

TOWN HALL MEETING

(Term 2, 2024-25)

Prof. Aaron Ho
BME Department Chairperson
20 March 2025 (Thur)

11:30 AM - 12:30 PM

(BME Website => Students => Undergraduate Students => Town Hall Meeting)



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



CUHK Biomedical Engineering



BMEDEPT



CUHK Biomedical Engineering



Regular Town Hall Meeting

Town Hall meetings will be held every semester to ensure good communication with students in BME.



Agenda

- Programme Outcomes
- Summer Internship (Overseas and Local)
- Stream Preference and Declaration
- Elective Course Offering in 2025-26 (Tentative)
- BME Graduates Survey 2024
- Programme Curriculum Updates
- Others



Programme Outcomes

	Programme Outcome					
	PO 1	an ability to master the required knowledge of mathematics, science, and engineering and apply them appropriately to the BME discipline in general and/or to a specialized BME area				
	PO 2	an ability to design and conduct experiments, collect data on humans and other biological specimens, and to analyze and interpret data to address health-related issues				
	PO 3	an ability to design a system, component or process to meet desired needs within realistic constraints, and to develop innovative technologies to serve the healthcare needs of society				
	PO 4	an ability to identify, formulate and solve engineering problems critically				
/	PO 5	an ability to use the techniques, skills, and modern engineering tools necessary for BME practice				
	PO 6	an ability to use the computer/IT tools relevant to the BME discipline along with an understanding of their processes and limitations				
	PO 7	an ability to communicate effectively				
	PO 8	an ability to demonstrate leadership, to manage projects, and to function on multi-disciplinary teams				
	PO 9	an ability to understand professional and ethical responsibility, and the impact of engineering solutions in a global and social context, especially the importance of health, safety and environmental considerations to both workers and the general public				
	PO 10	a readiness to engage in lifelong learning to stay abreast of contemporary issues, and a capacity to acquire new knowledge and skills across disciplinary boundaries				

Programme Outcomes

Matching between the Programme Outcomes and the HKIE Graduate Attributes

HKIE Graduate Attributes	BME Programme Outcomes
 a) an ability to apply knowledge of mathematics, science, and engineering approprio the degree discipline 	ate to PO1
b) an ability to design and conduct experiments as well as to analyze and interpret da	ata PO2
c) an ability to design a system, component or process to meet desired needs within reconstraints, such as economic, environmental, social, political, ethical, health & safe manufacturability & sustainability	
d) an ability to function on multi-disciplinary teams	PO8
/ e) an ability to identify, formulate and solve engineering problems	PO4
f) an ability to understand professional and ethical responsibility	PO9
g) an ability to communicate effectively	PO7
h) an ability to understand the impact of engineering solutions in a global and social context, especially the importance of health, safety and environmental consideration both workers and the general public	ons to PO9
i) an ability to stay abreast of contemporary issues	PO10
j) an ability to recognize the need for, and to engage in lifelong learning	PO10
k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice appropriate to the degree discipline	PO5
I) an ability to use the computer/IT tools relevant to the discipline along with an understanding of their processes and limitations	PO6

- 1. BME Overseas Research Exchange
- 2. Local Internship
 - BME Undergraduate Research Internship
 - Faculty Undergraduate Summer Research Internship
 - Government, Hospitals & Companies



1. BME Overseas Summer Research Exchange (Summer 2025, 8-10 weeks)

Oversea Institutions:

- Monash University, Melbourne
- National Tsing Hua University, Taiwan
- New Jersey Institute of Technology, America
- New Zealand College of Chiropractic, New Zealand
- University of Washington, America
- All information has been uploaded to our Department's website

http://www.bme.cuhk.edu.hk/new/overseas_internship.php

1. BME Overseas Summer Research Exchange (Summer 2025, 8-10 weeks)

Interested students should complete the attached application form and submit it with all required documents to the department at bmeinfo@cuhk.edu.hk by 20 December 2024 (Fri).

