DATA SCIENCE AT
CITY UNIVERSITY OF HONG KONG

JOIN US NOW!
Be among the first students in Hong Kong to graduate in this exciting field.

www.cityu.edu.hk/sdsc
OUR DATA SCIENCE PROGRAMMES

City University of Hong Kong offers two brand new and unique undergraduate programmes aimed at nurturing and developing students to become data scientists who are able to create applicable knowledge in order to support social and economic development in Hong Kong and beyond.

Bachelor of Engineering
DATA AND SYSTEMS ANALYTICS

Data Science plus
Aimed at educating data scientists with solid understanding of tools and techniques who focus on using data science to solve social and economic applications

Offering specializations in
- Smart City
- Internet of Things (IoT)
- Computing and Analytics
- Financial Technology (FinTech)

Bachelor of Science
DATA SCIENCE

Data Science deep
Aimed at educating data scientists with rigorous theoretical knowledge and a solid foundation for exploring new data science methods

Offering specializations in
- Statistical Learning
- Artificial Intelligence
- Social Media Analytics
- Data Science in Business

There is a great demand in the market for technologies and talents in the field of data science ranging from financial application, smart city, mobile commerce, to AI-machine learning, robotics, healthcare, education, and communications.

Dr. James LEI, Acting Director of Intelligent Software and Systems, ASTRI
**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 to support social and economic development.

**WHY STUDY DATA SCIENCE?**

Recently, business and industries powered by data science experienced 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 is becoming a new career and a popular one too.

---

### CURRICULUM

**Data Science project**

*Apply your knowledge and showcase your data science capabilities*

**Elective courses**

*Freedom to follow your own path and interests*

<table>
<thead>
<tr>
<th>BEng in Data and Systems Analytics</th>
<th>BSc in Data Science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specialization modules</strong></td>
<td><strong>Specialization modules</strong></td>
</tr>
<tr>
<td><em>Become an expert in</em></td>
<td><em>Become an expert in</em></td>
</tr>
<tr>
<td>- Smart City</td>
<td>- Statistical Learning</td>
</tr>
<tr>
<td>- Internet of Things (IoT)</td>
<td>- Artificial Intelligence</td>
</tr>
<tr>
<td>- Computing and analytics</td>
<td>- Social Media Analytics</td>
</tr>
<tr>
<td>- Financial Technology (FinTech)</td>
<td>- Data Science in Business</td>
</tr>
<tr>
<td><strong>Advanced courses</strong></td>
<td><strong>Advanced courses</strong></td>
</tr>
<tr>
<td>- Physics</td>
<td>- Cloud Computing</td>
</tr>
<tr>
<td>- Decision Analysis</td>
<td>- Data Structures and Algorithms</td>
</tr>
<tr>
<td>- Quality Technology</td>
<td>- Natural Language Processing</td>
</tr>
<tr>
<td>- Operations Research</td>
<td>- Machine Learning</td>
</tr>
<tr>
<td>- Financial Engineering</td>
<td>- Computational Statistics</td>
</tr>
<tr>
<td>- Reliability Engineering</td>
<td>- Deep Learning</td>
</tr>
<tr>
<td>- Engineering Economics</td>
<td></td>
</tr>
</tbody>
</table>

**Data Science courses**

*Fundamental courses to start your study in data science*

| - Data Mining                      | - Data Visualization |
| - Optimization                     | - Statistical Inference |
| - Data Analysis                    | - Artificial Intelligence |

**General Education courses**

*University and school required courses to build up the foundation*

| - Calculus                         | - English and Chinese |
| - Linear Algebra                   | - Computer Programming |
| - Database Systems                 | - Probability and Statistics |

---

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

---

*We need Data Science talents to help shape a Smarter Hong Kong.*

Dr. Ernest LO, Founder and CEO, Future Impact Lab Ltd.
CAREER

You can work in many different industries:
- Finance & Banking
- Healthcare
- IT companies
- Transportation & Logistics
- Retail & Marketing
- Government
- Academia

Possible jobs:
- Consultant
- Data Analyst
- Data Engineer
- Data Scientist
- Business Intelligence Analyst
- Financial Quantitative Analyst

“I strongly welcome these programmes as they provide graduates of professional training in data science disciplines to fill-up such soaring demand of talents locally and internationally.”

Dr. Hua Xiang,
Regional Head of Independent Model Review,
Asia Pacific, HSBC

WHY CITYU?

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

55TH
Ranked 55th among the world’s top 200 universities (QS World University Rankings 2019)

8TH
Ranked 8th among Asia’s top universities (QS Asia University Rankings 2018)

STUDENT LIFE

Overseas Exchange
Experience student life in different countries

Internships
Opportunities for overseas and local internships

Scholarships & Awards
We support and recognize outstanding students

Activities
Mentor schemes, company visits, career talks and guest lectures

SCHOOL OF DATA SCIENCE

Tel: +852 3442 7887
Email: sdscg@cityu.edu.hk
www.cityu.edu.hk/sdsc
Room P6524, Yeung Kin Man Academic Building,
City University of Hong Kong, 83 Tat Chee Avenue,
Kowloon Tong, Hong Kong