

# 數學 (MATH)

## 課程重點

數學在各個科技範疇都佔一席位。數學不但是解決實質問題及理解事物的抽象方法，更是商業、工程學、以及生物、物理、計算機科學等科技領域中用以溝通的語言。數學系的學生可從多元化的課程中挑選適合自己的專修科目。

數學課程提供下列七個專修科目：

- 應用數學
- 計算機科學
- 綜合數學
- 數學及物理
- 純數學
- 高級純數學\*
- 統計及金融數學

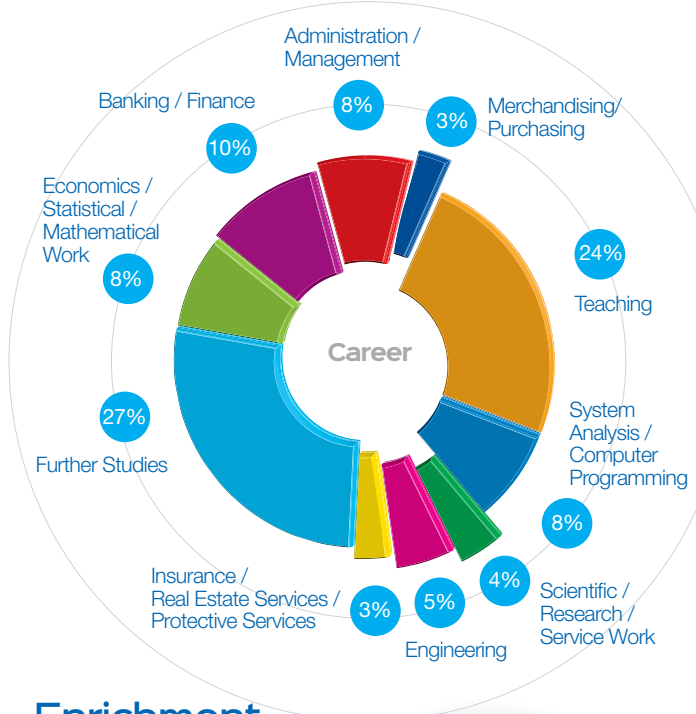
\* 高級純數學專修為數學能力較高的學生而設計。該專修的學生將更深入地學習高階數學範疇，從而為升讀研究院課程作更佳準備。

## 就業前景

約有四分一的數學系畢業生會繼續升學，他們大都遠赴海外院校深造。另有四份一的畢業生會從事教育工作。其餘畢業生會從事於商業及服務性行業，如：行政管理、計算機程式設計、會計、保險、市場公關及銷售、採購、銀行財務，或從事學術研究工作。



## Career Placements in 2018



## Enrichment Activities in 2018-19



THE HONG KONG  
UNIVERSITY OF SCIENCE  
AND TECHNOLOGY

## BSc in Mathematics

JUPAS Catalogue No: JS5102

### For Further Information

Phone: (852) 2358 7460

Fax: (852) 2358 1643

Email: [mathug@ust.hk](mailto:mathug@ust.hk)

[www.math.ust.hk](http://www.math.ust.hk)

© PTC-G19119 Printed on recycled paper



DEPARTMENT OF  
MATHEMATICS  
SCHOOL OF SCIENCE, HKUST





# BSc in Mathematics

JS5102 – Science (Group A) (SSCI-A)

## Major Program

Seven Tracks  
(See adjacent page)

## Minor Program

Minor in Actuarial  
Mathematics

Minor in Mathematics

## HKUST Entry Requirements

English Language 3

Chinese Language 3

Mathematics (Compulsory Part) 2

Liberal Studies 2

Elective 1 3

Elective 2 or M1/M2 3

## Science School Requirements

JUPAS Catalogue No:

JS5102 – Science (Group A) (SSCI-A)

JS5103 – Science (Group B) (SSCI-B)

In addition to HKUST entry requirements, applicants have to meet the following conditions:

### School/Program-specific Subject (Elective 1)

One of: Biology/ Chemistry/ Physics/ Combined Science/ Integrated Science/ M1/ M2

### Score Calculation for the Best 5 subjects:

- (1) Eng + (2) Math + (3) Best weighted science elective + (4) Best weighted/other elective + (5) Best other elective
- With the weighting which include:

1.5 x English

2 x Respective Science Electives  
(e.g. **M1/M2/Physics in choosing SSCI-A Program**, and Biology/Chemistry in choosing SSCI-B Program)

1.5 x Other Science Elective  
(e.g. **Biology/Chemistry/Combined Science in choosing SSCI-A Program**, and M1/M2/Physics/Combined Science in choosing SSCI-B Program)

Remarks:

We will take the highest score of at most TWO weighted science electives.

## BSc in Mathematics

Fundamental math courses: Students in all tracks take three semesters of calculus, linear algebra, two semesters of real analysis, and a capstone project course.

### Pure Mathematics Track

For students interested in pure mathematics. In addition to fundamental math courses, students take advanced courses in applied mathematics, statistics, analysis, algebra and geometry.

### Pure Mathematics (Advanced) Track

Same as the Pure Mathematics Track, but students take the honors versions of the fundamental math courses.

### Applied Mathematics Track

For students interested in the application of mathematics to the sciences. In addition to fundamental math courses, students take additional courses in applied mathematics.

### Statistics & Financial Mathematics Track

For students interested in probability and statistics and the application of mathematics to finance. In addition to fundamental math courses, students take courses in statistics, probability and financial mathematics.

### Computer Science Track

For students interested in both mathematics and computer science. In addition to fundamental math courses, students take a substantial number of computer science courses.

### Mathematics & Physics Track

For students interested in both mathematics and physics. In addition to fundamental math courses, students take a substantial number of physics courses.

### General Mathematics Track

For students who want the greatest flexibility in their choice of mathematics electives. In addition to fundamental math courses, students may choose additional electives from pure and applied mathematics and statistics.

## The S.S. Chern Class in Mathematics



Students with demonstrated mathematical excellence are eligible for admission to the prestigious “S.S. Chern Class” once they have declared their major as either Mathematics (MATH), Mathematics and Economics (MAEC), or Data Science and Technology (DSCT). Depending on the academic performance, a Chern Class student can receive up to HK\$50,000 scholarships by graduation.

Talented high  
school students

honors in  
- IMO  
- APMO  
- CMO  
- HKIMO

top scorers in  
- China JEE  
- Taiwan GSAT

## ELIGIBILITY FOR THE CHERN CLASS

enroll in  
School of  
Science  
HKUST

complete  
Honors  
Calculus II

Major in  
MATH/MAEC

Chern  
Class  
Student

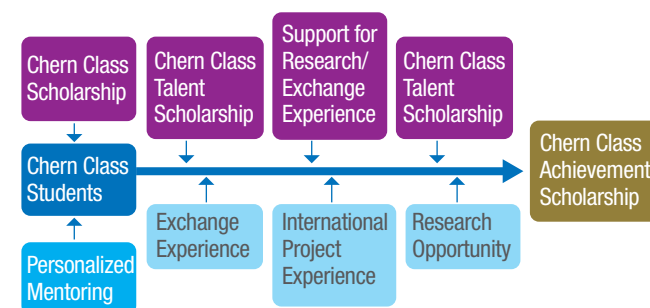
HKUST students

Students in IRE  
Program (JS5101)

excel in Calculus I or  
Honors Calculus I

excel in Honors  
Calculus II

## SUPPORTS AND AWARDS



[www.math.ust.hk/ug/chern\\_class](http://www.math.ust.hk/ug/chern_class)