degree requirement.

Major Requirements

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

Major Pre-requisite course(s)

			Credit(s) attained
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
LIFS	1902	General Biology II	3

Required Course(s)

			Credit(s) attained
LIFS		Note: Students with level 3 or above in HKDSE 1x Biology are exempted from taking LIFS 1903	0-1
LIFS	1903	Laboratory for General Biology I	1
LIFS	1904	Laboratory for General Biology II	1
LIFS	2010	Modern Approaches to Biochemical and Cell Biological Research	3
LIFS	2040	Cell Biology	3
LIFS	2210	Biochemistry I	3
LIFS	2220	Biochemistry II	3
LIFS	2240	Cell Biology Laboratory	3
LIFS	2720	Biochemistry Laboratory	2
LIFS	2820	Biochemical Laboratory Techniques	1
LIFS	3010	Molecular and Cellular Biology I	3

LIFS	3020	Molecular and Cellular Biology II	3
LIFS	3140	General Genetics	4
LIFS/SCIE		Note: LIFS 4961 OR (LIFS 4971 AND LIFS 4981) OR (SCIE 4500 AND LIFS 4981) (Students following IRE Track can only use (SCIE 4500 AND LIFS 4981) to fulfill the requirement.)	3-7
LIFS	4961	Biochemistry and Cell Biology Capstone Project	3
LIFS	4971	Biochemistry and Cell Biology Project Research I	3
LIFS	4981	Biochemistry and Cell Biology Project Research II	4
SCIE	4500	IRE Research Project II	3
CHEM		Note: CHEM 1010 OR CHEM 1020	3
CHEM	1010	General Chemistry IA	3
CHEM	1020	General Chemistry IB	3
CHEM	1030	General Chemistry II	3
CHEM	1050	Laboratory for General Chemistry I	1
CHEM	1055	Laboratory for General Chemistry II	1
CHEM		Note: CHEM 2110 OR CHEM 2311	3
CHEM	2110	Organic Chemistry I	3
CHEM	2311	Analytical Chemistry	3
CHEM		Note: CHEM 2155 OR CHEM 2355	1
CHEM	2155	Fundamental Organic Chemistry Laboratory	1
CHEM	2355	Fundamental Analytical Chemistry Laboratory	1
LANG	3014	Laboratory Report Writing for Life Science Students	1
LANG	4014	English for Life Science Capstone and Final Year Projects	2

Elective(s)

			Minimum credit(s) required
LIFS/BIPH/ CHEM		Biochemistry and Cell Biology Electives (Courses from the specified elective list. Students following IRE Track are required to take a minimum of 12 credits; while others should either take a minimum of 20 credits (for those opting for LIFS 4971 & LIFS 4981), or 24 credits (for those opting for LIFS 4961). Courses taken as Major/Track Required Courses may not be counted towards the elective requirement.)	12-24
LIFS	1030	Environmental Science	3
LIFS	2060	Biodiversity	3
LIFS	2070	Introduction to Biotechnology	3
LIFS	2080	Plant Biology	3
LIFS	3002	Special Topics of Biological Sciences	2-4
LIFS	3040	Animal Physiology	3
LIFS	3060	Microbiology	3
LIFS	3070	Biophysics and Physical Biochemistry	3
LIFS	3110	Biotechnological Application of Recombinant DNA Techniques	3

LIFS	3240	Introduction to Neurobiology	3
LIFS	3320	Data Science for Biology and Medicine	3
LIFS	3370	Human Genetics in Practice	3
LIFS	3510	Junior Research Project I	2
LIFS	3520	Junior Research Project II	2
LIFS	4000	Special Topics in Life Science	1-4
LIFS	4060	Immunobiology	3
LIFS	4090	Developmental Biology	3
LIFS	4140	Cancer Biology	3
LIFS	4170**	Advanced Molecular Genetics	3
LIFS	4190	Advanced Cell Biology	3
LIFS	4370	Human Genetics and Personalized Medicine	3
LIFS	4540	Structure and Function of Proteins	3
LIFS	4580	Bioinformatics	3
LIFS	4620	Advanced Biological Chemistry	3
LIFS	4760	Biochemistry of Diseases	3
LIFS	4800	Epigenetics and Chromosome Biology	3
LIFS	4950	Neurochemistry	3
BIPH	2010	Introductory Biological Physics	3
BIPH	3010	Advanced Biological Physics	3
BIPH	4010	Principles of Quantitative Instrumentation	3
CHEM	3120	Organic Chemistry II	3
CHEM	3320	Instrumental Analysis	3
CHEM	4140	Intermediate Organic Chemistry	3

Track Study

International Research Enrichment Track

Students in the IRE Track should also take SCIE 4500 and LIFS 4981 as specified in the major requirements.

Required Course(s)

			Credit(s) attained
LIFS	3110	Biotechnological Application of Recombinant DNA Techniques	3
LIFS	3520	Junior Research Project II	2
SCIE	3500	IRE Research Project I	3

***Remarks on course(s):*

- LIFS 4170: The course was last offered in 2013-14 and was deleted subsequently.