NEEDED IN ALMOST EVERY FIELD

- Academia
- Consultancy
- Finance & Banking
- Government
- Healthcare
- Insurance
- IT Companies
- Law
- New Media / Social Media
- Retails & Marketing
- Social Work
- Transportation & Logistics

IN-DEMAND DATA SCIENCE CAREERS

- Business Intelligence Analyst
- Consultant
- Data Analyst
- Data Engineer
- Data Scientist
- Database Developer
- Financial Quantitative Analyst
- Machine Learning Engineer
- Statistician
- Marketing Analyst
- AI Engineer
- Cloud Specialist

Master of Science in Data Science (MSDS)

ADMISSION AND ENGLISH PROFICIENCY REQUIREMENTS

Applicant must be a degree holder in Engineering, Science or other relevant disciplines. Non-local candidates from an institution where the medium of instruction is not English should fulfil one of the following English proficiency requirements:

- a score of 79 (Internet-based test) in the Test of English as a Foreign Language (TOEFL); or
- an overall band score of 6.5 in International English Language Testing System (IELTS); or
- a minimum score of 450 in band 6 in the Chinese mainland's College English Test (CET6); or
- other equivalent qualifications.

DURATION AND CREDIT REQUIREMENT

Duration of study:

Normal Period	Maximum Period
Full-time (1 year)	FT (2.5 years)
Part-time (2 years)	PT/combined mode (5 years)

Total credit units required: 30

School of Data Science

16-201, 16/F, Lau Ming Wai Academic Building
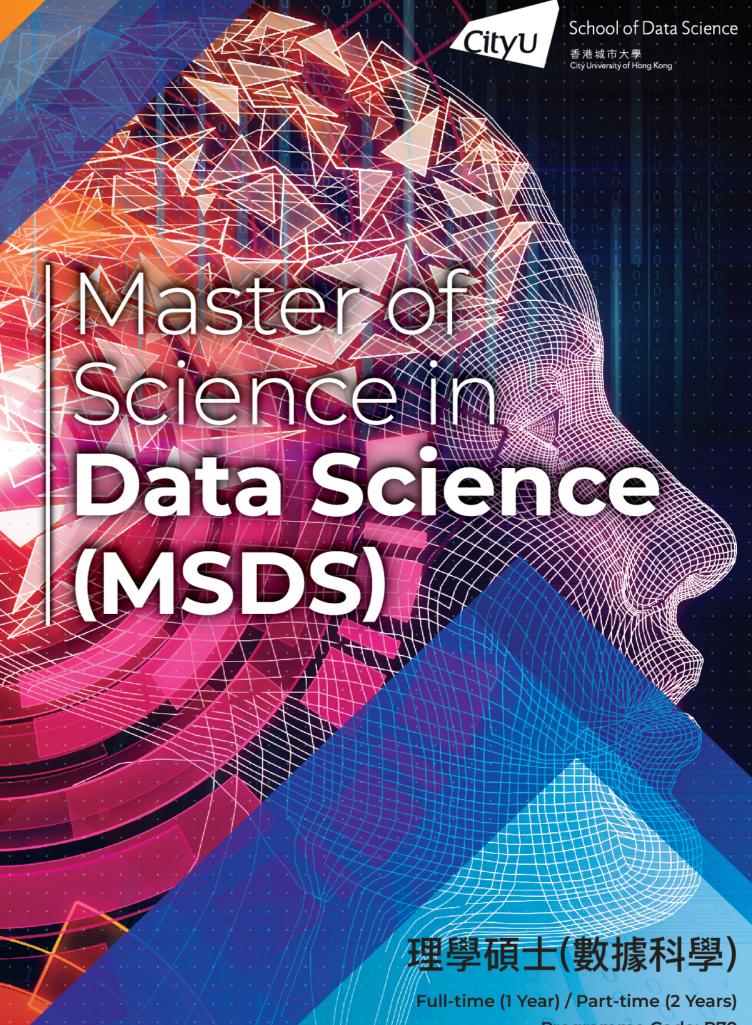City University of Hong Kong
83 Tat Chee Avenue Kowloon Hong Kong

