### Testimonials



#### WOO Pui Yung, Anna 2022 graduate

Currently a PhD student in CSE at University of Michigan.

Not only did I acquire a solid knowledge in areas such as communication systems and signal processing from the programme, but I also developed problemsolving skills and abilities to generate innovative solutions.



LIU Yinvin 2020 graduate Currently an MSc student in EECS at UC Berkeley.

The mathematical bottom-up type of thinking and the engineering top-down type of thinking -these two types of thinking trained us to be both creative and rigorous.



**Bachelor of Science (Hons) in** 

### MATHEMATICS

Analysis Calculus · Algebra Discrete Math · Probability

> Algorithms **Data Structures Information Theory Signal Processing**

Machine Learning · Big Data **Communications** Networking **Cyber Security** 



### www.mie.cuhk.edu.hk

An interdisciplinary programme jointly offered by Department of Information Engineering and **Department of Mathematics** 



LI Chenghui 2018 graduate First destination: MSc in IT at CMU. Currently a Research Engineer at Meta Reality Labs.

The MIEG programme is undoubtedly good for pursuing a higher degree. Most of the graduates can get some nice offers when applying for a Master or PhD degree after graduation.



YIN Zi 2013 graduate First destination: PhD in EE at Stanford. Currently a Vice President at D. E. Shaw Group.

Good enaineerina capability is required for experimentation, and a sharp math mind is needed for the understanding and analysis of results. A complete research cycle consists of both aspects.

#### Contact Persons



Department of Information Engineering The Chinese University of Hong Kong

**Professor Cheuk Ting LI** ctli@ie.cuhk.edu.hk 3943-5156

**Professor Chandra NAIR** chandra@ie.cuhk.edu.hk 3943-8467





Professor Eric T.S. CHUNG  $\sim$ tschung@math.cuhk.edu.hk .) 3943-7972



🌐 http://www.mie.cuhk.edu.hk 🛛 admin-mieg@ie.cuhk.edu.hk



# Mathematics and Information Engineering

JUPAS JS4733

### **Objectives**:

Acquire Analytical Problem Solving Skills

Ability to develop Innovative and **Creative Solutions** 

Attain **Solid Foundation** for Research

## Mathematics is our Passion ...

## ... Engineering is our Profession.

### Overview

Mathematics and Information Engineering (MIEG) is a selective interdisciplinary programme jointly offered by the Faculty of Science and the Faculty of Engineering, with the Department of Mathematics and the Department of Information Engineering being responsible for the management and operations.

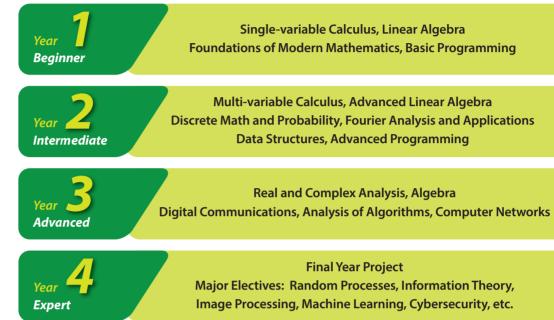
This is a rewarding programme designed to equip gifted students with solid fundamental knowledge in mathematics, information and computer sciences. MIEG graduates go for postgraduate studies at the top universities worldwide or pursue independent research or careers in various sectors.

JUPAS JS473









80+ Major Electives for you to choose, from fields of Big Data, Information Processing, Cyber Security, Internet Engineering, Telecommunications, Computer Networking, Software Engineering, and Mathematics.



### Programme Features

The programme places strong emphasis on research and encourages independent studies under the supervision of professors from either department. Students who excel in their studies will have opportunities to take up research work during their later years of study.



JUPAS

### Admission Channels for Different Qualifications

For secondary school students taking HKDSE. Admission is based on the results of 4 Core and 2 Electives with subject weighting.

Category	Subject Group	Min. Level	Weight
Core	English Language	4	1
	Chinese Language	3	1
	Mathematics (Compulsory Part)	5	2
	Liberal Studies	3	0.5
Elective	Mathematics Extended Module I or II	5	2
	Biology / Chemistry / Combined Science / Information and Communication Technology / Physics	4	1.5
	All other Elective Subjects		1



### Non-JUPAS (Local)

For local applicants with qualifications other than HKDSE, such as GCE-AL, IB, SAT/AP or other gualifications, please check the programme website for relevant information.



### International

For non-local applicants who require a student visa, or entry permit to study in Hong Kong, and with overseas qualifications such as GCE-AL, International-AL, IB, and other high school qualifications from recognised institutions, please contact us for more information.

**Major Requirement** 87 units +

Graduation

**Requirements** 

University **Core Requirement** 39 units

126 units

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### Mainland

Mainland China students who are current Gaokao candidates (应届高考生) must apply through the National Colleges and Universities Enrolment System (全国普通高 校统一招生计划)

Note: Applications of these two schemes will be assessed on a case-by-case basis.