STUDENT LIFE

The School provides student exchange and internship opportunities to our students to gain international perspectives, global engagement and industry experience.

Student may choose between the overseas student exchange opportunities at world-leading institutions provided by the School or the University. Paying the tuition at CityU, students will spend a study semester abroad and may transfer the academic credits earned at the host institution to fulfill the graduation requirement.

NEEDED IN ALMOST EVERY FIELD

Academia  Consulting  Finance & Banking  Government
Healthcare  Insurance  IT Companies  Law
New Media / Social Media  Retail & 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

From now on, knowledge in data science will be essential to every sector just like language skill.

Dr. Lucas Hui
Chief Technology Officer, ASTRI

SCHOOL OF DATA SCIENCE

+852 3442 7887
ssdsgo@cityu.edu.hk
www.cityu.edu.hk/sdsc

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

City University of Hong Kong offers two unique undergraduate programmes aimed at nurturing and developing students to become data science professionals who are able to discover applicable knowledge to support social and economic development in Hong Kong and beyond.

WHAT IS DATA SCIENCE?

Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from data. It employs techniques and theories within the context of mathematics, statistics, and computer science. It can add value to businesses by utilizing their data. Data science aims to help solve many important problems ranging from smart city to management and finance.

WHY STUDY DATA SCIENCE?

Recently, businesses and industries powered by data science experience a sharp growth. Various companies and organizations in Hong Kong and beyond are developing their own data analytics units. Numerous start-ups and incubation firms focus their energy on data science. Data science has become one of the most popular and promising careers nowadays.

Data science is the most valuable subject in modern business such as logistics, e-commerce, advertising, medicine, etc., just as oil in traditional industry.

Mr. Zhuoqun YANG
Director of SF Express Big Data Platform Research Center

1
The first School of Data Science in Hong Kong and the region

54
 Ranked 54th in the world [QS World University Rankings 2023]

4
 Ranked 4th among the world’s top universities founded in the last 50 years [QS Top 50 Under 50]

We are delighted to collaborate with CityU to nurture talented data scientists to advance the smart city development in Hong Kong.

Mr. Jerry Li
CEO of Lenovo PCCW Solutions

SCHOOL OF DATA SCIENCE (JS1071)

(Options: BSc Data Science, BSc Data and Systems Engineering)

Data Science focuses on solving problems and advancing societies using vast amounts of data. Students of JS1071 will have a free choice of majors (BSc Data Science or BSc Data and Systems Engineering) after one year of study.

WHY US?

CURRICULUM

Data Science Project
Apply your knowledge and showcase your data science capabilities

Major Elective Courses
Freedom to follow your own path and interests

You may make use of the free electives to gain domain knowledge in specific areas or even enrich your studies with a minor

<table>
<thead>
<tr>
<th>Bachelor of Science Data Science (JS1072)</th>
<th>Bachelor of Science Data and Systems Engineering (JS1074)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialization Modules</td>
<td>Specialization Courses</td>
</tr>
<tr>
<td>Become an expert in</td>
<td>Become an expert in</td>
</tr>
<tr>
<td>- Statistical Learning</td>
<td>- FinTech</td>
</tr>
<tr>
<td>- Artificial Intelligence (AI)</td>
<td>- Industrial AI</td>
</tr>
<tr>
<td>- Social Media Analytics</td>
<td>- Smart City</td>
</tr>
<tr>
<td>Advanced Courses</td>
<td></td>
</tr>
<tr>
<td>- Cloud Computing</td>
<td>- Decision Analytics and Risk Management</td>
</tr>
<tr>
<td>- Data Structures</td>
<td>- Quality Technologies</td>
</tr>
<tr>
<td>- Digital Trace Analytics</td>
<td>- Operations Research</td>
</tr>
<tr>
<td>- Machine Learning</td>
<td>- Financial Engineering and Analytics</td>
</tr>
<tr>
<td>- Computational Statistics</td>
<td>- Reliability Engineering</td>
</tr>
<tr>
<td>- Deep Learning</td>
<td>- Engineering Economics</td>
</tr>
</tbody>
</table>

Data Science Courses
Fundamental courses to start your study in data science

- Data Mining
- Convex Optimization
- Statistical Methods and Data Analysis

- Data Visualization
- Artificial Intelligence
- Fundamentals of Machine Learning

Gateway Education Courses
Required courses to build up the foundation

- Calculus
- English and Chinese
- Computer Programming

- Linear Algebra
- Introduction to Data Science
- Probability and Statistics

This figure shows the basic structure of our two programmes. It is subject to change.

Bachelor of Science Data Science (JS1072)

Data Science DEEP
The programme provides essential trainings like quantitative knowledge, statistics, data mining technology and computing tools for emerging real-world applications.

In an inter-professional setting, students are given the tools to build theoretical and methodological knowledge in data science, communication skills and ethic awareness. There are three flexible modules of advanced knowledge:

- Artificial Intelligence (AI)
- Social Media Analytics
- Statistical Learning

Bachelor of Science Data and Systems Engineering (JS1074)

Data Science PLUS
The programme offers solid foundation in data science and intelligent systems, where students will learn to analyse, manage and improve enterprise-class systems using big data. Graduates will be equipped with necessary tools and skills to solve emerging real-world application problems and become big data professionals in the following fields:

- FinTech
- Industrial AI
- Internet of Things (IoT)
- Smart City