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

A203
WELCOME!!
### Why Faculty of Education, HKU?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Name</th>
<th>Country/Region</th>
<th>No. of FTE Students</th>
<th>No. of students per staff</th>
<th>International Students</th>
<th>Female:Male Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stanford University</td>
<td>United States</td>
<td>16,135</td>
<td>7.3</td>
<td>23%</td>
<td>43:57</td>
</tr>
<tr>
<td>2</td>
<td>Harvard University</td>
<td>United States</td>
<td>20,823</td>
<td>9.2</td>
<td>24%</td>
<td>49:51</td>
</tr>
<tr>
<td>3</td>
<td>University of Hong Kong</td>
<td>Hong Kong</td>
<td>18,260</td>
<td>18.2</td>
<td>44%</td>
<td>54:46</td>
</tr>
</tbody>
</table>

Ranked 3rd in education in THE World University Rankings 2020

Source: The 2020 Times Higher Education World University Rankings
The Bachelor of Arts & Sciences degrees, involving all ten faculties, are aimed at nurturing globally-minded thinkers and leaders able to leverage their interdisciplinary knowledge and skills to address the contemporary and future challenges of our increasingly complex world.
The new Bachelor of Arts & Sciences degrees, involving all ten faculties, are aimed at nurturing globally-minded thinkers and leaders able to leverage their interdisciplinary knowledge and skills to address the contemporary and future challenges of our increasingly complex world.

Bachelor of Arts & Sciences

Applied AI

Design +

FinTech

Global Health & Development

Social Data Science

https://basc.hku.hk/
The BASc(SDS) degree addresses our rapidly changing, data driven society, where economic, political and technological factors are interconnected.

The programme aims to drive and catalyse new ways of thinking when making sense of data and applying data science in the context of social sciences. It takes an interdisciplinary approach, integrating information science, computer science, mathematics, statistics and social sciences to address social issues and societal challenges.

Social data science is an area of great demand in the twenty-first century and is expected to grow globally and locally across industries, such as information technology, marketing, corporate setting, consulting, health care, financial services, government, NGOs, academia, retail and consumer services, gaming, and education-related organisations.

Faculty of Education
Email: basc.sds@hku.hk
Tel: 3917 5413

https://basc.hku.hk/sds/
Bachelor of Arts and Sciences in Social Data Science

Programme Overview and Aims

https://web.edu.hku.hk/programme/bsds
Why BASc (SDS)?

• 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.
• The course takes an interdisciplinary approach, integrating information science, computer science, mathematics, statistics, and social sciences to address social issues and societal challenges.
Why BASc (SDS) so special?

• 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.

• 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.
Demand for graduates in social data science

• According to a recent report published by IBM, the demand for data scientists will soar by 28% to 2,720,000 (in the USA alone) by 2020.
• 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 is highlighted and emphasized in the sections of “Innovation and Technology” and “Smart City” in the Chief Executive’s 2017 Policy Address.
Upon graduation of 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

• Synthesize 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
Programme features

- **Exchange Programme** - To foster students’ international understanding, the programme encourages them to study overseas in well-established universities through academic exchange.

- **Partnerships with Industry** - Students will apply what they learn in their academic studies in real-life situations by working on social data science related projects through a summer internship experience in a selected organization.

- **Final Year Project (FYP)** - Students will apply a wide range of research methods and skills in a social data science project to complete a significant piece of work under supervision.
Eligibility and intake quota

- Candidates holding a recognized full-time **Associate Degree** or **Higher Diploma** programme of at least two years duration in Hong Kong

- The intake quota for 2020-21 is **20**
There is no Year 1 or Year 2 admission. Successful applicants will be admitted directly to Year 3 of this four-year programme.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major in SDS</td>
<td>72</td>
</tr>
<tr>
<td>Common Core Courses (in 2 different Areas of Inquiry)</td>
<td>12</td>
</tr>
<tr>
<td>Language Enhancement</td>
<td>6</td>
</tr>
<tr>
<td>Free Electives</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>
72-credit Major in Social Data Science

- Core courses (54 credits)
- Electives (18 credits; students are required to choose 6 credits from each Faculty)
Core Courses (54 credits)

Introductory courses (24 credits)
- Social data science foundations (6 credits)
- Social computing: methods and applications (6 credits)
- Data visualization (6 credits)
- Data structure and algorithm (6 credits)

Advanced courses (30 credits)
- Data warehousing and data mining (6 credits)
- In search of good policy: an introduction to public policy evaluation (6 credits)
- Linear statistical analysis (6 credits)
- Internship (6 credits)
- Project (6 credits)
Advanced Courses (Elective 18 credits)
- Not all courses will necessarily be offered every year

BSIM4020 Information society issues and policy (6 credits)
BSIM4024 Fundamentals of object-oriented programming (6 credits)
GEOG3417 Health, wellbeing, place and GIS (6 credits)
MLIM6319 Information behavior (6 credits)
MLIM7350 Data curation (6 credits)
POLI3128 The political economy of international development (6 credits)
PSYC2071 Judgements and decision making (6 credits)
SOCI2080 Media and culture in modern societies (6 credits)
SOWK2131 Behavioural economics for social change (6 credits)
STAT3613 Marketing analytics (6 credits)
STAT3620 Modern nonparametric statistics (6 credits)
STAT4602 Multivariate data analysis (6 credits)
STAT4609 Big data analytics (6 credits)
Partnerships with Industry

• Many **industry experts** participate in our programme as advisors, co-lecturers, and guest speakers.
• Students will apply what they learn in their academic studies in real-life situations by working on social data science related projects through a summer **internship experience** in a selected organization.
• The course provides opportunities for the application of social data science **knowledge and techniques** to practical situations, such as marketing, corporate setting, consulting, health care, financial services, and retail and consumer services.
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, information technology and gaming
• Marketing, financial services and consulting
• Health care, academia and education
• Government, public services and NGOs