*** Late applications will not be considered ***

Important Date

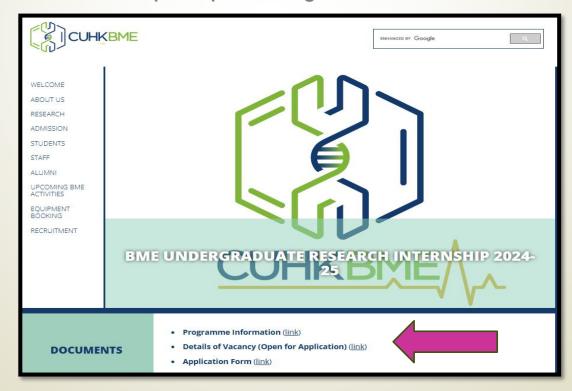
Application Deadline	20 December 2024			
Interview by the BME Panel	9 -10 January 2025			
Matching and Nomination to the Hosts	11 - 24 January 2025			
Interview and Decision by the Hosts	25 January – 7 February 2025			
Official Notification of Acceptance	By the end of February 2025			

2. Local Internship

BME Undergraduate Research Internship

http://www.bme.cuhk.edu.hk/new/ug_internship.php

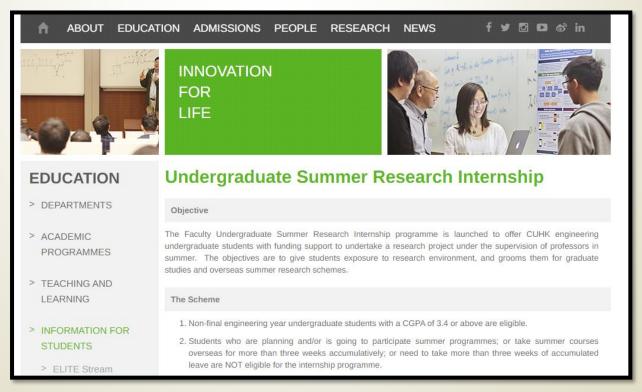
Students must demonstrate strong academic performance, with a cumulative GPA of 2.8 or higher. Please note that final-year students are not allowed to participate during the summer.



2. Local Internship

Faculty Undergraduate Summer Research Internship https://www.erg.cuhk.edu.hk/erg/SummerResearchInternship

Non-final year undergraduate students with a <u>cumulative GPA of 3.4 or</u> <u>above</u> are eligible to apply.



2. Local Internship

Government, Hospitals & Companies

- CUHK Medical Centre (2)
- Gleneagles Hospital (1)
- Hong Kong Adventist Hospital (Stubbs Road) (1-2)
- Hong Kong Adventist Hospital (Tsuen Wan) (1-2)
- Hospital Authority (1-2)
- St Paul's Hospital (2)
- GE Medical Systems HK Ltd (2)
- DBS (1)



Stream Preference and Declaration

Students may choose not to specialize in any stream or to specialize in one of the three streams and complete at least 12 units from the elective courses listed in the study scheme, at most one elective at 2000 or below level, plus BMEG4998/ESTR4998 and BMEG4999/ESTR4999, prescribed by the stream.

Important Date

By 9 February 2025 (Sun)

Survey on Stream Preference & BMEG Elective Course Offering in the next academic year 2025-26. (For Year 1 Senior-year entry and Year 2 or above students)

https://cloud.itsc.cuhk.edu.hk/webform/view.php?id=13700210

By 30 May 2025 (Fri)

Students who are expected to graduate in Term 2, 2024-25, and would like to declare stream, please complete the form

https://cloud.itsc.cuhk.edu.hk/webform/view.php?id=13703626

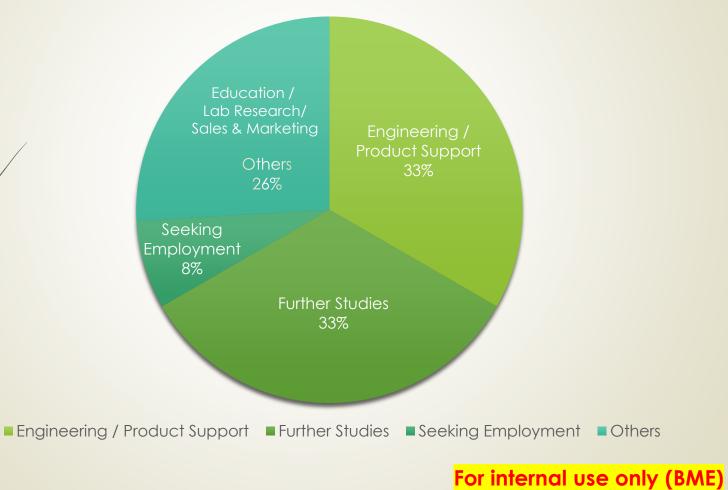
A Certified Letter for the BME Stream will be issued to students who have fulfilled the course requirement of the stream by August 2025.

