

BSc in Mathematics and Economics (MAEC)

This is an interdisciplinary program jointly offered by the HKUST's School of Science (SSCI) and the School of Business and Management (SBM). As the complexity and technical aspects of contemporary economic problems exhibit strong synergy between mathematics and economics, this joint-school program aims to provide students with solid training in the fundamental theories of both disciplines. The MAEC program is suited to students who are keen on acquiring a strong quantitative background in economics to work in the business and financial sectors, or who intend to pursue further study in applied mathematics, economics, or business-related areas such as finance and management science.



Program Overview

- Unique undergraduate program in Hong Kong that combines modern economic theory with advanced mathematical skills, providing students an excellent foundation for a successful career in the business, finance, or public sectors.
- Broad-based education that stresses lifelong learning abilities; the balanced curriculum instills in students quantitative reasoning skills, conceptual understanding, and the ability to effectively communicate in mathematics and in the language of economics and social sciences.

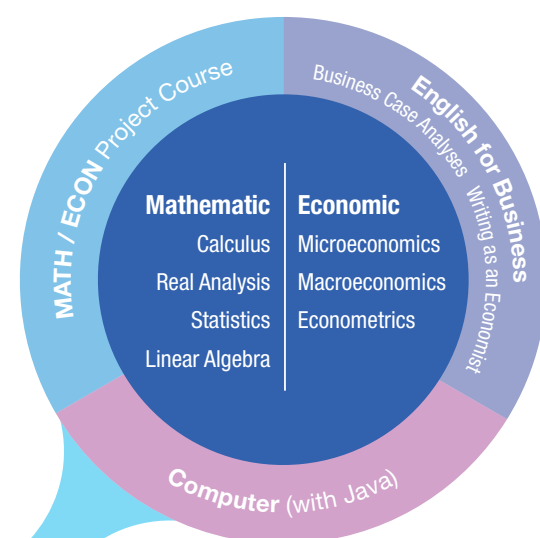
Program Structure

The 4-year MAEC program combines modern economic theory with advanced mathematical skills. The curriculum provides students with solid training in the fundamental theories of both mathematics and economics. Students will be equipped with quantitative reasoning skills, conceptual understanding, and the ability to communicate in mathematics effectively and the language of economics and social sciences. Below are the key components of the curriculum:

Subject Area	No. of Courses
Mathematics (Core)	7-8
Mathematics (Depth Electives)	2
Economic (Core)	7-8
Economic (Depth Electives)	2
Science Foundation	2
Accounting / Finance	2
Language for Business	1
Computing	1
University Common Core	10

Intended Learning Outcomes

- Critically evaluate practical economic models and exercise sound economic judgment in applying mathematical and economic principles to achieve justifiable solutions and making effective decisions supported by analytical and quantitative techniques.
- Communicate quantitative and economic concepts and methods effectively to a range of audiences, both in oral and written forms.
- Be effective users of information technology and use statistical and econometrics software to deal with databases in conducting empirical analysis in business applications.
- Understand the professional and ethical responsibility and have informed ethical thinking based on rigorous quantitative and economic analysis.



Enrichment Activities

Every year, the School of Science and the School of Business and Management run a broad spectrum of enrichment activities such as international exchange, career training and internship program, and social service projects. The goal is to help our students develop a global perspective as well as sharpen their interpersonal skills.

Students enrolled under the joint-school MAEC program are eligible to:

- sign up for professional seminars and co-curricular programs organized by both Schools;
- join either School's international exchange program; and
- access the job banks and career services provided by both Schools.

A MAEC student joined the WISE Singapore Study Tour, organized by the HKUST's Women In Science and Engineering (WISE) club.



A MAEC student participated in an activity of Alpha Kappa Psi, one of the oldest and largest business fraternities.

Career Prospects

Career opportunities in the actuarial, banking and finance industry in Hong Kong are promising for those capable of applying mathematical tools to understand the financial markets and make economic forecasts. Graduates with an interdisciplinary degree are increasingly valued and needed in the job market, and tend to have more diverse career options than those majoring in Mathematics or Economics alone. A number of MAEC alumni have joined top-ranked financial institutions and multinational firms. Our MAEC graduates are equipped with sufficient background for entry into advanced/professional degree programs in economics, financial mathematics, statistics, and other business-related fields. Recent graduates have been admitted to PhD / Master's programs at leading universities worldwide.





Words from MAEC Student

It is an incredible experience to study Mathematics and Economics at a world-class university. As a student of the joint-school program, I can really feel the support from both the School of Science and the Business School that provide me with ample resources for personal and career development. Studying at HKUST with friendly and reputable professors, staff, and students really makes me feel like I am in the best place to spend my university life.

Gerald GUNAWAN

BSc in Mathematics and Economics, Class of 2023

Admissions Requirements

Prospective students may apply for the MAEC program through direct choice in the JUPAS / Non-JUPAS admissions scheme, or transfer from the regular Science / Business School programs after their first year of study. Admissions is based on academic results and interview performance.

JUPAS

Program-based Entry (JS5813)

HKDSE applicants with one of: M1 / M2/ Biology / Chemistry / Physics / Combined Science / Economics

Non-JUPAS

Applicants with international qualifications (**IBDP, GCEAL, SAT,** etc.) with one senior level subject from:

Mathematics / Biology / Chemistry / Physics

School-based Admissions

via SSCI or SBM

Students admitted into SSCI / SBM can declare MAEC after completing the first year of study.

JOIN MAEC PROGRAM GO BEYOND YOUR LIMITS FIND TRANSFORMATION HERE

School of Science – Undergraduate Admissions

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MAEC website



SSCI Linktree

