香港科技大學
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

BSc in Data Science and Technology (DSCT)

The Data Science and Technology (DSCT) program is jointly offered by the School of Science and the School of Engineering. A wide range of business and industry sectors are experiencing a growing demand for data specialists to perform in-depth analyses of the valuable datasets generated throughout business operations. DSCT graduates are exceptionally well-positioned to seize emerging opportunities in today's data driven job market. This program equips students with a robust set of mathematical tools, data analytical techniques and IT technologies to interpret and drive insights from data acquired from diverse sources.

DSCT students apply a wide array of mathematical and IT tools to build basic expertise in data analysis and programming, enabling them to interpret and investigate real-world phenomena embedded in large-scale datasets from diverse information sources. Additionally, students gain hands-on experience and benefit from expert guidance to develop their practical data analysis skills - providing a strong foundation for their future career. The program covers a broad spectrum of expertise, including machine learning, classification, clustering, data mining, database management, cloud computing and data visualization.

School of 理學院 Science

工學院 SCHOOL OF ENGINEERING

Program Curriculum

The DSCT program combines basic knowledge of data analytics, programming skills, mathematical and computational background, which provides students a solid foundation for their future career.

The DSCT program is a tech-based program. We provide students with a solid foundation in the fundamental and in-depth knowledge in special areas.

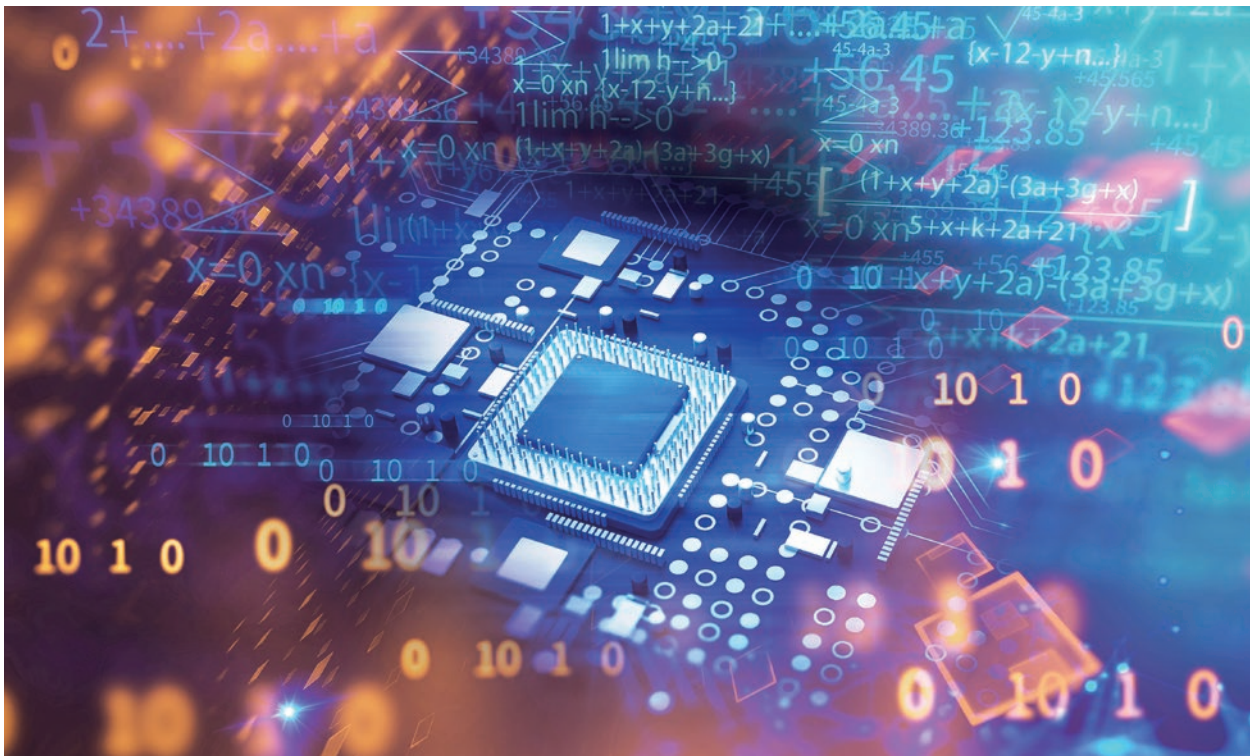
- It emphasizes on students' mathematical and computational disciplines.
- Students will receive hands-on experience and expert guidance to acquire practical skills of data analysis that will provide them a good step to their future.

