

BSc (Hons) in APPLIED BIOLOGY

(JS2510 BACHELOR OF SCIENCE)



**Environmental
Science
Concentration**



**Biotechnology
Concentration**

Opportunities to build a better world

- * Scholarships
- * Exchange Programmes
- * Internship Programmes
- * Study Abroad Programme
- * HKIQEP Accredited Programme (Environmental Science Concentration)
- * BEAM Affiliate Training (Environmental Science Concentration)
- * HKBU-University of Lincoln Double Degree Programme



Website





BSc (Hons) in

APPLIED BIOLOGY



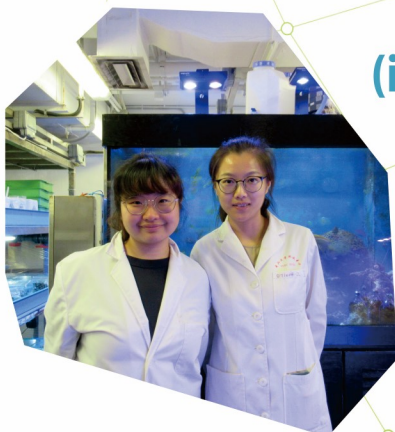
Background

The Department of Biology at HKBU offers a four-year undergraduate degree programme for BSc (Hons) in Applied Biology. The programme provides students with comprehensive training in biological sciences with specialties in biotechnology and environmental sciences. The courses are designed to assist students in understanding the theories of biology and to provide training in technical skills for research and applications.

Undergraduate Degree Programme

The Applied Biology programme provides professional training in two concentrations of biology:

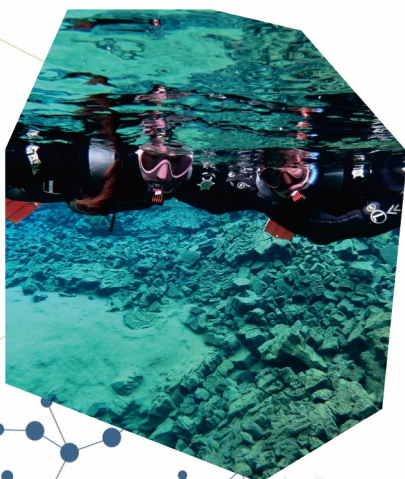
(i) Biotechnology Concentration



Students in this concentration will develop an understanding of the theories of biology as well as biotechnology applications by taking courses in the fields of cellular/ molecular/ developmental biology, genetics, molecular biotechnology, and other biological fields. In addition, a wide spectrum of laboratory courses designed for training students in technical skills for biological and biomedical research and biotechnology industry are provided.

(ii) Environmental Science Concentration

Students in this concentration will develop understanding of the theories of biology as well as environmental science by taking courses focusing in the fields of biodiversity, ecology, environmental impact assessment and waste management, biological resources management and other environmental management skills. Practical training will provide our students with the ability for addressing current and topical environmental and human health- related issues and challenges.



Courses of Four-Year Undergraduate Degree Programme

Total (minimum) units required for graduation - 128 units

Major Courses



Biotechnology Concentration

- * Biological Chemistry
- * Cell Biology
- * Genetics and Evolution
- * Microbiology
- * Animal Physiology
- * Immunology
- * Molecular Biology
- * Plant Physiology
- * Animal and Plant Biotechnology
- * Applied Biology Project I
- * Biotechnology Studies Lab I & II
- * Developmental Biology
- * Fermentation and Enzyme Technology
- * Research Methods in Biological Sciences



Environmental Science Concentration

- * Biodiversity
- * Biological Chemistry
- * Cell Biology
- * Natural Resources and Environment
- * Microbiology
- * Urban Water Resources Management
- * Ecology
- * Environmental Health and Toxicology
- * Waste Treatment and Recycling
- * Applied Biology Project I
- * Environmental Biotechnology
- * Environmental Science Lab I & II
- * Principles of Environmental Management
- * Research Methods in Biological Sciences

Major Electives Courses

Introduction to Genome Biology, Environmental Biotechnology, Neurobiology, Marine Biology, Chemical Analysis, Chemical Analysis Laboratory, Soil Science and Fertility, Introduction to Agricultural Science and Food Systems, Applied Biology Project II, Environmental Analysis, Sustainable Urban Environment, Genetics and Evolution, Animal Physiology, Molecular Biology, Plant Physiology, Fermentation & Enzyme Technology.

