



Department of
Biomedical Engineering
The Chinese University of Hong Kong

BEng (Hons) in Biomedical Engineering

Academic Counselling 2025

12 August 2025

Prof. Martin MAK
Associate Professor
Department of Biomedical Engineering



<http://www.bme.cuhk.edu.hk>



BMEDEPT



CUHK Biomedical Engineering



CUHK Biomedical Engineering

Biomedical Engineering ranks **global TOP 11** in 2024
subject ranking of Academic Ranking of World
Universities (ARWU)



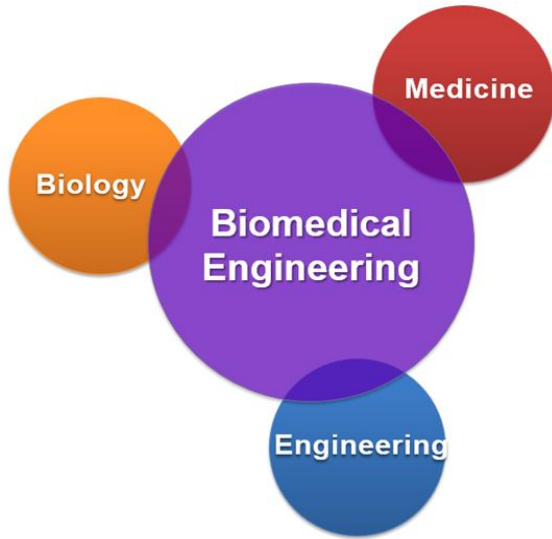
Global Ranking
11th

Hong Kong Ranking
1st

Year	2018	2019	2020	2021	2022	2023	2024
Global Ranking	101-150	51-75	33	18	13	20	11
Hong Kong Ranking	3	2	2	1	1	1	1

<https://www.shanghairanking.com/rankings/gras/2024/RS0208>

Biomedical Engineering (BME)



CUHK-BME's Motto

EXPLORE 探索
CARE 關懷
INNOVATE 創新

- An interdisciplinary division offered by the **Faculty of Engineering** in close collaboration with the **Faculty of Medicine**
- Both basic and applied research
- Wide access to courses offered by different divisions
- Tailor-made learning programmes
- Individualized PhD candidacy examination

Academic Advisors in BME



Prof. Dongan WANG
Professor & Chairman



Prof. Jonathan CHOI
Professor



Prof. Aaron HO
Professor



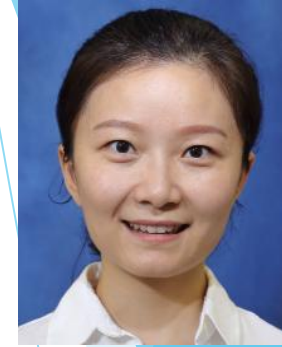
Prof. Megan HO
Professor



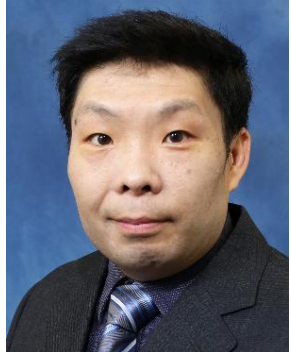
Prof. Chuanbin MAO
Professor



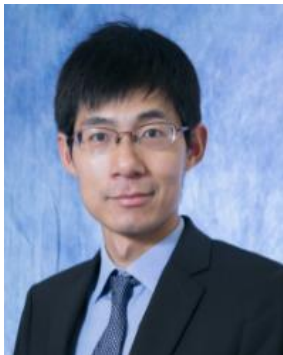
Prof. Raymond TONG
Professor



Prof. Liting DUAN
Associate Professor



Prof. Martin MAK
Associate Professor



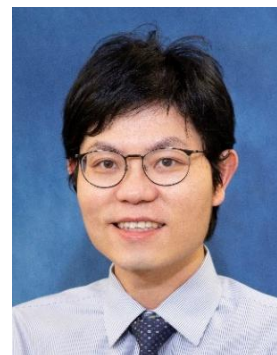
Prof. Renjie ZHOU
Associate Professor



Prof. Alan LI
Vice-Chancellor
Assistant Professor



Prof. Charles CHANG
Assistant Professor



Prof. Zhaoli GAO
Assistant Professor



Prof. Scott YUAN
Assistant Professor



Dr. Wutao LOU
Lecturer

Study Scheme

Access BME website <http://www.bme.cuhk.edu.hk/>

Click “Students” > “Undergraduate Students” > Study Scheme > **Your Admission Year**

