Enquiries:
Department of Statistics & Actuarial Science
Miss Jacey Yeung
Tel: (852) 3917 4152 Email: mdasc@hku.hk

Faculty of Science, The University of Hong Kong
G/F Chong Yu Tung Physics Building, Pokfulam Road, Hong Kong
Tel: (852) 3917 5287 Fax: (852) 2858 4620 Email: scitpg@hku.hk
### Scholarships and Awards

**Entrance Scholarship for Master of Data Science**
- Entrance scholarship for Master of Data Science of HK$30,000 will be offered annually to new MDASC students on the basis of academic merit and financial need subject to approval.

**Master of Data Science Outstanding Performance Award**
- One scholarship of HK$50,000 will be awarded annually to MDASC student on the basis of academic merit and quality of coursework.

**Lifelong Learning Prizes in Data Science**
- Multiple Lifelong Learning Prizes in Data Science, each from HK$5,000 to HK$10,000, will be awarded to MDASC students on the basis of academic achievement.

**Belt and Road Scholarship in Statistics and Data Science**
- A scholarship outstanding new students from participating Belt and Road countries. Composition fees of MDASC could be waived for awardees, and additional allowance of HK$10,000 will be provided to support their studies.

**Targeted Taught Postgraduate Programmes Fellowship Schemes**
- The Master of Data Science programme is one of the eligible programmes under the University Grants Committee for Targeted Taught Postgraduate Programmes Fellowships Scheme. Each local applicant who is selected for the fellowships scheme will be granted an award of HK$120,000.

### Reimbursable Course(s) by Continuing Education Fund (CEF)

The following courses have been included in the list of reimbursable courses under the CEF:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP7503</td>
<td>Multimedia Technologies</td>
</tr>
<tr>
<td>COMP7506</td>
<td>Smart Phone Apps Development</td>
</tr>
<tr>
<td>COMP7507</td>
<td>Visualization and Visual Analytics</td>
</tr>
<tr>
<td>COMP7905</td>
<td>Introduction to Cyber Security</td>
</tr>
<tr>
<td>STAT613</td>
<td>Financial Data Analysis</td>
</tr>
<tr>
<td>STAT7008</td>
<td>Data Mining Technologies</td>
</tr>
<tr>
<td>STAT8003</td>
<td>Programming for Data Science</td>
</tr>
<tr>
<td>STAT8017</td>
<td>Time Series Forecasting</td>
</tr>
<tr>
<td>STAT819</td>
<td>Marketing Analytics</td>
</tr>
</tbody>
</table>

All CEF applicants are required to attend at least 70% of the concerned courses before they are eligible for fee reimbursement under the CEF.

* Students who have completed the same courses in their previous studies in HKU, e.g. Master of Statistics or Master of Science in Computer Science may, on production of relevant transcripts, be permitted to enrol in the course of disciplinary electives from other common core courses and will not be accorded any fee reimbursement under any other courses.

### Graduates Testimonial

**Luo Yuxin** MDASC Part-time Graduate 2023
- Trader, Credit Swaps

As a trader in financial industry, I need to deeply interact with data in my daily tasks. The MDASC programme provides a comprehensive and flexible curriculum, which benefits me a lot in many aspects. Data visualization helps me to extract key insights from millions of financial data more simply and clearly. Machine learning enables me to explore automated algorithm trading techniques. Statistical inference and models give me the ability to capture hidden trading opportunities from date. Furthermore, after taking the program, I can have more professional skills and knowledge. I believe this program will beneficial to not only students who are interested in IT, but also students who want to engage in financial and business industries.

**Wong Stephanie** MDASC Part-time Graduate 2023
- Deputy Manager, Client Overseas Container Line Ltd

What first attracted me to the MDASC programme was its interdisciplinary approach to analyzing data and the focus on applying such findings to solving real-life problems. The programme covered a wide range of practical techniques and applications. Furthermore, the course assignments were all very hands-on, equipping students with the ability to apply their knowledge in practical settings. The programme has benefited my career as it allows me to discover hidden trends and patterns in data and helps me become someone that can transform data into actionable insights. Regardless of what your career role may be, I’m sure the knowledge you gain from this programme will go into good use, as data has become such an integral part of our life.