政府資助計劃
Government-funded programme

Targeted Taught Postgraduate Programmes Fellowships Scheme offered by the University Grants Committee
(Maximum HK$120,000 for meritorious LOCAL students)

+852 3442 7887

sdscgo@cityu.edu.hk

www.cityu.edu.hk/sdsc

理學碩士(數據科學)

Full-time (1 Year) / Part-time (2 Years)

Programme Code: P70

PROGRAMME AIMS

The programme aims to produce data-analytic graduates to meet the growing demand for high-level data science skills and to prepare graduates to apply data science techniques to knowledge discovery and dissemination in organizational decision-making. It is also intended to help organizational data analytic professionals upgrade their technical management and development skills, and to provide a solid path for students from related quantitative fields to rapidly transition to data science careers.

PROGRAMME STRUCTURE

You can obtain an MSc degree by completing coursework only or by combining coursework with a dissertation project.

5 core courses + 5 elective courses

5 core courses + 3 elective courses + dissertation

1.
Apply knowledge of science and engineering appropriate to the data science discipline;

2.
Understand the theoretical foundation of contemporary techniques and apply them for managing, mining, and analysing data across multiple disciplines;

3.
Comprehend computational tools and use data-driven thinking to discover new knowledge and to solve real-world problems with complex structures;

4.
Recognise the need for and engage in continuous learning about emerging and innovative data science techniques and ideas; and
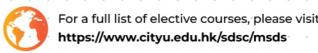
5.
Communicate ideas and findings in written, oral and visual forms and work in a diverse team environment.

CORE COURSES

- Exploratory Data Analysis and Visualisation
- Research Projects for Data Science
- Statistical Machine Learning I
- Statistical Machine Learning II
- Storing and Retrieving Data

ELECTIVE COURSES

Cross-disciplinary courses will be introduced to offer students solid theoretical training in data science, including fundamentals of machine learning, optimization and statistics, and hands-on experiences in data science applications, including artificial intelligence, blockchain, natural language processing, smart cities and many others. Students can tailor the curriculum to their professional interests and career needs.

For a full list of elective courses, please visit
https://www.cityu.edu.hk/sdsc/msds

CAREER PROSPECTS

The MSDS programme offers comprehensive and thorough training for students seeking a profession in data science. Our graduates have embarked on a variety of highly rewarding careers, including (but not limited to) data scientists, data analysts, data engineers, AI engineers, professional consultants, managers and researchers. Careers in data science offer excellent growth opportunities and competitive renumeration packages. These professional roles are in high demand across a broad spectrum of industries in the technology, real estate, insurance, education, e-commerce, retail, and marketing sector.

Our graduates have been hired by accounting firms, tech giants, retail giants, and global banks. Employers of our graduates include prestigious companies such as Alibaba, Baidu, China Unicom, CITICS, Hospital Authority, HUAWEI, P&G, PricewaterhouseCoopers China, SF Express Tech, etc. This bears testimony to the success of our graduates, and the high value and deep trust that private sectors place on our MSDS programme. Many of our alumni hold key positions that oversee the application of data science to impactful tasks, such as managing strategic business, financial, and operations decisions. Many of our alumni also shoulder crucial roles in critical information and communication, or science and technology sectors. Their career paths span across Hong Kong, the USA, and Mainland China (e.g. Beijing, Chongqing, Guangzhou, Kunming, Ningbo, Shanghai, Shenzhen and so on).

Most of our alumni receive monthly salaries that are significantly above the average monthly salary for graduates of STEM (science, technology, engineering, and mathematics) fields. In addition to serving in industry, nearly 20% of our graduates pursue research degrees at world-renowned universities. Some of them are furthering their studies in top universities like The University of Minnesota, The Chinese University of Hong Kong (Hong Kong & Shenzhen), Seoul National University, The University of Hong Kong, The Hong Kong University of Science and Technology, and Shanghai Jiao Tong University.