STUDY SCHEME

YEAR 2025-2026

Applicable to students admitted in 2025-26 - [download link](#)

Academic Advisor

ID:

student center

general info

academics

admissions

financial aid

Student Center

▼ Academics

[My Class Schedule](#)
[Shopping Cart](#)
[My Planner](#)

other academic... ▼

Deadlines

URL

Gradebook

This Week's Schedule

	Class	Schedule
	BMEG 2001-- LEC (4896)	Mo 1:30PM - 2:15PM Y.C. Liang Hall 103
	BMEG 2210-- LEC (7344)	We 10:30AM - 11:15AM Institute of Chin Studies L1 Tu 4:30PM - 6:15PM William M W Mong Eng Bldg 407
	BMEG 2210--T01 TUT (7377)	We 11:30AM - 12:15PM Institute of Chin Studies L1
	CHEM 1380-B LEC (7507)	Tu 1:30PM - 2:15PM Science Centre L1 Th 3:30PM - 5:15PM Science Centre L1
	CHEM 1380-BT01 TUT (7508)	Tu 2:30PM - 3:15PM Science Centre L1
	CHLT 1200-GH LEC (4181)	Th 12:30PM - 3:15PM Y.C. Liang Hall G03

SEARCH FOR CLASSES

▼ Enrollment Dates
[Open Enrollment Dates](#)

▼ Advisor
Program Advisor
Professor TONG Kai Yu
[details ▶](#)

Check CUSIS to find out
who is your academic
advisor (will be ready
in early September)

Students are advised to meet their Academic Advisor at least once per semester!

BME Curriculum Structure

University Core Requirements#	
	<u>Units</u>
Chinese Language	5
English Language	8
University GE	7
College GE	6
Foundation GE Courses	6
Understanding China	1
Hong Kong in the Wider Constitutional Order	1
IT	3
PE	2
Total:	39

Major Programme Requirements	
	<u>Units</u>
Faculty Package	9
Foundation Courses	12
Major Required Courses	36
Research Component Courses	6
Major Elective Courses	12
Total:	75

Free Electives: 9

Minimum Units for Graduation: **123**

For details of University Core, please visit: <http://www.res.cuhk.edu.hk/en-gb/undergraduate-students/information-for-year-1-students/information-on-university-core-requirements-and-exemption>

Student Handbook: http://rgsntl.rgs.cuhk.edu.hk/aqs_prd_applx

Recommended Study Scheme: Year 1

	Units	Pre-assigned
<u>Year 1 - Term 1</u>		
• BMEG2001 Introduction to Biomedical Engineering	1	✓
• CHEM1280 Intro to Organic Chemistry & Biomolecules/ CHEM1380 Basic Chemistry for Engineers/ LSCI1001 Basic Concepts in Biological Sciences/ LSCI1002 Introduction to Biological Sciences	0-3	
• ENGG1125 Single Variable Calculus for Engineers	3	✓
• PHYS1110 Engineering Physics: Mechanics and Thermodynamics	3	✓
• SBMS1431 Human Anatomy and Physiology I	2	✓
<u>Year 1 - Term 2</u>		
• ENGG1120 Linear Algebra for Engineers	3	✓
• ENGG1130 Multivariable Calculus for Engineers	3	✓
• CHEM1280/ CHEM1380/ LSCI1001/ LSCI1002* (if not taken in Term 1 and depends on the course offering term)	0-3 2	✓
• SBMS1432 Human Anatomy and Physiology II		
<u>Year 1 - Summer (4 weeks)</u>		
• BMEG2603 Hospital Experience and Engineering Practicum (Summer Practical Training) (*please reserve your time & take it in year-1 summer!!!)	2	✓

