

MASTER OF SCIENCE IN BIOSTATISTICS

理學碩士(生物統計學)

**Empower your journey in the
Data-Intense Era with Biostatistics!**

- Emphasizes on **One Health** approach training
- Comprehensive training in the principles and applications of statistics in **biological science** and **public health**
- Covers areas in **probability and statistical theory with a research focus**
- Accredited by the **Royal Statistical Society**
- CEF reimbursable courses for local students

- ▶ **1-Year Full-time | 2-Year Part-time**
- ▶ **2027 Intake**
- ▶ **Programme Code: P97**



資歷架構
Qualifications
Framework

QF Level: 6
QR Registration Number:
22/000546/L6
Validity Period:
On-going since 29 Aug 2022



Enquiry

Department of Biostatistics

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Accredited
University

ROYAL
STATISTICAL
SOCIETY

DATA | EVIDENCE | DECISIONS



About the Programme

The **Department of Biostatistics** was established on 1 July 2021. As the first of its kind in Hong Kong, the department aims to achieve a vision of advancing health data science, enhancing collaborations with existing experts in data science, public health and veterinary epidemiology, as well as synergising interdisciplinary education and research across the University.

The **Master of Science in Biostatistics (MScBIOS)** aims to train the next generation of biostatisticians through an innovative curriculum and equip them with the necessary analytical, leadership and communication skills to meet the challenges of a data-intense era. It will help foster the development of novel statistical theory and the application of state-of-the-art data analytical solutions for problems in public health, veterinary epidemiology and the biomedical sciences.

Comprehensive training in the principles and applications of statistics in biological science and public health will be provided. Students are trained in Biostatistics using One Health approach to enhance their knowledge, abilities and professional capabilities to solve the interdisciplinary health problems posed by emerging medical and public health issues.

Graduates of the programme, whom are envisaged to be in high demand following the increasing global concerns over public health and the rapid expansion of the pharmaceutical industry in China, will be qualified to pursue careers involving biomedical and public health in government, biotech companies, and national/international research institutions. There is a severe shortage of trained biostatisticians in the market. It is expected that there will be an increase in employment opportunities in public health for biostatisticians due to the COVID-19 pandemic.



Programme Structure

Students are required to complete **30 credit units** for graduation.

Core Courses (18 credit units)

- Advanced Methods in Biostatistics 
- Communication and Project Study
- Principles of Epidemiology and One Health
- Probability 
- Statistical Computing 
- Statistical Inference 



These courses have been included in the list of reimbursable courses under the Continuing Education Fund. The mother programme (Master of Science in Biostatistics) of these courses is recognised under the Qualifications Framework (QF Level 6).

Elective Courses (12 credit units)⁽¹⁾

- AI for Biostatistics: Practice in Life Science and Healthcare
- Artificial Intelligence in Health Science Research and Management
- Clinical Trials
- Computational Biology, Experimental Design and Data Science
- Infectious Disease Epidemiology
- Intermediate Level Statistics for One Health
- Introduction to Biostatistics in One Health
- Introduction to Statistical Learning
- Longitudinal Data Analysis
- Public Health Surveillance and Risk Analysis
- Research/Internship Project
- Selected Topics in Biostatistics
- Spatial Data Analysis
- Statistical Methods for Categorical Data Analysis
- Storytelling of Health Science Data with Analysis and Visualization
- Survival Analysis
- Time Series Analysis
- Wearable Technologies and Digital Medicine

⁽¹⁾ The offering of elective courses is subject to change without prior notice

Professional Recognition

The MScBIOS programme has been accredited by the Royal Statistical Society (RSS), U.K., in December 2023. All students enrolled will be eligible for e-Student membership of the RSS. Graduates will meet the academic criteria for the standard route to Graduate Statistician (GradStat). With at least five years' work experience within a statistical role, a holder of GradStat may apply for Chartered Statistician (CStat).

For more details, please visit the RSS website:

<https://rss.org.uk/membership/professional-development/accreditation-scheme/>



Career Prospect

Graduates can pursue careers, for example, in biomedical and public health studies in government, biotechnology companies and national/international research institutions. The programme also provides the necessary academic preparation for those who wish to pursue PhD-level training in biostatistics at a later date.

Admission Requirements

To be eligible for admission, applicants must possess a recognized undergraduate degree that includes courses in the mathematical or biomedical sciences. Applicants who might not have solid training in mathematics and statistics during their undergraduate studies would also be considered. Prior coursework in linear algebra, calculus and statistics is highly desirable.

Applicants satisfying the admission requirements who have relevant working experience will be considered favourably.

Applicants whose entrance qualification is obtained from an institution where the medium of instruction is NOT English should also fulfill the following minimum English proficiency requirement:

- a score of 79 (for tests taken prior to 21 January 2026) or 4 (for tests taken from 21 January 2026 onwards) (Internet-based Test) in the Test of English as a Foreign Language (TOEFL); or
- an overall band score of 6.0 in the International English Language Testing System (IELTS); or
- a score of 450 in the Chinese mainland's College English Test (CET-6); or
- other equivalent qualifications.

For details of admission requirements, please visit
<https://www.cityu.edu.hk/pg/programme/p97>