## DURATION AND CREDIT REQUIREMENT

<table>
<thead>
<tr>
<th>Duration of Study</th>
<th>Normal Period</th>
<th>Maximum Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time (1 year)</td>
<td>FT (2.5 years)</td>
<td>PT/combined mode (5 years)</td>
</tr>
<tr>
<td>Part-time (2 years)</td>
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Total credit units required: 30

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**Contact Us**
Email: sdscgo@cityu.edu.hk
Website: www.cityu.edu.hk/sdsc/msds

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**Master of Science in Data Science (MSDS)**

Full-time (1 Year) / Part-time (2 Years)
Programme Code: P70
PROGRAMME AIMS

The programme aims to produce data-analytic graduates to meet the growing demand for high-level data science skills and to prepare graduates to apply data science techniques to knowledge discovery and dissemination in organizational decision-making. It is also intended to help organizational data analytic professionals upgrade their technical management and development skills, and to provide a solid path for students from related quantitative fields to rapidly transition to data science careers.

PROGRAMME STRUCTURE

You can obtain an MSc degree by completing coursework only or by combining coursework with a dissertation project.

<table>
<thead>
<tr>
<th>Core courses</th>
<th>Elective courses</th>
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</thead>
<tbody>
<tr>
<td>Research Projects for Data Science</td>
<td>Statistical Learning II</td>
</tr>
<tr>
<td>Exploratory Data Analysis and Visualisation</td>
<td>Storing and Retrieving Data</td>
</tr>
<tr>
<td>Statistical Machine Learning I</td>
<td></td>
</tr>
<tr>
<td>5 core courses + 5 elective courses</td>
<td>5 core courses + 5 elective courses + dissertation</td>
</tr>
</tbody>
</table>

Cross-disciplinary courses will be introduced to offer students solid theoretical training in data science, including fundamentals of machine learning, optimization and statistics, and hands-on experiences in data science applications, including artificial intelligence, blockchain, natural language processing, smart cities and many others. Students can tailor the curriculum to their professional interests and career needs.

For a full list of elective courses, please visit https://www.cityu.edu.hk/isdsc/msds

CAREER PROSPECTS

A strong demand for data scientists and analysts has been recently observed in the worldwide job market. This programme aims at producing data-analytic and business-aware graduates to meet this growing demand by equipping them with big data analytics skills and nurturing their ability to apply data science techniques to address emerging complicated real-life problems. Upon successful completion of this programme, the student should be able to:

1. Apply data processing skills to handle data of various formats and sizes;
2. Conduct comprehensive data analytics with integrating techniques from various disciplines for knowledge discovery and dissemination in organizational decision-making;
3. Utilize a variety of data visualization techniques to interpret data analytics results;
4. Demonstrate strong quantitative capabilities as well as communication skills, and
5. Develop descriptive, prescriptive and predictive analytics solutions to tackle emerging challenges in contemporary problems.

ADMISSION AND ENGLISH PROFICIENCY REQUIREMENTS

Applicant must be a degree holder in Engineering, Science or another relevant discipline or its equivalent. Non-local candidates from an institution where the medium of instruction is not English should fulfil one of the following English proficiency requirements:

- a TOEFL score of 550 (paper-based test) or 79 (revised paper-delivered test) or 79 (Internet-based test) on the Test of English as a Foreign Language (TOEFL); or
- an overall band score of 6.5 in International English Language Testing System (IELTS); or
- a minimum score of 450 in band 6 in the Chinese mainland’s College English Test (CET6); or
- other equivalent qualifications.