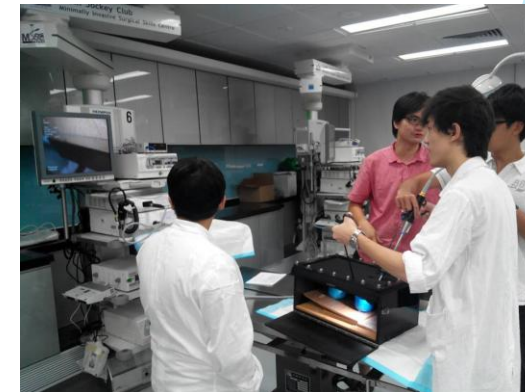
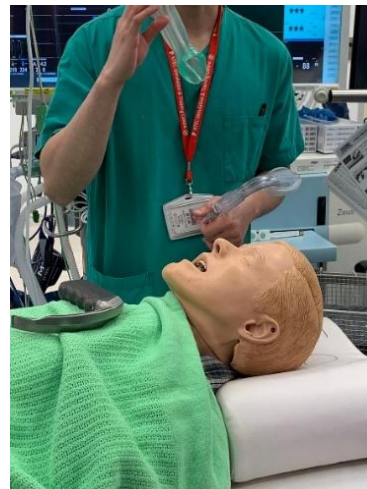
For Year 1 students, all required courses will be pre-assigned to you except CHEM & LSCI courses (unless there is time clash due to re-take of foundation courses)

*Students who would like to take LSCI1002 to fulfill the major requirement are recommended to take the course in their Year 1 or Year 3 as the course may be clashed with SBMS1440 in Year 2 study.

BME Practical Training

BMEG2603 Hospital Experience and Engineering Practicum (Year 1 Summer)

- Four-week professional and practical summer training on CUHK main campus and at Prince of Wales Hospital (PWH) and CUHK Medical Centre (CUMC) for Year 1 students
- **In-house Training involves:**
Electronic Circuit Design, Simulation, Fabrication, Interfacing with Software, Data Acquisition and Wireless Communication, etc.
- **Hospital Training involves:**
 - Daily operation, information flow and logistics in the clinic
 - Fundamentals and basic operation of medical instruments



Recommended Study Scheme: Year 2

	Units	Pre-assigned
<u>Year 2 - Term 1</u>		
• ENGG1110 Problem Solving By Programming	3	✓
• ENGG1111 AI Literacy Workshop	0	
• BMEG2210 Orthopaedic Biomechanics and Musculoskeletal Injury	3	✓
• BMEG2410 Complex Analysis and Differential Equations	3	✓
<u>Year 2 - Term 2</u>		
• BMEG2012 Biomedical Engineering Laboratory	2	✓
• BMEG2218 Ethical Practice in Bionic Human	2	✓
• BMEG2300 Circuits and Signals for Biomedical Engineering	3	✓
• ENGG1310 Engineering Physics: Electromagnetics, Optics and Modern Physics	3	✓
• SBMS1440 Cell and Molecular Biology in Biomedical Engineering	2	✓
• STAT3210 Statistical Techniques in Life Sciences	3	✓

For Year 2 students, all required courses except ENGG1111 will be pre-assigned to you (unless there is time clash due to re-take of foundation courses)

Recommended Study Scheme: Year 3-4

	Units	Pre-assigned
<u>Year 3 - Term 1</u> Major required: (1) BMEG3430 Biomaterials and Tissue Engineering (2) BMEG3111 Medical Instrumentation and Design (3) BMEG3320 Biomedical Imaging Major Elective: 1 course	8 3	
<u>Year 3 - Term 2</u> Major required: BMEG4010 Global Medical Device Regulatory Affairs Major Elective: 1 course	3 3	
Year 4: Work-Study for students who want to receive industrial training Note: Students who have completed a structured training programme are qualify for consideration of ENGG1820 Engineering Internship (1 unit)		
<u>Year 4 - Term 1 (or Year 5 for work-study)</u> Major required: BMEG4998 Final Year Project I Major Elective: 1 course	3 3	✓
<u>Year 4 - Term 2</u> Major required: BMEG4999 Final Year Project II Major Elective: 1 course	3 3	✓

Please discuss with your Academic Advisor if necessary

Stream Specialization

Students may choose not to specialize in any stream or to specialize in one of the three streams and complete a minimum of 12 units of courses, at most one elective at 2000 or below level, plus BMEG4998 and 4999[e], prescribed by the stream

