香港中文大學理學院
FACULTY OF SCIENCE
THE CHINESE UNIVERSITY OF HONG KONG

# 數據科學及商業統計碩士(兼讀)課程
# MSc in Data Science and Business Statistics

## Department of Statistics
The Chinese University of Hong Kong
A Two-Year Part-Time Taught Programme

# Overview

The programme is organised by the Department of Statistics at the Chinese University of Hong Kong. It focuses on data analysis skills and explores core areas of applied and business statistics. This is a part-time taught programme that is based primarily on coursework. Students must complete a minimum of 8 elective courses. Each course consists of a three-hour lecture each week throughout a term of 14 weeks. Classes are held on weekday evenings or Saturday afternoons. The expected completion time is two years.

The programme serves a wide range of audiences. It will be suitable for executives who need to interpret statistical results to define policies; for professionals from both the private and public sectors who are obliged to collect and analyse data; and for educators and practitioners in education and public health agencies who appreciate the effective use of data as a crucial element for enhancing the quality of society.

# About the Department of Statistics

The Department of Statistics at the Chinese University of Hong Kong was founded in 1982. It is committed to spearheading the design of high-quality and up-to-date statistical education for the community. The Department offers three undergraduate programmes, three research postgraduate programmes leading to MPhil and PhD degrees, and two taught postgraduate programmes, MSc in Data Science and Business Statistics and MSc in Risk Management Science.

## Coursework Requirement

Students are required to complete 3 core courses

STAT5101 Foundations of Data Science
STAT5102 Regression in Practice
STAT5106 Programming Techniques for Data Science

**and** a minimum of 5 electives from the following to graduate.

STAT5103 High-dimensional Data Analysis
STAT5104 Data Mining
STAT5105 Applied Survival Data Analysis
STAT5107 Discrete Data Analytics
STAT6104 Financial Time Series
STAT6105 Basic Actuarial Principles and their Applications
STAT6106 Applied Bayesian Methods
STAT6107 Selected Topics on Data Science and Business Statistics
STAT6108 Official Statistics and Structural Equation Modelling
RMSC5101 Statistical Methods in Risk Management and Finance
RMSC6001 Interest Rates and Fixed Incomes Risk Management
RMSC6004 Special Topics in Risk Management
RMSC6005 Special Topics in Quantitative Finance

Course descriptions are available at Department website
http://www.sta.cuhk.edu.hk/Programmes/PostgraduateStudies.aspx

## Other University Requirements

- Students must fulfill the Term Assessment Requirement of the Graduate School. For details, please refer to Section 13.0 "Unsatisfactory Performance and Discontinuation of studies" of the General Regulations Governing Postgraduate Studies which can be accessed from the Graduate School Homepage (https://www.gs.cuhk.edu.hk/)
- Students must achieve a cumulative GPA of at least 2.0


持續進修基金
Continuing Education Fund

This course has been included in the list of reimbursable courses under the Continuing Education Fund.

This course/ The mother course (Master of Science in Data Science and Business Statistics) of this module is recognized under the Qualifications Framework (QF Level 6)

## Schedule and Period of Study

The programme is offered on a part-time basis. Students who take two courses each term can complete their studies in two years. Each course consists of a three-hour lecture each week throughout a term of 14 weeks. Classes are held on weekday evenings or Saturdays in CUHK campus.

## Assessment

There is no comprehensive examination for the programme. Students shall be assessed on the basis of their performance in the courses they enroll. Criteria for assessment may include any combination of the following: assignments, mid-term, examination, class work, project or any other specified criteria.

## Tuition Fee

$72,500 per annum for 2020 admission

## Admission Requirements

Applicants shall have,

- graduated from a recognized university and obtained a Bachelor's degree, normally with honours not lower than Second Class
- fulfilled the University's minimum English language requirements for admission to postgraduate programmes (more information at www.gs.cuhk.edu.hk )

## Application Procedures

1. Submit an online application at the Graduate School website www.gs.cuhk.edu.hk
2. Submit supporting documents to the Department of Statistics, Room 119, Lady Shaw Building, the Chinese University of Hong Kong by the application deadline. Supporting documents required are,
   a. Copy of certificates
   b. Official transcripts of all tertiary level studies. Official transcripts should be sent directly to the Programme in a sealed envelope, except for CUHK qualifications where photocopies of transcripts are accepted.
   c. Proof of English Language proficiency
   d. Confidential recommendations from two referees
   e. Copy of HKID card or other identity document

## Application Deadline

28 February 2020

Applications will be processed on a rolling basis until all places have been filled. Early applications are strongly encouraged.

# Words from Alumni

"Our department has been using multiple regression analysis as a major tool in revaluing a vast number of properties in Hong Kong annually for rating and Government rent purpose. The demand for well-trained staff in data science and computer assisted mass appraisal (CAMA) technique is great.

By studying the DSBS Programme, I have learned the statistical methods for analyzing and interpreting data. The knowledge gained facilitates my daily work in handling multiple regression analysis and the result interpretation. The subjects themselves are really challenging, but, with support and guidance from the teaching staff, an Arts student like me can still manage them without much difficulty."

Anita Ng '10

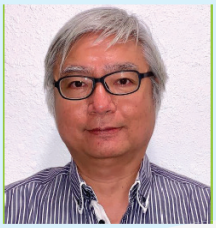
"The programme has given me more knowledge of statistics, and insights into data analysis and data interpretation, which will help me to cope with the demands of the data-driven world. It provides a wide range of theoretical and applied courses which I found very useful and practical, such as Applied Bayesian Analysis and Official Statistics. This programme has definitely helped me to use data more effectively when formulating strategies and policies."

Vivian Chung '18

"To understand God's thoughts we must study statistics, for these are the measure of his purpose."

– Florence Nightingale

The DSBS programme distils the essence of advanced statistical knowledge, helping me to sharpen my real-life data-analysis skills. It comprises a diverse range of subjects that complement and extend my engineering background and interests, and equips me with the know-how needed to utilise practical statistical and analytical tools in the workplace. Thanks to the unfailing help of the experienced professors, I now feel confident to dive into further research on data science, so as to better understand God's thoughts!

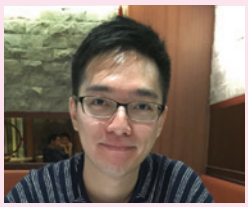


Victor Hui '18

"The DSBS Programme enriched my life in many different ways. With diversified courses from Statistics for Management to Time Series, DSBS offers much to students both academically and in real life scenarios. DSBS equipped me not only with analytical tools but also understanding of the statistical theories behind. These allowed me to have deeper insights in the financial world.

DSBS offers a wide range of challenging and rewarding classes. Professors are very nice and kind, who makes climbing the learning curve for non-Mathematics majors like me much easier."

Felix Ho '13



Andrew Chan '15

"Thanks to the MSc DSBS Programme, I equipped myself with critical reasoning and advanced data analytic skills in my two-year study, which are much desired in the Age of Big Data. The courses were not only theoretical but also focused on applications. I would like to recommend this programme to those who want to acquire capabilities to gain deep insights from data."

December 2019


Enquiries

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