香港科技大學
THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY

School of 理學院
Science

BSc in
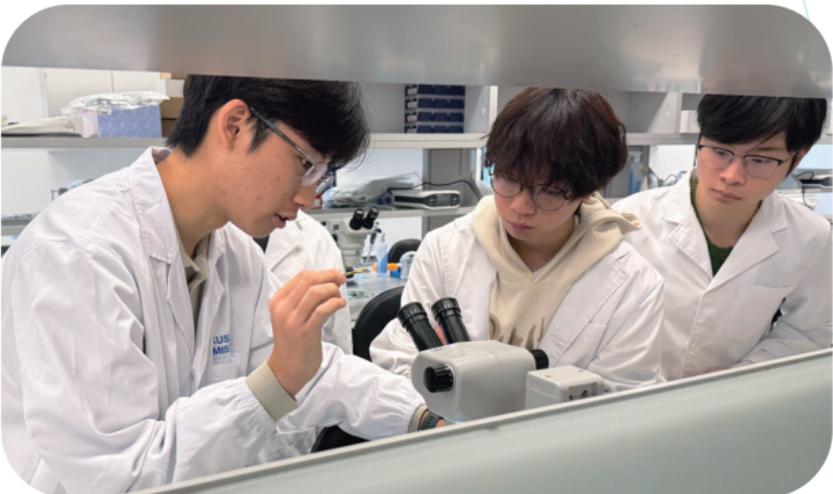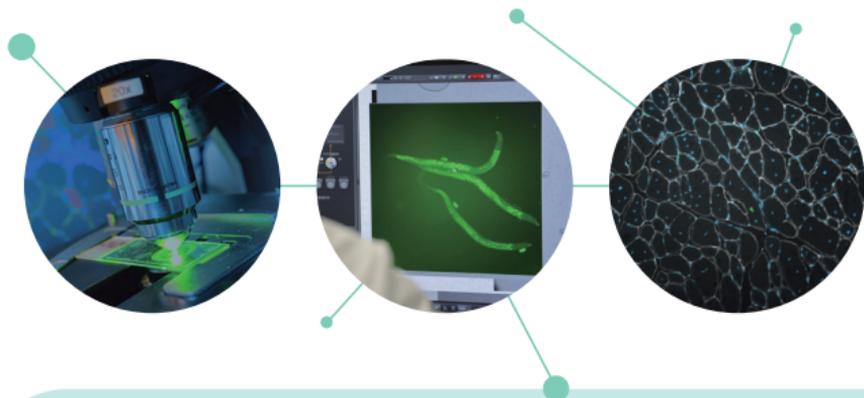# Biomedical and
Health Sciences (BMH)

Program Overview

The BMH program aims at training future leaders in scientific and healthcare sectors. Students will study key aspects of biomedical and health sciences, with an emphasis on turning ideas into practice. This program provides exposure to advanced diagnostic and disease modeling technologies including the use of omics technologies, computational analytical pipelines and the generation of experimental models for accelerated drug or treatment discoveries in a pre-clinical setting.

Program Uniqueness

- **Case study series**: Generation of disease models by genome editing; characterization of disease models by omics; genome-wide association studies in practice; and computational analysis of next-generation sequencing data

- **Internship**: Volunteering opportunities in community health centers, clinics, and medical diagnostics or research laboratories

Curriculum Structure

The early curriculum is broad-based, covering both theoretical and practical aspects of biomedical science. The integration of foundational knowledge is achieved through inquiry-based experiential learning courses that emphasize teamwork and individualized capstone projects in the final year.

Subject Area	Credits attained
Life Science	40-45
Chemistry	8
Quantitative and computational analysis	6-7
Electives	9

Core Courses

	Required School of Science Course(s)	Required BMH-specific Course(s)
Year 1	• Two courses each in Life Science, Chemistry • One course each in Physics, Mathematics	• Guided Study on Biomedical and Health Sciences
Year 2	• One course in Computer Science	• Case Study on BMH I - From Proposal to Practice
Year 3	Nil	• Case Study on BMH IIA - Generation of Disease Models by Genome Editing • Case Study on BMH IIB - Characterization of Disease Models by Omics • Case Study on BMH IIC - Genome-wide Association Studies in Practice • Case Study on BMH IID - Computational Analysis of Next-generation Sequencing Data
Year 4	Nil	• BMH Project Research I/II or BMH Capstone Project (Literature Review)

Enrichment Activities

The BMH program aims to train students who show strong commitment and promise in research or practice in medically related fields at the postgraduate level. Learning goes beyond classroom and laboratory settings. Co-curricular activities that provide volunteering or shadowing opportunities in community health centers, clinics, medical diagnostics, or research laboratories will strengthen students' understanding of potential career paths.

Career Prospects

The BMH graduates are primed for postgraduate training in clinical medicine, genetic counselling, and biomedical research. With their immersive education in biomedical and health technologies, we also expect our graduates to be sought after by pharmaceutical companies, research institutes, government agencies and healthcare consulting firms.

Contact Us

School of Science – Undergraduate Admissions

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BMH website

BMH Program Office

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