



Bachelor of Arts and Sciences in Social Data Science [BASc(SDS)] A203



Two-year top-up degree for
associate degree/high diploma holders

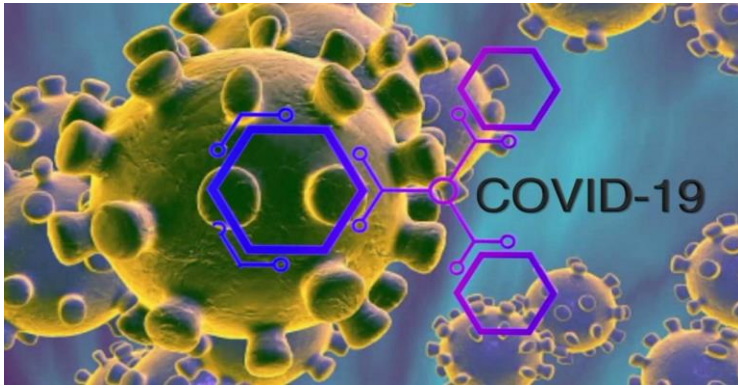


Welcome!

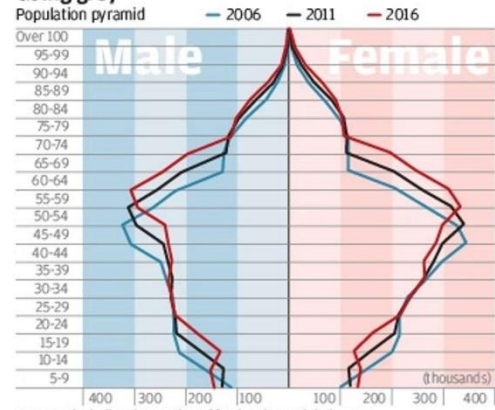


What is Social Data Science?





Going grey



Note: not including the number of foreign domestic helpers

Source: Census and Statistics Department

SCMP

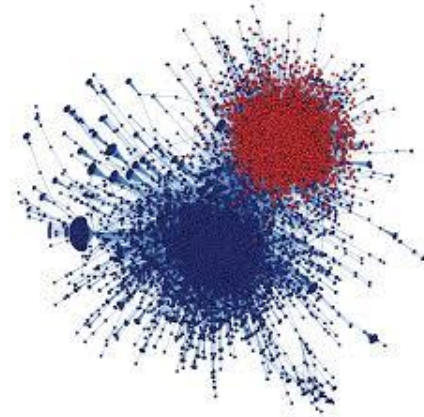


Fig sources:

<https://aecm.eu/corona-information/> <https://climate.nasa.gov/effects/>

<https://www.scmp.com/news/hong-kong/education-community/article/2074440/sharp-growth-hong-kongs-elderly-population>

<https://aaai.org/>



Social Data Science

- Our rapidly changing society is now driven by digital data, and our decision-making is often situated in social contexts and influenced by societal, economic, political and technological factors.
- Social data science aims to drive and catalyse new ways of thinking when analysing and applying data in the context of the social sciences.
- Social data science is an area having strong demand in the twenty-first century and it is expected to grow globally and locally across settings.

Why Social Data Science?

- Gain an in-depth understanding of social phenomena
- Support evidence-based decision-making
- Develop novel approaches for addressing societal challenges
- Inform the design and evaluation of social services and policies
- Prepare for the future
- ...

BASc(SDS) Programme

- By bringing together different disciplines from the **Faculties of Education, Science and Social Sciences**, we are positioning the BASc(SDS) as a senior year entry programme for sub-degree holders.
- As one of the Bachelor of Arts & Sciences (BASc) programmes at HKU, BASc(SDS) programme takes an **interdisciplinary** approach, integrating information science, computer science, mathematics, statistics, and social sciences to cultivate students' knowledge and technical skills in addressing social issues and societal challenges.

Programme Aims

- The programme strives to cultivate a community of students from diverse academic backgrounds who possess a keen interest in social data science.
- The programme aims to equip students with data literacy, analytical skills, and interdisciplinary thinking, enabling them to leverage large-scale datasets to derive meaningful insights and make informed decisions in addressing complex social issues.