Medical Instrumentation & Biosensors (MIB)

BMEG3103 Big Data in HealthCare	BMEG3130 TeleMedicine & Mobile Healthcare	BMEG3210 Biofluids
BMEG3330 Neuroengineering	BMEG3420 Medical Robotics	BMEG3440 Global Engineering Medical Innovation
BMEG4220 Wearable Biomedical Devices and Personalized Healthcare	BMEG4410 BioMEMS	BMEG4450- Bionanotechnology
BMEG4520 Cardiovascular Engineering	ELEG3201 Microelectronic Devices and Circuits	CSCI course(s) * Students are allowed to take a maximum of 3 units of CSCI course(s) at 1000 or above level

Biomedical Imaging, Informatics & Modeling (BIIM)

BMEG3102 Bioinformatics	BMEG3103 Big Data in HealthCare	BMEG 3105 Data Analytics for Personalized Genomics and Precision Medicine
BMEG3440 Global Engineering Medical Innovation	BMEG4220 Wearable Biomedical Devices and Personalized Healthcare	BMEG4320 AI & Imaging for Biomedical Engineering
BMEG4520 Cardiovascular Engineering	CSCI course(s) * Students are allowed to take a maximum of 3 units of CSCI course(s) at 1000 or above level	

Molecular, Cell & Tissue Engineering (MCTE)

BMEG3105 Data Analytics for Personalized Genomics and Precision Medicine	BMEG3140 Molecular and Cellular Engineering Laboratory	BMEG3210 Biofluids
BMEG3440 Global Engineering Medical Innovation	BMEG4410 BioMEMS	BMEG4450 Bionanotechnology
BMEG4510 Biomolecular Engineering	BMEG4520 Cardiovascular Engineering	BMEG4530 Musculoskeletal Tissue Engineering
MBTE4320 Genetic Engineering	CSCI course(s) * Students are allowed to take a maximum of 3 units of CSCI course(s) at 1000 or above level	

Course Registration - CUSIS

- Register your courses through CUSIS during your allotted timeslot on **27 August 2025 (*10:00 am - 10:00 pm)**
- For details on University Core, please visit the RES website:
<http://www.res.cuhk.edu.hk/en-gb/undergraduate-students/information-for-year-1-students/information-on-university-core-requirements-and-exemption/university-core-requirements-for-year-1-students>

** Login time is from 10:00 a.m. for new students admitted with Advanced Standing or admitted to senior-year places and those admitted to Medical Year 2 or above. Other students' login time is from 11:00 a.m.*

Add/Drop Courses

Date / Time	Add/Drop
8 September 2025 (8:30 pm) - 14 September 2025 (8:30 pm)	CUSIS e-Add/Drop

- You are strongly advised to plan and select courses very carefully
- You should give priority to **Pre-assigned** courses
- *Minimum* no. of units in a term: 9
- *Maximum* no. of units in a term: 18
- Maximum no. of units in *summer term*: 6
- Maximum no. of units in an academic year: 39 (*summer courses included*)

Note:

First-year students (excluding senior-year entrants) are allowed to take up to 19 units in each term (Term 1 & 2 2025-26). The maximum no. of units in an academic year will remain 39.

Double Degree Option

ERG-BBA

- 1st degree: Bachelor of Engineering (Biomedical Engineering)
 - 2nd degree: Bachelor of Business Administration (Integrated BBA Programme)
 - Collaborated with the Faculty of Business Administration
-
- *Subject to the approval of the two Faculties/Programs concerned*
 - *Must complete at least 30 units of Integrated BBA Programme courses within the normative / minimum study period of 1st degree*
 - *For further information, please refer to the Faculty website at <http://www.erg.cuhk.edu.hk/erg/ergbba>*

Minor Programmes

- Students can take up to two minor programmes
- 18-30 units for each minor programme

For details, please refer to the section "Requirements of Major Programmes and Minor Programmes" under the 4-year normative curriculum of the [Undergraduate Student Handbook](#).