Intended Learning Outcomes

- The ability to understand data problems arising in the areas of commerce and industry etc.
- The ability to model data problems using different mathematical tools.
- The ability to design and implement efficient algorithms to solve different mathematical models for data problems.
- The ability to interpret the results provided by different algorithms and apply them to the data problems to gain meaningful insights or offer predictions.

Applications of Data Science and Technology

- Gaming
- Recommendation System
- Commercial Data Analytics
- Social Media Analytics
- Digital Marketing
- Self-Driving System
- Speech Recognition
- Smart Cities and Urban Analytics
- Fintech
- Personalized Medicine



Enrichment Activities

Students in the DSCT program can enjoy all the student services and facilities provided by both Schools:

- Exchange programs offered by the School of Science and the School of Engineering
- Internship opportunities referred by the Department of Mathematics and the Department of Computer Science and Engineering

Two DSCT students (left and right) are participants in the “SHE INSPIRES” Mentorship Programme. One of the students has also visited the Logistics and Supply Chain MultiTech R&D Centre (LSCM) through the programme.

A DSCT student has joined a Summer Internship Programme 2026 at IBM.

Career Prospects

A lot of data specialist/scientist positions are created every day in various business and industry sectors to make use of the massive datasets collected there. Graduates of data science and technology are of high demand in today’s job market, and most of them will be employed in those sectors such as IT, engineering, and finance. There will be other career opportunities such as management and sales, etc. Below are some examples:

- Data Scientists
- Data Engineers
- Data Analysts
- Deep Learning Research Scientist
- Data Management Specialist
- Strategic Cloud Engineer

Words from DSCT Graduate

HKUST's Data Science program equipped me with a solid foundation in mathematics and programming, complemented by a sharp focus on statistics and machine learning. Beyond teaching these fundamental skills, the curriculum offered the flexibility to cultivate my specific interests. I found ample opportunities to engage in both supervised and independent research, alongside a wealth of avenues for summer internships. What makes Data Science truly unique is this very versatility; it bridges the gap for students drawn to both mathematics and computer science, paving the way for a future in either research or industry.

Darren CHUA
BSc in Data Science and Technology,
with an additional major in Mathematics and Computer Science,
Class of 2026

Admissions Requirements

Prospective students may apply for the *Science (Group A) program (JS5102)* from the School of Science, or the *Engineering with Extended Major in Artificial Intelligence program (JS5282)* from the School of Engineering through direct choices in the JUPAS / Non-JUPAS admissions scheme.

Upon completion of the major pre-requisite courses at the end of the first year, students can declare major in Data Science and Technology.

The pre-requisite courses include:

- MATH 1013 Calculus I / MATH 1023 Honors Calculus I, and
- MATH 1014 Calculus II / MATH 1024 Honors Calculus II, and
- COMP 1023 Introduction to Python Programming

JOIN DSCT PROGRAM

GO BEYOND YOUR LIMITS
FIND TRANSFORMATION HERE

School of Science – Undergraduate Admissions
Tel : (852) 2358 5065
Email : ugscience@ust.hk
Website : science.hkust.edu.hk
Facebook : @hkust.science
Instagram : @hkust.ug.science

DSCT Program Office
Tel : (852) 2358 7444
Email : dsctug@ust.hk
Website : dsct.hkust.edu.hk

DSCT website

SSCI Linktree

MTPC-G23582

Copyright@2026 HKUST