**Cheung Ngai Yin** MDASC Part-time Graduate 2023
- Co-Founder, Math Innovation

The MDASC programme is both academically challenging and commercially relevant, allowing me to enhance my skills, experience, and knowledge in various areas of data science. The learning experience through the MDASC is unparalleled. Not only do I learn from top professors in their fields, but also from talented and experienced classmates who come from different industries.

Specifically, the Data Science Project provides an excellent opportunity for the students to explore deeply in an interested field of data science and artificial intelligence or even commercialize their ideas. With the department’s tremendous support and the programme’s professional training, I have equipped with the knowledge and confidence to start an artificial intelligence startup after graduation.

No matter where you come from or what you are looking for, I believe the MDASC programme will definitely open the door for a new career path for you in the future.

### Programme Curriculum

#### Compulsory Courses (24 credits)

- COMP7404: Computational intelligence and machine learning
- DASC7011: Statistical inference for data science
- DASC7104: Advanced database systems
- STAT7102: Advanced statistical modelling

#### Disciplinary Electives (36 credits)*

<table>
<thead>
<tr>
<th>List A (at least 12 credits)</th>
<th>List B (at least 12 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP7107: Management of complex data types</td>
<td></td>
</tr>
<tr>
<td>COMP7305: Cluster and cloud computing</td>
<td></td>
</tr>
<tr>
<td>COMP7409: Machine learning in trading and finance</td>
<td></td>
</tr>
<tr>
<td>COMP7503: Multimedia technologies</td>
<td></td>
</tr>
<tr>
<td>COMP7506: Smart phone apps development</td>
<td></td>
</tr>
<tr>
<td>COMP7507: Visualization and visual analytics</td>
<td></td>
</tr>
<tr>
<td>COMP7906: Introduction to cybersecurity</td>
<td></td>
</tr>
<tr>
<td>DASC7606: Deep learning</td>
<td></td>
</tr>
<tr>
<td>FITE7410: Financial fraud analytics</td>
<td></td>
</tr>
<tr>
<td>IOCM6044: Data science for business</td>
<td></td>
</tr>
</tbody>
</table>

### Capstone requirement (12 credits)

- DASC7600: Data science project (12 credits) + a 6-credit course (from List A or List B)

### Programme Duration and Class Schedules

- **Full-time (1.5 years)**
  - Programme normally extends over 1.5 academic years for full-time study, and 2.5 academic years for part-time study. Teaching will take place mostly on weekday evenings, and Saturday mornings and afternoons. All lectures are conducted in English at HKU.

- **Part-time (2.5 years)**
  - Programme will take place on weekday evenings, and Saturday mornings and afternoons. All lectures are conducted in English.

#### Optional Preparatory Courses

- **Preparatory course in mathematics and calculus for students who need to rejuvenate their skills in data management (12 credits)**
  - **Branching opportunity:** Students need to complete the necessary preparatory course in mathematics and calculus for students who need to rejuvenate their skills in data management (12 credits).

### Descriptions

- **Data Analyst**
  - For students who need to rejuvenate their skills in data management.

- **Algorithm Engineer**
  - For students who need to rejuvenate their skills in data management.

- **Manager of International Cooperation**
  - For students who need to rejuvenate their skills in data management.

### Course Descriptions

- **Data science practicum**
  - For students who need to rejuvenate their skills in data management.

- **Data science project**
  - For students who need to rejuvenate their skills in data management.

- **Natural language processing and text analytics**
  - For students who need to rejuvenate their skills in data management.

- **Blockchain data analytics**
  - For students who need to rejuvenate their skills in data management.

### No Course Level Requirements

- **Entry level**
  - For students who need to rejuvenate their skills in data management.

- **Advanced level**
  - For students who need to rejuvenate their skills in data management.

- **Graduate level**
  - For students who need to rejuvenate their skills in data management.

- **Professional level**
  - For students who need to rejuvenate their skills in data management.

### Specific Requirements

- **Part-time study**
  - Programme will take place on weekday evenings, and Saturday mornings and afternoons. All lectures are conducted in English.

- **Full-time study**
  - Programme normally extends over 1.5 academic years for full-time study, and 2.5 academic years for part-time study. Teaching will take place mostly on weekday evenings, and Saturday mornings and afternoons. All lectures are conducted in English at HKU.