

Bachelor of Science in

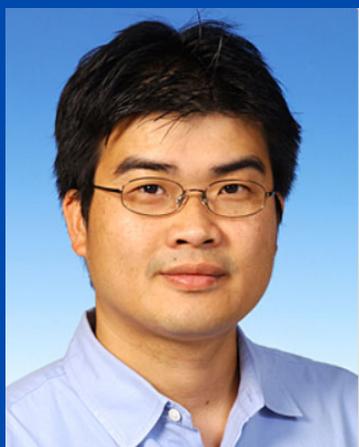
Biotechnology & Business

A joint school program offered by
The School of Science and The School of Business and Management



Our Team

Program Directorship



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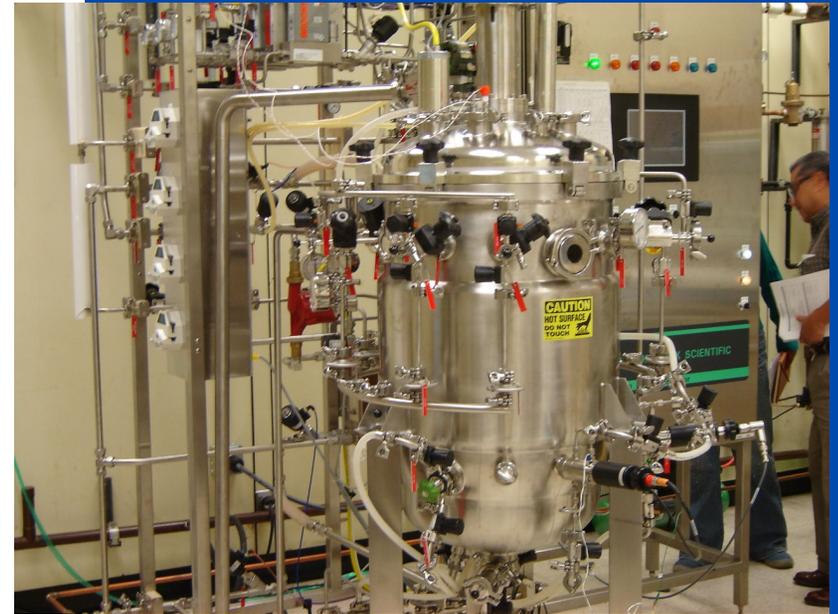
BIOTECHNOLOGY

The application of techniques and processes that utilize **biological systems** to provide innovative solutions to complex issues in many aspects of our daily life.



Genetic Engineering

Often involves the isolation, manipulation and reintroduction of **DNA** into **model organisms**, usually to express a **protein**.



Examples of Biotechnology-related Industries



Alcohol Industry - USD 1161 Billion
The production of fermented alcoholic drinks from starch containing raw materials has been practiced for centuries.



OPEC Revenue – USD 1027 Billion
The petroleum industry's interest is now in biotechnology as an alternative technology to resolve the challenges and needs of this worldwide important sector.



Pharmaceuticals – USD 1072 Billion
There will always be people who need medication of some sort and treatment for serious illnesses.

Biotechnology in Hong Kong

- In HKSAR Government Budget, biotechnology is one of the focused areas for development under the Innovation and Technology sector; over **ten billion Hong Kong Dollars** will be allocated for the development of the industry
- HK has **~300** biotech-related companies
 - >70 are listed in HK Stock Exchange/GEM
 - ~45 biotech start-ups based in HK Science Park
 - Some companies have grown to establish manufacturing plants
- The world-renowned **Karolinska Institute of Sweden** has established its first overseas research facility at HKSTP



BIBU Program Highlights

- The **broad-based learning experience** helps equip students with a solid foundation of knowledge and skills to function effectively in the biotechnology industry
- **Internship opportunities and industrial visits** provide students with a global outlook on biotechnology development and applications in a business setting
- Enhance students' creativity and critical thinking skills
- The **holistic curriculum** nurtures students to become effective managers and leaders in the biotechnology industry

BIBU Program Uniqueness

One of its kind in Hong Kong



Get essential knowledge of Biotechnology and Business in 4 years



Enjoy services / opportunities offered by **BOTH** School of Science and School of Business and Management

BIBU Program Structure

A holistic 4-year curriculum covering domains in **Science** (Life Science and Biotechnology) and **Business** (Managerial Accounting, Micro/Macroeconomics, Operations Management) with a total of 118-122 credits:

Exclusive for BIBU Students

- BIBU1010 – Biotechnology and Business Seminar
- BIBU4820 - Biotechnology Entrepreneurship and Business Operations
- BIBU4830 – Biotechnology Management
- BIBU4840/4850 – BIBU Capstone Project

Subject Area	Credits
Life Science	22-25
Science Core	12-17
Business Core	29
Interdisciplinary (BIBU)	10-13
Biotechnology/Business Electives	9
English for Science/Business	6
University Common Core	30

Australia Monash University	France Ecole Polytechnique	Malaysia Universiti Putra Malaysia	Russia National Research University Higher School of Economics	Taiwan National Taiwan University
Austria MCI Management Center Innsbruck	Germany University of Stuttgart	Mexico Tecnologico de Monterrey	Singapore National University of Singapore	Netherlands University of Groningen
Canada University of Toronto	Ireland Trinity College Dublin	Norway University of Bergen	South Korea Seoul National University	Turkey Koc University
China Peking University	Japan Kyoto University	Philippines Ateneo de Manila University	Sweden Lund University	United Kingdom University College London
Denmark University of Copenhagen	Luxembourg University of Luxembourg	Poland Jagiellonian University	Switzerland ETH Zurich	United States Cornell University

(Popular Destinations)

Exchange Program

HKUST has approximately 230 exchange partners across 36 countries around the world. BIBU Students can join exchange programs offered by both School of Science & School of Business and Management.

Enrichment Activities

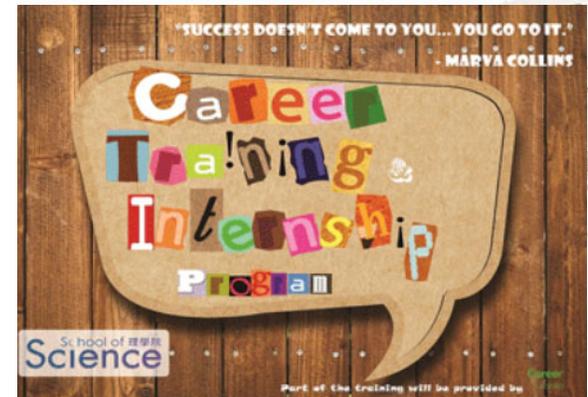
To help students develop a global perspective as well as sharpen their interpersonal skills, the School of Science (SSCI) and the School of Business and Management (SBM) of HKUST run a wide variety of enrichment activities such as international exchange, career training and internship program, and social service projects.

BIBU students are eligible to:

- sign up for professional **seminars** and **co-curricular programs** organized by both Schools;
- join either School's international **exchange** program; and
- access the job banks and **career services** provided by both Schools.

SSCI: <http://advise.science.ust.hk/sfs>

SBM: <http://undergrad.bm.ust.hk/student-life/student-life-landing>



Career Prospects

A Comprehensive experience prepares BIBU students to excel in any career path they aspire to

Potential Employers

- Multinational pharmaceutical
- Bioproduct vendors
- Biotech service providers
- Medical device manufacturers
- Consulting firms focusing on the biotech/pharma industries

Postgraduate Studies

Canada

University of British Columbia

M. Sc. in Experimental Medicine

United Kingdom

London School of Economics and Political Science

M. Sc. International Health Policy

Hong Kong

The University of Hong Kong

Master of Public Health

Admissions



JUPAS Direct Entry (JS5811)

HKDSE applicants with either **Biology** or **Chemistry**

01



International Qualifications

Applicants with Int'l Qualifications (IBDP, GCEAL, SAT, etc.) with at least one senior level subject from: **Biology / Chemistry / Mathematics**

02



Transfer from HKUST Science (Group B – JS5103) or any Business Programs

- SSCI-B/SBM students may choose to major in BIBU via **major selection exercise** after completing the 1st year of study
- An option for students **without** HKDSE **Biology or Chemistry**

03

Admission Requirements – JUPAS (JS5811)

Minimum Requirements

Subject	Minimum Level Requirement
English Language	4
Chinese Language	3
Mathematics (Compulsory Module)	3
Liberal Studies	2
Elective 1 Must be Biology or Chemistry	3
Elective 2 Any Category A subjects or M1/M2	3

JUPAS score calculation

**Best 6 subjects
with weighting**

English & Math (Comp) x 2

Best Elective:
Biology / Chemistry x 1.5

Subject 1

Weighted English Language

Subject 2

Weighted Mathematics (Compulsory Module)

Subject 3

Weighted Best Elective:
Biology OR Chemistry

Subject 4, 5 & 6

Next best 3 subjects
Can be Core **OR** any Category A subjects

Further Information

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