Bachelor of Science in Biotechnology, Entrepreneurship and Healthcare Management

This interdisciplinary undergraduate programme is designed for talented students who would like to develop a career in biotechnology entrepreneurship, business analysis, and/or healthcare management, to capture the emerging opportunities in Hong Kong, the Greater Bay Area, and beyond. The programme brings together the Faculties of Science, Medicine, and Business Administration at The Chinese University of Hong Kong to co-develop a brand new, integrated curriculum with active learning as the core. In addition to a compilation of complementary courses in Biomedical Sciences, Business Administration, Molecular Biotechnology, and Public Health, capstone courses will be co-taught by the professors in different Faculties to upgrade students’ problem-solving ability using cross-disciplinary knowledge. Opportunities of mentorships and internships from the relevant industrial, service, and venture capital sectors will be sought to allow the students to learn through connecting knowledge with real-world problems.

MISSIONS
- The programme aims to develop talents with a broad base of complementary knowledge, who shall demonstrate the following essential attributes:
  - an entrepreneurial mindset with ground-breaking ideas to translate the advancement of biotechnology, biomedical sciences, and healthcare into commercial opportunities;
  - an ability to integrate a broad base of knowledge in biotechnology, biomedical & health sciences, data analytics, and business management to provide innovative and cross-disciplinary solutions;
  - an ability to communicate with collaborators of diverse backgrounds and participate in the management of healthcare operations and development.

HIGHLIGHTS
- Cross-disciplinary training by Faculties of Science, Medicine, and Business Administration.
- Biotechnology knowledge with an emphasis on the applications on biomedical and environmental issues.
- Analytical skills to connect scientific knowledge to "real-world" business.
- Sense and skills in entrepreneurship and healthcare management.

4 Major Teaching Units
- Biomedical Sciences
- Business Administration
- Molecular Biotechnology
- Public Health
Curriculum

Faculty Package
- Introduction to Biological Sciences
- Foundation Course for Health Sciences II
- Management

Required Courses
- Introductory Financial Accounting
- Economics for Business Studies I
- Statistical Analysis for Business Decisions
- Operations Management
- Financial Management
- Introduction to Molecular Biotechnology
- Business and Social Aspects of Biotechnology
- Foundations in Public Health
- Principles of Infectious Diseases
- Health Care System and Policy
- Theories and Concepts of Health Behaviours
- Introduction to Bioethics

2 Concentrations
1) Biotechnology Entrepreneurship and Innovation
2) Healthcare and Biomedicine Analytics

Capstone Courses
- Capstone Project I: Critical analysis of existing business models and policies related to biotechnology and healthcare
- Capstone Project II: Proposal writing on innovations in business models and policies related to biotechnology and healthcare

Active Learning
- To solidify and associate learning experience with real-world business through:
  - Group Projects
  - Mentorship
  - Internship

Strong relationship with the biomedical, biotechnology and healthcare industries
- Students shall have the valuable opportunity to be mentored by external advisors from different industries.

Academic Advisory System
- Every student is assigned an Academic Advisor, who provides academic and general advice on issues such as course selection, guided study, research opportunities and adaptation to University learning mode.

Student Exchanges
- Our students have the access to a multitude of exchange programmes, and can spend a summer, a semester, or even a full academic year abroad, like Austria, Sweden, Switzerland, Korea, etc. There are three types of exchange opportunities:
  - University-wide Exchange
  - College-based Exchange
  - Faculty/Departmental Exchange

Supports for Entrepreneurship Building
- CUHK InnoPort is the habitat for CUHK innovators and entrepreneurs, which offers various funding and incubation programmes to support entrepreneurship building, for example:
  - Startup mentorship and internship programme
  - Entrepreneurship education, boot camp and competition
  - Technology Start-up Support Scheme for Universities
  - PILOTS LITE Programme for Start-ups

DSE Admission Requirements

4 Core Subjects
- Level 4 in English
- Level 3 in Chinese and Mathematics
- Level 2 in Liberal Studies

Elective Subjects
- 1st – Level 3 in any ONE subject from Biology or Chemistry
- 2nd – Level 3 in any ONE subject in Category A or Category C

Selection Principle
- Best 5 subjects

Bonus Point Arrangement
- The 6th and 7th subjects and good interview performance may have bonus scores

Career Prospects

The interdisciplinary education affords students a plethora of career opportunities in the fields of biotechnology, medical science, public health and business:
- Leaders in the start-ups in advanced life science, health-technology, and environment solutions
- Business consultants and analysts for science and technology firms
- Management in healthcare and medical institutes

The programme is subject to the University’s final approval.