BME Outstanding Achievement Scholarships

Number of Awards

EIGHT awards, \$10,000 each

Open to students for application in every academic year!
(at the end of the 2nd semester, around June every year)

Eligibility and Award Criteria

- Year 1 to Year 4 or above BME undergraduate students
- Year GPA of 3.0 or above in the previous year of study
- Participated in co-curricular and/or extra-curricular activities:
 - ✓ Awards, especially those related to BME discipline
 - ✓ Community Service, e.g. contribution to BME Department (such as serving in the BME Society, BME Student Ambassador and BME Buddy Scheme and) and/or Profession
 - ✓ Other achievement, e.g. sports, competitions, voluntary work
- Financial needs
- Interview Performance
- Awardees of the previous academic year are also eligible, however, the applications will be evaluated on the track for non-cash award.



BME Outstanding Achievement Scholarships 2024-25

Name	Year of Study in 2024-25
POON, Chi Yung	1
TOU, Sam lao	1
ARIANTI, Putu Juanita	2
CHEUNG, Yu Yan	2
FU, Yingqi	2
ZHANG, Laibohan	2
LEE, Ho Lam	3
LEE, Michelle	3
SANTOSO, BERENICA	3
SHANG, Chenyu	3
ZHAI, Xueer	3
LEUNG, Chung Ki	4

Important Regulations

Study Period

Normative study period: 4 years

Maximum study period: 6 years

(including any periods of leave of absence and suspension of studies, but excluding any periods of compulsory military service)

Change of Study Period

Participating in approved exchange programs and internship schemes will be allowed

UG Student Handbook: http://rgsntl.rgs.cuhk.edu.hk/aqs_prd_applx

Keep check CUHK Email Account and reply us!

All important messages will be sent to your CUHK email account.

Please check your CUHK email account regularly!

When emailing your academic advisor, course instructors or major programme administration, be professional, courteous and clear.

Your email should include the following details:

- A subject line to state the purpose of your email
- Your full name
- Student ID
- Course code and name
- Other main information as appropriate

BME Internships Opportunities

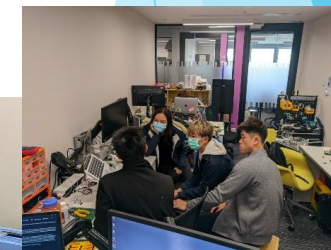
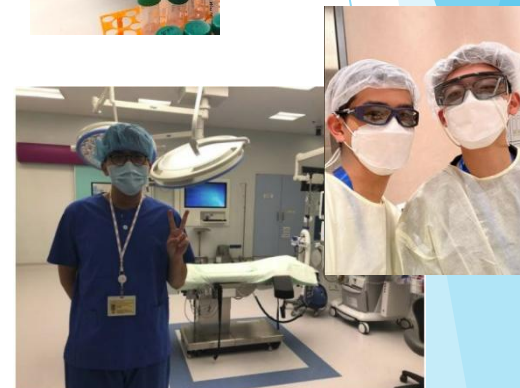
In the last two academic years, our senior-year students joined local and overseas internship programmes and work-study

Overseas Summer Research Internship (past opportunities)

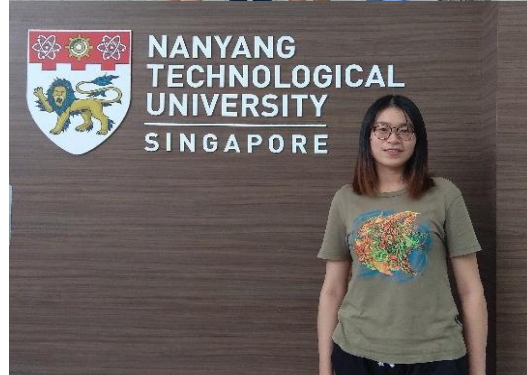
Hosting Institution	
Columbia University, US	Imperial College, UK
Michigan State University, US	University of Toronto, Canada
Northwestern University, US	University of Sydney, Australia
University of Pennsylvania, US	Korea Institute of Science & Technology, South Korea
University of Pittsburgh, US	National University of Singapore, Singapore
University of California, US	Nanyang Technological University, Singapore
University of California at San Diego, US	Technika University of Gdańsk, Poland
University of California at Irvine, US	Chang Gung University, Taiwan
University of Illinois at Urbana-Champaign, US	National Taiwan University, Taiwan
Stanford University, US	National Tsing Hua University, Taiwan
New Jersey Institute of Technology, US	French National Centre for Scientific Research (CNRS), Troyes, France
Tsinghua University, Beijing, China	