Upon graduation from this programme, students will be able to:

- Identify social impact and decision-making process based on the digital data and information
- Demonstrate skills and knowledge in data science and computation through operating with tools and techniques for analysing, visualising, and modelling data
- Synthesise interdisciplinary knowledge and skills in social computation and statistical tools for analysis/analytics to solve real world problems
- Build awareness of social informatics and data science in research and identify controversies and initiatives in the region and the globe
- Apply the design principles and emerging methodologies with information technology from the social informatics perspectives in solving social challenges
- Design basic solutions in addressing social, economic or political inquiries and challenges

Why studying BAsSc(SDS) at HKU?



Why Faculty of Education, HKU?

 Faculty of Education
The University of Hong Kong
香港大學教育學院 HEARTS | MINDS

U.S. News & World Report
2024-25 Best Global Universities Subject Rankings

Education & Educational Research

is ranked **1st** globally



 香港大學
THE UNIVERSITY OF HONG KONG

QS World University Rankings by Subject 2024

Dentistry #3 	Education and Training #7 	Architecture/ Built Environment #12 
Geography #14 	Linguistics #15 	Civil and Structural Engineering #20 
Law and Legal Studies #20 	Social Policy and Administration #21 	History of Art #21-40 



Demand for graduates in social data science

- Data scientist roles have grown over 650% since 2012, creating 11.5M jobs by 2026, according to the U.S. Bureau of Labor Statistics.
- The demand for data science platform solution and data scientists is expected to grow faster in Asia due to its economic prosperity and advanced technological infrastructure, in particular in dealing with new forms of data with a focus on social, economic, and political aspects.
- **Local demand:** the importance of data technology, data analytics, and data services as stipulated in the Chief Executive's 2023 Policy Address to set up a \$10 billion New Industrialisation Acceleration Scheme – To promote the downstream development of new industrialisation with financial assistance for enterprises in the fields of life and health technologies, AI and data science, advanced manufacturing, and new energy technologies.

What jobs does this degree feed into?

Potential graduates in this programme will be qualified to work in different fields. Industries with high demand for knowledge and skills of social data science include:

- Innovative and information technologies
- Marketing, financial services and consulting
- Health care, academia and education
- Government, public services and NGOs

Highlights of graduate positions

Our graduates are highly sought after upon graduation. Here are highlights of companies and positions of our graduates:

Company
Hong Kong Disneyland
Hong Kong International Airport
Information Technology Project Division, HKSAR Government
PCCW Limited
PricewaterhouseCoopers (PwC)
The University of Hong Kong

Position
AI Engineer
Business Analyst
Analyst/Programmer II
Data Analytics Associate
Laboratory Data Analyst
Senior Recruitment Consultant

Programme Structure and Features



BASc(SDS) senior year programme

There is no Year 1 or Year 2 admission.

Successful applicants will be admitted directly to Year 3 of this four-year programme.

	Total
Major in SDS	72
Common Core Courses (in 2 different Areas of Inquiry)	12
English Language Enhancement	6
Free Electives	30
Total	120



72-credit Major in Social Data Science

- ❑ Core courses
(54 credits)
- ❑ Advanced Elective Courses
(18 credits; choose 6 credits from each Faculty)



Core Courses (54 credits)

Introductory courses (24 credits)

- Social data science foundations
- Social computing: Methods and applications
- Data processing and visualisation
- Introduction to statistics

Advanced compulsory courses (18 credits)

- Data warehousing and data mining
- Application of big data analytics in social sciences / Advanced social data analysis
- Introduction to R/Python programming and elementary data analysis

Capstone courses (12 credits)

- Internship
 - Project
-

Advanced Elective Courses: 18 credits (6 credits from each discipline)

- Year 3 students can enroll – subject to availability of places
- Not all courses will be offered every year

