

# Curriculum for Taught Postgraduate Programs

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## Master of Science (MSc) Program in Biotechnology

### **Program Director:**

Yung-Hou WONG, Professor of Life Science

The Master of Science (MSc) program in Biotechnology is a multidisciplinary program designed to provide rigorous training to students for professional careers in the biotechnology and pharmaceutical industries. Since its inception in 1993, the program has been widely recognized by professional practitioners in the relevant fields as a premier academic program.

Recently, the program has undergone a major revision to meet the growing and specialized demands of the biotechnology and pharmaceutical industries. The revised program is offered in part-time mode with enrichments in various basic and advanced biotechnological elements, including pharmaceutical, analytical, transgenic and recombinant technology, bioprocessing, business operations and management. All these elements are unique for preparing students to become scientific research leaders with entrepreneurship in emerging bio-industrial areas. With this training and exposure, graduates from the program will be able to initiate innovative solutions in biotechnology and rapidly advance their careers.

### ***Admission Requirements***

Applicants should normally possess a first degree in Biological Science or a related area. They should have a proven record of good performance, be proficient in English and must demonstrate basic knowledge in biotechnology concerns. Admission to the program is based on the recommendation by the Committee on MSc Program in Biotechnology.

### ***Program Duration***

The normal period for completing the program is 18 months in part-time mode.

### ***Program Fee***

The program fee is HK\$83,000 for the entire program. New students admitted with credit transfer are also required to pay the full program fee.

### ***Curriculum***

Students are required to complete a minimum of 26 credits by taking four required courses, three elective courses, and one project.

1. Required courses (14 credits):
  - BTEC 5210 Principles and Applications in Biotechnology
  - BTEC 5220 Business Operations of Biotechnology
  - BTEC 5260 Bioanalytical Technology
  - BTEC 5760 Concepts in Bioprocessing

2. Elective courses (9 credits):
  - BTEC 5380 Drug Discovery and Development
  - BTEC 5550 Nutraceuticals and Transgenic Products
  - BTEC 5630 Recombinant DNA Technology and Bioproducts
  - LIFS 4380\* Pharmacology and Toxicology
  
3. Project course (3 or 4 credits):
  - BTEC 6900 Case Investigation in Biotechnology
  - BTEC 6930# Directed Biotechnological Research

*\* LIFS 4380 is only for students who can attend day-time courses on weekdays.*

*# MSc students, who can participate in day-time laboratory work, are allowed to take BTEC 6930 which is a research project in the area of biotechnology under the supervision of a faculty member.*

### ***Graduation Requirements***

To graduate from the program, a student must complete the program with a graduation grade average (GGA) of 2.850 or above as required of all postgraduate students at the University.