Testimonials

WOO Pui Yung, Anna
2022 graduate
Currently a PhD student in CSE at University of Michigan.

LIU Yinyin
2020 graduate
Currently an MSc student in EEC at UC Berkeley.

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

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

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

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.

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.

Objectives:

- Acquire Analytical Problem Solving Skills
- Ability to develop Innovative and Creative Solutions
- Attain Solid Foundation for Research

MATHEMATICS

Analysis
Calculus · Algebra
Discrete Math · Probability

Algorithms
Data Structures
Information Theory
Signal Processing

Machine Learning · Big Data
Communications
Networking
Cyber Security

INFORMATION SCIENCE

Bachelor of Science (Hons) in
Mathematics and Information Engineering

JUPAS CODE JS4733

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

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.

Admission Channels for Different Qualifications

JUPAS

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

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

Non-JUPAS (Local)

For local applicants with qualifications other than HKDSE, such as GCE-AL, IB, SAT/AP or other qualifications, 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.

Mainland

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

Graduation Requirements

<table>
<thead>
<tr>
<th>Year</th>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Major Requirement</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>University Core Requirement</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>126</td>
</tr>
</tbody>
</table>

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