Admission Requirement

(1) JUPAS Admission (JS2510 Bachelor of Science)

Candidates will be admitted on a Faculty basis with broad-based education from all scientific fields in Year 1. Candidates must fulfil the following HKDSE requirements for admission to the Faculty of Science.

Level 3 in:

- o Chinese Language
- o English Language
- o Any two Elective Subjects
(preferably good results in science related subjects)

Level 2 in:

- o Mathematics
- o Citizenship and Social Development

Attained in:

Criteria for Applied Biology as Major Programme Assignment

Candidates who have attained a 5* or above in relevant science subjects will be guaranteed for admission; or
I.A minimum cGPA of 2.4 attained by the end of Year 1; and
II.A grade of C+ or above in BIOL1005 Introduction to Biology

(2) Non JUPAS Admission

- o Local applicants;
- o Mainland Applicants; or
- o International qualifications

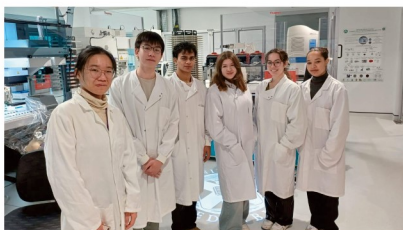
Please visit
<http://admissions.hkbu.edu.hk/en/>
for more admission details.

Career Prospects



Many of our graduates gain employment after graduation in a variety of careers that require a solid background in applied biology such as biotechnology marketing, management and testing lab, biological science education, nature conservation, environmental monitoring, pollution control, public health and sanitation, food and environmental hygiene, non-government organisations and green groups.

Exchange Programmes, Internship Programmes, Summer Research Programme, Study Tours and Scholarships



Study Abroad Programme, University of Edinburgh, UK



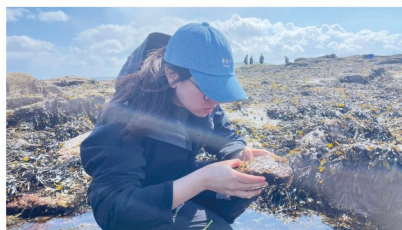
Taipei Waste Management Facilities Study Tour



Okinawa, Japan Excursion



The Hong Kong Jockey Club Scholarship



Hong Kong Baptist University - University of Lincoln Double Degree Programme



ASMPT Technology Award 2024

BEAM Affiliate Training

The BSc (Hons) in Applied Biology (Environmental Science Concentration) is accredited for direct application to the BEAM Affiliate qualification.

HKIQEP Accredited Programme

The BSc (Hons) in Applied Biology (Environmental Science Concentration) has been accredited by the Hong Kong Institute of Qualified Environmental Professionals Limited (HKIQEP) under the HKIQEP Accreditation Scheme for Environmental Degree Programmes – Undergraduate Level, in FIVE areas which include two Fundamental Areas (Environmental Science and Environmental Management) and three Specific Areas (Water, Waste, and Environment Impact Assessment and Health Impact Assessment) of the HKIQEP Syllabus.

Graduates from our Environmental Science Concentration are provided with a shorter path to becoming a professional member of HKIQEP, a pathway for Qualified Environmental Professionals. This qualification is recognized by the Environment and Ecology Bureau and Development Bureau, and 45 reputed companies in Hong Kong.

HKBU-University of Lincoln Double Degree Programme

Double Degree Programme in Bachelor of Science (Hons) in Applied Biology (HKBU) and Bachelor of Science (Hons) in Ecology and Conservation (UoL)

Earn 2 degrees in 4 years with the same tuition fee.

This programme is jointly offered by HKBU (Department of Biology) and the University of Lincoln (School of Life Sciences), UK. In this "3+1" curriculum, students will study the first three years at HKBU to gain fundamental and advanced knowledge and skills in environmental science and management to address current and topical environmental and human health related issues and problems, and study Year 4 at UoL in its Ecology and Conservation programme. This will provide students with a firm grounding in the principles of ecology and conservation to address challenges pertaining to the conservation of biodiversity.

Programme Enquiries

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Admissions Enquiries

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WeChat



WhatsApp

The Department also offers opportunities for postgraduate study at MSc, MPhil and PhD level for graduates interested in further study. For more details, please refer to our website: biol.hkbu.edu.hk
(08/2024)