



bioresource conservation

BSc (Hons) in Bioresource & Agricultural Science



modern agricultural science and practice



preserve biodiversity

The integration of agricultural science with bioresource

from the perspective
of sustainability

*The **only** agriculture-related
degree programme in Hong Kong*

JS2510
BACHELOR OF SCIENCE

BSc (Hons) in Bioresource and Agricultural Science

This new and internationally competitive programme offered by the Department of Biology since 2019 is the first professional, multidisciplinary programme in Hong Kong that focuses on the integration of agricultural science with bioresource from the perspective of sustainability.

The aims of the programme is to nurture students into becoming leaders of the bioresource and agricultural science field to address environmental problems and challenges both locally and globally such as the overexploitation of bioresources, effects of climate change and extreme weather, and food security and food safety, by providing scientific and intensive training on agrotechnology and bioresource management practices.

Local and Regional Initiatives:

- Redevelopment of agriculture in Hong Kong
 - The New Agriculture Policy
 - Hong Kong 2030+
- Rapid agricultural development of the Bay Area and "One-Belt-One-Road" cities

Special Features



MULTIDISCIPLINARY PROGRAMME

First multidisciplinary undergraduate programme in Hong Kong covering agriculture, landscaping, and environmental, social and economic sustainability



INTERNSHIPS

Internship experience in the industry for ALL students



EXPERIENTIAL LEARNING

Basic farm training at Agriculture, Fisheries and Conservation Department (AFCD) Experimental Station



LOCAL / OVERSEAS TRAINING

Local/overseas technical and practical training, e.g. Organic Inspector Certification Course by International Organic Inspectors Association (IOIA)



INSTITUTE SUPPORT

The programme is supported by the Institute of Bioresource and Agriculture (IBA) which was newly established under the Faculty of Science. The Institute serves as a knowledge hub that actively engages and promotes bioresource conservation and sustainable agriculture to the general public.



Structure of Four-Year Undergraduate Degree Programme

Total (minimum) units required for graduation
- 129 units

Science Common Core – 16 units
Major Core and Major Electives – 52 units
University Core – 13 units
General Education (GE) – 18 units
Free Electives – 30 units

YEAR 1

Science Common Core Courses

- Introduction to Biology
- Introduction to Chemistry
- Essence of Computing
- Introduction to Mathematics and Statistics
- Introduction to Green Energy /
Introduction to Physics
- Integrated Science Laboratory

YEAR 2

Major Courses

- Introduction to Agricultural Science
and Food Systems
- Natural Resources and Environment
- Biodiversity
- Biodiversity Laboratory
- Genetics
- Summer Internship

YEAR 3

Major Courses

- Ecology
- Ecology Laboratory
- Soil Science and Fertility
- Soil Science Laboratory
- Crop Production and Management
- Plant Diseases, Pests, and Weed
Management
- Bioresource and Agricultural
Science Laboratory

YEAR 4

Major Courses

- Farm Management for Urban Environment
- Urban Horticulture
- Biological Resources and Management
- Agribusiness: Marketing and Entrepreneurship
- Organic Certification and Inspector Training
- Bioresource and Agricultural Science Project I

Major Electives

- Plant Physiology
- Principles of Environmental Management
- Environmental Biotechnology
- Bioresource and Agricultural Science Project II
- Fundamentals of Organic Chemistry
- Analytical and Testing Sciences Tutorials I
- Rural and Agricultural Development in China



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)

LEARNING OUTCOMES

Students will receive professional training to become leading scientists in bioresource and agricultural science.

- This programme will provide you with essential knowledge and a solid foundation on the study of bioresources and agriculture;
- You will learn to appreciate how sustainability could contribute to nature and humanity and understand the science of sustainable agriculture and bioresource management;
- You will develop the ability to utilise research methodologies, field skills and statistical tools to identify and critically analyse agriculture, bioresource and conservation issues in the local, regional and international contexts;
- You will develop a heightened sensitivity to conflicts and challenges in current issues concerning the interfaces of agriculture practices, nature conservation, urban development and bioresource management; and
- You will be able to contribute to the sustainable development of the agricultural industry.



CAREER PROSPECTS

The Bachelor of Science (Hons) in Bioresource and Agricultural Science will provide graduates with the knowledge and practical skills required for a wide array of bioresource, agriculture, and environmental-related professions.

- Agribusiness (agricultural produce e.g. crops, agrochemicals, animal feeds, and equipment and services)
- Businesses (production, processing, distribution and retailing in the food sector)
- Professionals in agrotechnology
- Research and development (crop and soil science, environmental science, food science, animal science)
- Environmental consultancy
- Government (e.g. Agriculture, Fisheries and Conservation Department, Environmental Protection Department)
- Non-governmental organisations
- Green groups

Programme Enquiries

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Admissions Enquiries

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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