

香港浸會大學







bioresource conservation



RANKS NO. 1 in World Leading (4\*) Research Impact in Biological Sciences in RAE 2020

**TOP 3** in Overall 4\* Research in **Biological Sciences in RAE 2020** 







## 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** 



biol.hkbu.edu.hk

## BSc (Hons) in Bioresource and Agricultural Science

This 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 the coronavirus pandemic on food security, and impacts of food systems on bioresources, 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



INTERNSHIPS



EXPERIENTIAL LEARNING

LOCAL / OVERSEAS TRAINING



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

Internship experience in the industry for ALL students

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

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

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.

# Professional Courses for Four-Year Undergraduate Degree Programme

Total (minimum) units required for graduation - 129 units

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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

## Major Courses

## YEAR 2

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

# YEAR 3 • Ecology

- Ecology Laboratory
- Biological Resources and Management
- Soil Science and Fertility
- Soil Science and Fertility Laboratory
- Crop Production and Management

## YEAR 4

- Plant Diseases, Pests, and Weed Management
- Urban Horticulture
- Bioresource and Agricultural Science Laboratory
- Farm Management for Urban Environment
- 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

## **Experiential Learning through Internships**



Agriculture, Fisheries and Conservation Department, Government of HKSAR 2021

## **Admission Requirement**

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.

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Chinese Language English Language Any two Elective Subjects (good results in sciencerelated subjects) Mathematics Liberal Studies

Clover Seed Co. Ltd. 2021

### <u>Criteria for Bioresource and Agricultural Science as</u> <u>Major Programme Assignment</u>

Pegasus Greenland Ltd. 2021

Candidates who have attained a 5\* or above in relevant science subjects will be guaranteed for admission; or

l. A minimum cGPA of 2.0 attained by the end of Year 1; and II. A grade of C or above in BIOL1005 Introduction to Biology

## 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.





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## 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

### **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 2200 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

Bioresource Agricultural Science