Other past summer BME internship opportunities include:

- **Public sector:** HKPC, EMSD
- **Medical sector:** HA, local private hospitals (e.g. Hong Kong Adventist Hospital-Tsuen Wan & Stubbs Road, Gleneagles Hospital, St. Paul Hospital etc.), Johnson & Johnson Medical Devices, Stryker, Celki Medical etc.
- **Academic sector:** CAS SIAT, HKSTP, Professors' lab



Overseas Exchange



Recent BME Activities

Townhall Meeting



Alumni Sharing



MRC Lab Visit



Annual Spring Dinner



Where do our BME graduates go?

- Manufacturing Industries
- Clinical Engineers in Hospitals
- Entrepreneurs in Biotech Companies
- Regulatory Affairs
- Distribution & Sale
- Testing Laboratories
- Research Scientists & Engineers
- Further Studies (MSc, PhD, MD, MBA, PCLL)



BME Graduates Career Pathways (2022-2024)

Engineering/ Product Support

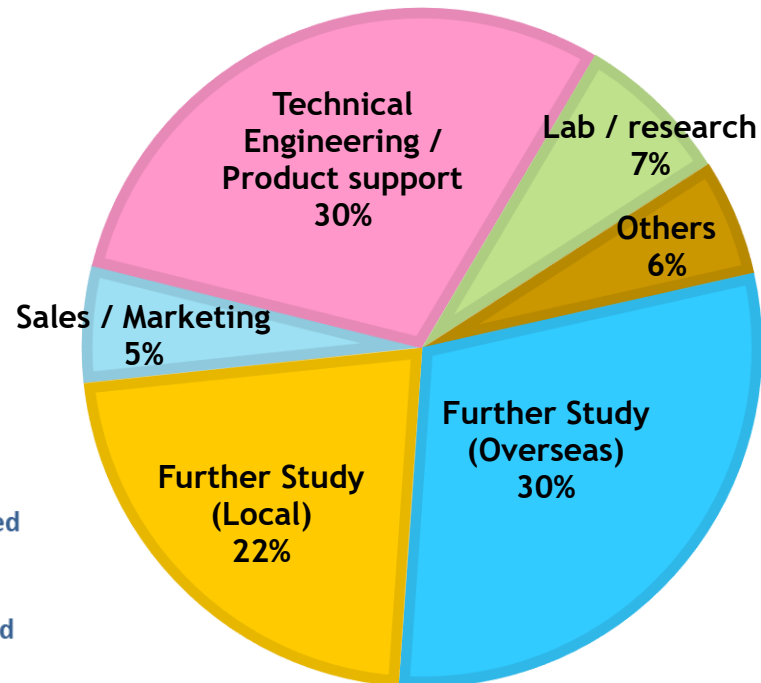
- Abbott Medical
- Celki Vitlaire
- Electrical and Mechanical Services Department
- Eppendorf China Limited
- Getinge Group HK
- Hong Kong Adventist Hospital – Stubbs Road
- Hong Kong Adventist Hospital – Tsuen Wan
- Hospital Authority
- Morning Bright Engineering Co., Ltd
- Most Glory Trading Limited
- Olympus Corporation of Asia Pacific Limited
- PhoMedics
- Roche Diagnostic
- Sanwa Biotech
- Union Hospital

Sales/ Marketing

- Antercare
- Johnson & Johnson
- Kinwood Healthcare Limited
- Philips
- Siemens
- Ultronic Enterprise Limited

Further Studies (Local)

- The Chinese University of Hong Kong
- The Education University of Hong Kong
- The Hong Kong University of Science and Technology
- The Hong Kong Polytechnic University



Lab/ Research

- The Chinese University of Hong Kong
- The Hong Kong Polytechnic University
- City University of Hong Kong
- Center for Neuromusculoskeletal Restorative Medicine (CNRM)
- Hong Kong Centre for Neurodegenerative Disease Limited