Faculty of Education

- BSIM3017 Database systems
- BSIM3021 Web development, users and management
- BSIM3025 Multimedia and human-computer interaction
- BSIM4011 Project management
- BSIM4020 Information society issues and policy
- BSIM4024 Fundamentals of object-oriented programming
- BSIM4027 Selected topics in information management
- BSIM4028 Principles and practice of data visualization
- MLIM6319 Information behavior
- MLIM7350 Data curation

Faculty of Social Sciences

- GEOG1020 Modern maps in the age of big data
- GEOG2090 Introduction to geographic information systems
- GEOG2152 Health and medical geography
- GEOG3417 Health, wellbeing, place and GIS
- POLI3039 Public policy analysis
- POLI3080 Global political economy
- POLI3131 In search of good policy: an introduction to policy evaluation
- PSYC2071 Judgements and decision making
- SOCI2080 Media and culture in modern societies
- SOWK2023 Social policy issues in Hong Kong
- SOWK2131 Behavioural economics for social change
- SOWK3091 Mental health sciences and society

Faculty of Science

- STAT2605 Demographic and socio-economic statistics
- STAT3612 Statistical machine learning
- STAT3613 Marketing analytics
- STAT3617 Sample survey methods
- STAT3622 Data visualization
- STAT4011 Natural language processing
- STAT4601 Time-series analysis
- STAT4609 Big data analytics



Programme Features

- **Partnerships with Industry (BSDS3999 Internship)** - Students apply what they learn in their academic studies in real-life situations by working on social data science related projects through internship experience in a selected organisation.
- **Final Year Project (BSDS4999 Project)** - Students apply a wide range of research methods and skills in a social data science project to complete a significant piece of work under supervision.
- **Exchange Programme** - To foster students' international understanding, the programme encourages students to study overseas in well-established universities through academic exchange. BAsSc(SDS) students have participated in exchange programmes in University Jean Moulin Lyon 3 (France), Tilburg University (Netherlands), University of Bergen (Norway), Stockholm University (Sweden), and University of Surrey (UK).

Learning outside classroom



A hands-on workshop to illustrate the six functions of a GIS software: Capture, store, display, spatial query, spatial analyses, output and share

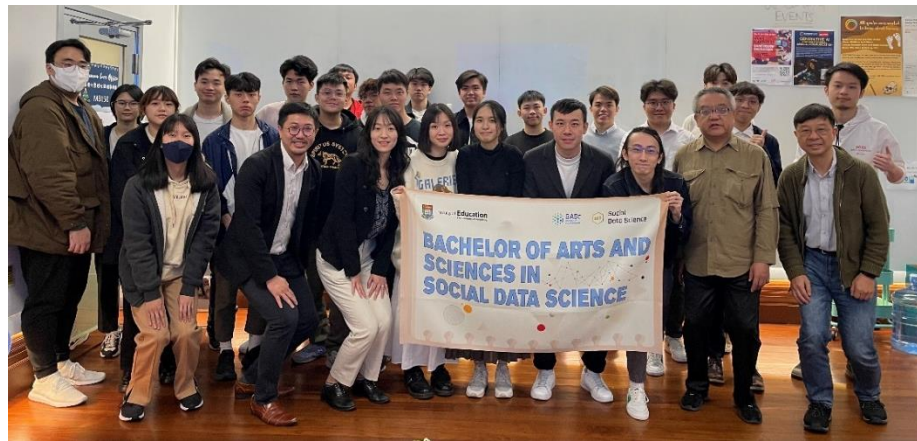
Guided tour to **Geospatial Lab of Development Bureau,**
HKSAR Government



Guided tour to **E&M InnoZone of Electrical and Mechanical Services Department,**
HKSAR Government

Student wellbeing

New students mingle with current students and academic advisors at the beginning of their exciting learning journey



Social Gatherings at BASc Lounge



Students and academic advisors catch up with each other at the beginning of Semester 2. Year 4 students and an alumnus share their internship experience/career plans/job seeking experience with fellow students



Career Development Support

- **Programme Level**
 - Internship course, and CV workshop
 - Social gathering student & teacher sharing
- **BASc Family Level**
 - BASc Green Gown Career Roundtable
- **University Level**
 - CEDARS workshops



2024 BASc Green Gown Career Roundtable

Hear What Our Graduate Says



**Why did you
choose
BASc(SDS)?**

“The BASc(SDS) programme allows me to use data-driven methodologies to understand human behaviour and address societal issues effectively, which is the evolution direction of all social sciences and the growing societal needs on candidates' skill sets.”

