



香港浸會大學
HONG KONG BAPTIST UNIVERSITY



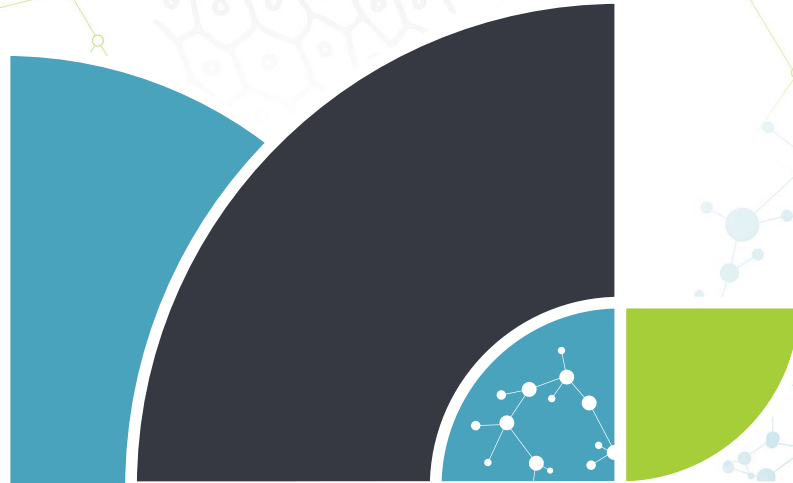
香港浸會大學理學院
HKBU Faculty of Science



biotechnology



environmental sciences



BSc (Hons) in

APPLIED BIOLOGY

Opportunities to build a better world

- Research with Professors
- Scholarships
- Exchange Programmes
- Internship Programmes
- Study Abroad



academic & technical skills



research & applications

JS2510
BACHELOR OF SCIENCE



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 fields of biology.

(i) Biotechnology

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, organismal biology, genetics, molecular biotechnology, and other biological fields. In addition, various laboratory courses in these fields are provided to equip students with technical skills for biological and biomedical research and biotechnology industry.



(ii) Environmental Science

Students in this concentration will develop understanding of the theories of biology as well as environmental science by taking courses in the fields of microbiology, biodiversity, ecology, biochemistry, environmental health and toxicology, biological resources management and other biology related courses. Students will learn practical skills, such as the collection and analyses of water and soil samples from the field, and instrumental analyses in the lab, and various management tools and their applications to address current and topical environmental and human health-related issues and challenges.



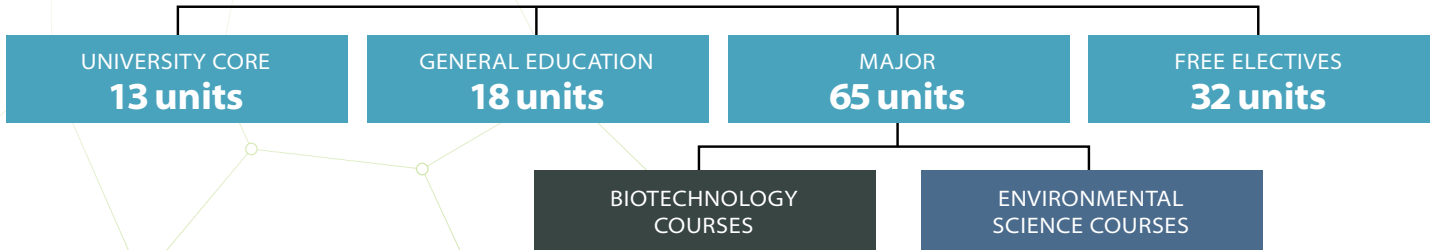


Structure

of Four-Year Undergraduate Degree Programme



TOTAL (MINIMUM) UNITS REQUIRED FOR GRADUATION
128 units



Biotechnology Concentration (Years 2 – 4)

YEAR 2

Biological Chemistry
Cell Biology
Cell Biology Lab
Genetics
Genetics Lab
Microbiology
Microbiology Lab
Free Elective
General Education (GE)

YEAR 3

Animal Physiology
Animal Physiology Lab
Immunology
Molecular Biology
Plant Physiology
Plant Physiology Lab
Major Elective
Free Elective
GE or GE Capstone

YEAR 4

Animal and Plant Biotechnology
Applied Biology Project I
Biotechnology Studies Lab I
Biotechnology Studies Lab II
Developmental Biology
Fermentation and Enzyme Technology
Major Elective
Free Elective
GE Capstone

Environmental Science Concentration (Years 2 – 4)

YEAR 2

Biodiversity
Biodiversity Lab
Biological Chemistry
Cell Biology
Introduction to Environmental Sciences
Microbiology
Microbiology Lab
Free Elective
GE

YEAR 3

Biological Resources and Management
Ecology
Ecology Lab
Environmental Health and Toxicology
Waste Treatment and Recycling
Major Elective
Free Elective
GE or GE Capstone

YEAR 4

Applied Biology Project I
Environmental Biotechnology
Environmental Science Lab I
Environmental Science Lab II
Principles of Environmental Management
Major Elective
Free Elective
GE Capstone

Admission Requirements

Candidates must fulfil the following HKDSE requirements for admission to the programme:

Level 3 in:
Chinese Language
English Language

Level 2 in:
Mathematics
Liberal Studies
One Elective Subject
(preferably good results in a science-related subject)

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 and management, biological science education, nature conservation, environmental monitoring, pollution control, public health and sanitation, and food and environmental hygiene.



Exchange Programmes, Excursion Opportunities and Study Tours



Eckerd College Summer Research Exchange Programme, Florida, USA 2019



Taipei Waste Management Facilities Study Tour 2019



Okinawa, Japan Excursion 2017

Academic Staff and their Area of Expertise

You can find out more about our academic staff and their area of expertise by scanning the QR code below to our website.

Alumni

Cathy Lui



“ The Department of Biology at HKBU did not only nurture me to be a better researcher during my undergraduate and postgraduate studies but also transformed me into an entrepreneur. I am extremely proud of being an alumni of the department, where the platform provided, although intense, pushed me to grow and make leaps and bounds from academia to industry. If you are interested in learning, expanding your horizons, being challenged and supported by research experts then Biology at HKBU could be for you. ”

Samuel Ma



“ In 2010, I graduated with a BSc (Hons) in Applied Biology (Environmental Science concentration), which proved invaluable in enabling me to begin my career in arboriculture a year later. The programme provided me with a solid foundation in knowledge, practical techniques and skills needed to face the demanding challenges presented in the arboriculture and urban forestry industry. I enjoyed my time here as an undergraduate student so much that I have recently returned as a postgraduate student to the department to conduct arboriculture research and hope that my results will have positive impacts on the arboriculture industry. I highly recommend this programme to anyone who is aspiring to be an arborist. Currently there are over thirty HKBU alumni working as arborists in Hong Kong alone. ”

Programme Enquiries

Department of Biology
General Office
RRS815, 8/F, Sir Run Run Shaw Building
Ho Sin Hang Campus, Hong Kong Baptist
University Kowloon Tong
Tel : (+852) 3411 7050
Fax : (+852) 3411 5995
E-mail : biol@hkbu.edu.hk

Admissions Enquiries

Admissions Section
Academic Registry
AAB701, 7/F, Academic and Administration Building
Baptist University Road Campus
Hong Kong Baptist University, Kowloon Tong
Tel : (+852) 3411 5027/3411 7358
Fax : (+852) 3411 7373
E-mail : 334jupas@hkbu.edu



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