Elective Course Offering 2023-26

	Course Code	Stream	Course Title	Unit(s)	2023-24 (Term)	2024-25 (Term)	2025-26 (Term)
ı	BMEG3102	BIIM	Bioinformatics	3	2	2	X
	BMEG3103	MIB/ BIIM	Big Data in HealthCare	3	1	1	1
	BMEG3105	BIIM/MCTE	Data Analytics for Personalized Genomics and Precision Medicine	3	1	1	1
	BMEG3130	MIB	Tele-Medicine and Mobile Healthcare	3	-	-	1
	BMEG3140	MCTE	Molecular and Cellular Engineering Laboratory	3	1	1	1 or 2
	BMEG3210	MIB/MCTE	Biofluids	3	2	-	X
	BMEG3330	MIB	Neuroengineering	3	2	1	1
	BMEG3420	MIB	Medical Robotics	3	=	2	2
	BMEG3440	MIB/BIIM/ MCTE	Global Engineering Medical Innovation	3	2	2	2
	BMEG3910	-	Undergraduate Research in Biomedical Engineering	3	1 & 2	1 & 2	1 & 2
	BMEG3920	-	Cross-Cultural Biomedical Collaboration for Global Health Challenges (NEW)	3	-	Summer	Summer
	BMEG4220	MIB	Wearable Biomedical Devices and Personalized Healthcare	3	-	1	1
	BMEG4320	BIIM	AI & Imaging for Biomedical Engineering	3	1	-	1
	BMEG4410	MIB/MCTE	BIOMEMS	3	2	-	2
	BMEG4450	MIB/MCTE	Bionanotechnology	3	2	2	2
	BMEG4510	MCTE	Biomolecular Engineering	3	=	2	X
	BMEG4520	MIB/BIIM/ MCTE	Cardiovascular Engineering	3	2	-	2
	BMEG4530	МСТЕ	Musculoskeletal Tissue Engineering	3	-	2	2

BME Graduates Survey 2024





Programme Curriculum Updates

Effective from 2025-26 intake

- 1. Introduction of the new 2-unit major required course (2000 level) about Bionic Human and the Future of Being Human
 - The course broadens students' perspectives on nature, science and technology. Students will learn to appraise with a scientific attitude and to evaluate human's role in being part of nature and the impact of science and technology on modern life.
 - Students taken UGEB/BMEG1217 Bionic Human and the Future of Being Human may consider applying for course substitution (subject to approval by the Department and Faculty).
- 2. The units of BMEG2602 Hospital Experience and Engineering Practicum will be increased from 1 unit to 2 units.

Programme Curriculum Updates

Effective from 2025-26 intake

- 3. After the creation of the new major required course and revision of the unit for BMEG2602, the major requirement will be changed as below:
 - Major required courses: increased from 33 units to 36 units
 - Major elective courses: decreased from 15 units to 12 units
 - Stream requirement: no change (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.)
 - These amendments will not revise the total required units by the BME program,i.e.75 units.

Collect Feedback from BME students:

- 1. Do you have any comments on the above proposal?
- 2. Any comments on adding the new course to the existing study scheme which will be included in the calculation of Major GPA.

Programme Curriculum Updates

Enhancement Courses Updates

BME launched enhancement courses in <u>Mathematics</u> (Term 1) and <u>Biology (Term 2)</u> during the 2018-19 academic year.

The department has decided <u>not to offer</u> these courses starting <u>from the 2025-26</u> academic year due to <u>low enrollment</u> in recent years.

Students who require academic assistance are encouraged to contact their Academic Advisor for support. The Department will make efforts to provide private tutoring if needed.

CUHK BME Joint Summer Course (Subject to approval by various governing committees)

BMEG3920 Global Innovation and Collaboration in Biomedical Engineering: Big Health Solutions for a Healthier Future (3 credit)

Three Participating Campuses (each campus recruits up to 10 students)

- The Chinese University of Hong Kong, HK
- Glasgow College, UESTC (Chengdu and Hainan), CN
- University of Glasgow, UK

Course Highlights

- International Collaboration: Students from all three campuses work together, fostering global perspectives and cross-cultural exchange
- Dual-Locale Format: The course is conducted in Chengdu and Hong Kong, scheduled for Summer 2025
- 18-day program with hands-on projects and interactive learning (9 days in Chengdu and 9 days in Hong Kong)
- Comprehensive Curriculum: Combines both classroom teaching and project-based learning

Extracurricular Activities:

- Cultural Tours: Discover and experience local traditions
- Company Visits: Gain industry exposure and practical insights through site visits in the Greater Bay Area and the Chengdu-Chongqing

Economic Circle











Q & A Session

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