What is your favourite thing in the BAsc(SDS) programme?

“My favourite aspect of the BAsc(SDS) programme is to **explore the intersection of different disciplines**. The progress of such allows me to gain a comprehensive understanding of various subjects and their interconnectedness. This **interdisciplinary approach encourages critical thinking and creative problem-solving**, which I found incredibly stimulating and rewarding.”



**In what ways has the
BASc(SDS) programme
changed you?**

“The changes in me, and probably others as well, are very obvious. Data science itself is merely a teaching of analytical skills and a learning of research methodologies. The collaboration of such a subject with other subjects offered by the University made the picture complete: **I have thereafter been able to apply my learned data science skills to explore the studies about the legal system innovatively.**”



What is your most memorable experience at HKU, particularly related to the BASc(SDS) programme?

“...The supportiveness of facilities and academic staff from BASc(SDS) programme for your research emphasises that HKU is a right choice.”



What is your advice to prospective students who are considering the BAsc(SDS) programme?

“To embrace curiosity and take full advantage of the **interdisciplinary learning opportunities** is not just the requirement of a student, but also the demand of the society. Within this programme, **multiple opportunities are provided to collaborate with peers from various backgrounds**, as they will bring unique perspectives and insights to your learning experience.”



What information you would give to prospective students and their families who are wondering whether the BAsc(SDS) is a worthwhile investment?

“Before participating in the BAsc(SDS) programme, a very crucial piece of information is to understand the programme’s emphasis on developing versatile skills and fostering adaptability. In today’s rapidly changing job market, employers increasingly value individuals who possess a diverse skill set and can quickly adapt to new challenges which are exactly highly sought after by employers. **There are more than opportunities and resources offered by this programme and this University.** Students may have all their wished development through this interdisciplinary nature doors to **a wide range of career paths.**”



Alumni Sharing



<https://www.basc.hku.hk/basc-social-data-science>



Admissions Requirements



Admissions requirements

- **Local graduates** of recognised full-time **Associate Degree (AD)** or **Higher Diploma (HD)** programmes of at least two years in duration from community colleges in Hong Kong in relevant disciplines, such as Data Science and Analytics, Engineering, Computer Science, Information Technology, Statistics, Applied Science, Social Sciences.
- **Final-year local students** studying such programmes may also apply and their applications will be considered subject to their successful completion of the programme by August 2025.
- **Intake quota for 2025 intake: 20***

**As the 2025/26 academic year is the beginning of the 2025/26 - 2027/28 triennium for which the allocation of UGC-funded places are still subject to the Government's approval, the number of intake quota shown above is indicative only and subject to changes or confirmation.*

Admissions requirements

- **Good GPA**
- IELTS 7 or equivalent (*strongly encouraged to take multiple attempts until achieving good score*)
- HKDSE Mathematics Level 3
- Leadership and life experience could be considered
→ 1-2 pages summary preferred
- Prefer applicants placing BAsSc(SDS) as **1st choice**
- Shortlisted applicants will be invited to an interview in **February/March 2025**

Application

- Apply through **Admissions to Senior Year Places (Direct Admissions Scheme)**
- Programme code: **A203**
- Apply by **noon, November 27, 2024** (Main round)
- Late application is accepted by **noon, August 22, 2025**
- Places are being filled all the time, you are advised to apply for admissions **as early as possible**.
- Admissions details: <https://admissions.hku.hk/apply/hong-kong-sub-degrees>
- Programme website: <https://web.edu.hku.hk/programme/bsds>



Programme Overview and Aims



<https://web.edu.hku.hk/programme/bsds>

bascsds@hku.hk

Enquiries Information

Application & Admissions

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Academic Matters

Contact: Dr Kelvin Lo
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Hope to see you soon!