Others

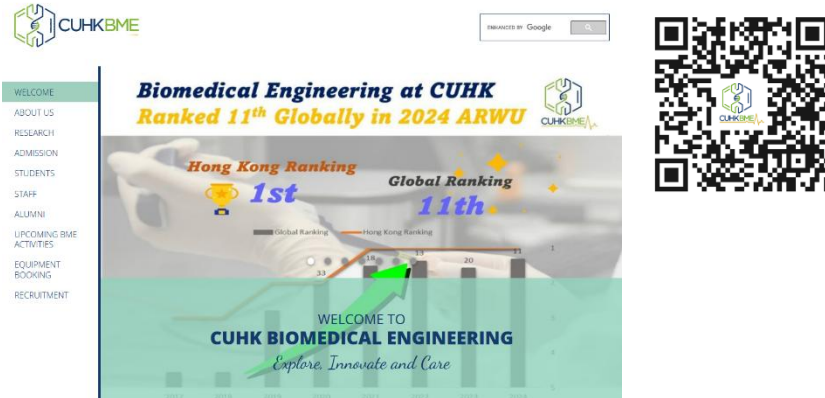
- HKFYG (Creative Education Unit)

Further Studies (Overseas)

- Auckland University of Technology
- Doshisha University
- Imperial College London
- Johns Hopkins University
- McGill University
- National University of Singapore
- Northwestern University
- Ruprecht Karl University of Heidelberg
- Seoul National University
- The University of Edinburgh
- University of Nottingham
- University of Oslo
- University of Toronto

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CUHK Biomedical Engineering (BME) Official Webpage



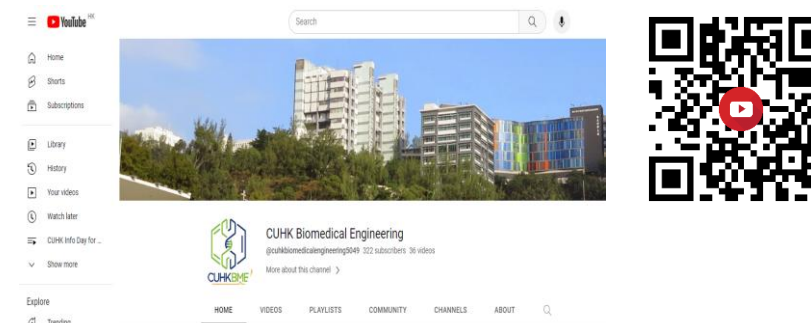
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CUHK Biomedical Engineering (BME) Facebook Webpage



CUHK Biomedical Engineering (BME) YouTube Channel



CUHK BME Society - 翊醫瀛源 Pelagos



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追蹤

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香港中文大學生物醫學工程學系系會

第十五屆內閣「翊醫瀛源Pelagos」

The 15th Cabinet of Biomedical Engineering Society, CUHK

Email: bmelagos@gmail... 更多



bmelagos@gmail.com



CUHK BME - Alumni Association



cuhkbmealumni



cuhkbmealumni@gmail.com



BME Student Ambassadors 2025-26

Name	Admission Channel	Year of Study	Gender	Contact
POON, Chi Yung	Non-JUPAS Local	2	F	1155199056@link.cuhk.edu.hk
CHARUSROJTHANADECH, Kuntapath	International	2	F	1155206525@link.cuhk.edu.hk
TOU, Sam lao	International	2	F	1155221935@link.cuhk.edu.hk
ARIANTI, Putu Juanita	International	3	F	1155211356@link.cuhk.edu.hk
BRITNEY-ALEXANDRA-VERMINSHU	International	3	F	1155221685@link.cuhk.edu.hk
FU, Yingqi	Non-JUPAS Local	3	F	1155211218@link.cuhk.edu.hk
ZHANG, Laibohan	Mainland Gao Kao	3	M	1155193424@link.cuhk.edu.hk
LEE, Tsz Yeung	JUPAS	4	M	1155194369@link.cuhk.edu.hk
LI, Wai Kwan	JUPAS	4	M	1155179462@link.cuhk.edu.hk
LEE, Michelle	International	4	F	1155220174@link.cuhk.edu.hk
SANTOSO, Berenica	Non-JUPAS Local	4	F	1155184201@link.cuhk.edu.hk

BME Student Ambassadors' Sharing

Name	Admission Channel	Year of Study
ARIANTI, Putu Juanita	International	3
POON, Chi Yung	Non-JUPAS Local	2
TOU, Sam lao	International	2

Q & A Session