



TOWN HALL MEETING Make BME Great Together

http://www.bme.cuhk.edu.hk/new/files/undergraduatestd/TownHallMeeting26Mar2021.pdf

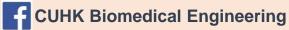
Prof. Raymond Tong
26 March 2021

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











Agenda

- 1. Programme Outcome & HKIE Required Outcomes
- 2. Updates on Summer Exchange and Internship
- 3. Stream Declaration of Final Year Graduating Students
- 4. Students' Stream Preference
- 5. Proposed Elective Course Offering in 2021-22
- 6. Policy of Course Cancellation due to Low Enrollment Rate
- 7. Graduate Employment Survey
- 8. Student Ambassadors Scheme
- 9. Biomedical Engineering Outstanding Achievement Scholarships
- 10. BME Society
- 11. BME Activities

Programme Outcome & HKIE Required Outcomes (1)

Program	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 Outcome & HKIE Required Outcomes (2)

Matching between the Programme Outcomes and the HKIE Required Outcomes

HKIE's Graduate Attributes	BME Programme Outcomes
a) an ability to apply knowledge of mathematics, science, and engineering appropriate to the degree discipline	PO1
b) an ability to design and conduct experiments as well as to analyze and interpret data	PO2
c) an ability to design a system, component or process to meet desired needs within realistic constraints, such as economic, environmental, social, political, ethical, health & safety, manufacturability & sustainability	PO3
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 considerations to both workers and the general public	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
1) an ability to use the computer/IT tools relevant to the discipline along with an understanding of their processes and limitations	PO6

Programme Outcome & HKIE Required Outcomes (3)

Matching between the Programme Outcomes and the HKIE Required Outcomes

Example:

Programme Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
	Apply knowledge of math, science & engineering to BME	Experiment on humans & biological specimens, analyze & interpret data	Innovate a system, part or process to meet desired needs within constraints	Identify, formulate, & solve engineering problems critically	Use techniques, skills, & modern engineering tools for BME practice	Use IT tools relevant to BME with an understanding of their limitation	Communicate effectively	Lead, manage projects, & function on multi-disciplinary teams	Understand ethics, global, societal & professional responsibilities	Learn new knowledge & skills across disciplines & continuously
HKIE Graduate Attributes	Α	В	С	E	К	L	G	D	F, H	l,J
REQUIRED COURSES										
BMEG2001 Intro to BME	√	✓	✓	✓	✓					
BMEG2011 BME Lab & Hospital Experience	✓	✓	✓	✓	✓	√	✓	✓		

Updates on Summer Exchange and Internship

Overseas Summer Research Internship

Overseas University	No. of BME Students who have confirmed to be accepted by the oversea hosts (as of 25 March 2021)
University of Pennsylvania, US	2
Columbia University, US	1
Michigan State University, US	1
Technika University of Gdańsk, Poland	1
Chang Gung University, Taiwan	2
University of Sydney, Australia	1

>> apply & follow-up on visa application ASAP

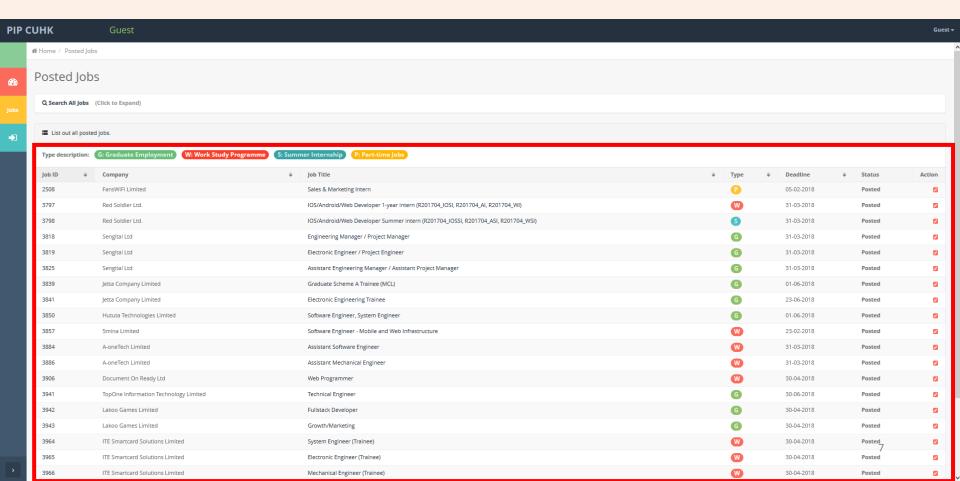
Local Summer Industrial Internships

More may be available later in April/May, e.g. EMSD, Johnson & Johnson's etc. START to PREPARE your CV for the potential Interview by companies

^{*} Please be alerted of our email notification

Placement & Internship Programme via CINTEC

https://pip.cintec.cuhk.edu.hk/web/



Placement & Internship Programme via Career Planning and Development Centre (CPDC)

https://cpdc.osa.cuhk.edu.hk/





ALL NEWS >

United Nations Major Group for Children and Youth - Remote Internship 20 November 2020

LATEST NEWS

STEM Internship Scheme 2020 (Winter Intake) – Job Vacancies and Guidelines for CUHK Students
20 November 2020

QUICK LINKS

PHOTO GALLERY

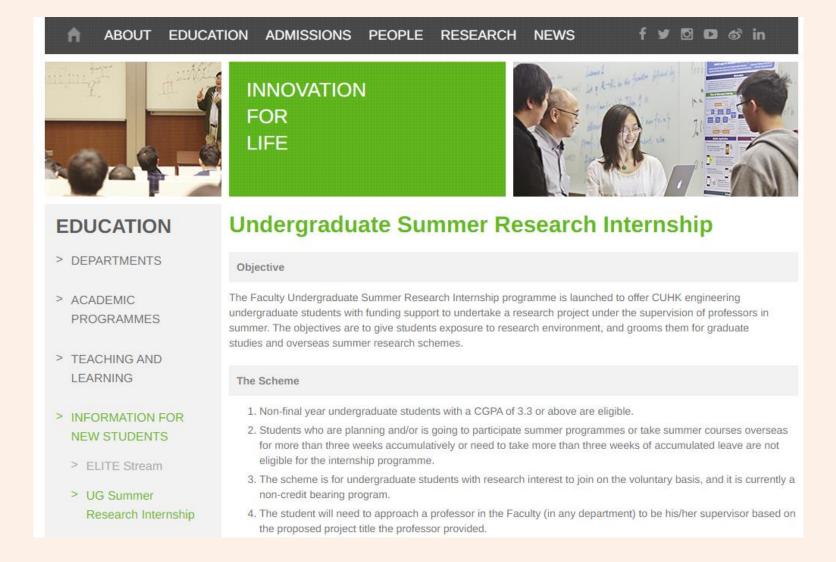
- Office of Student Affairs
- Careers E-coach
- CU Job Link
- Joint Institutions Job
 Information System (JIJIS)

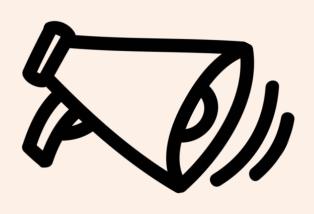


Faculty Undergraduate Summer Research Internship

https://www.erg.cuhk.edu.hk/erg/SummerResearchInternship

Non-final year undergraduate students with a <u>cumulative GPA of 3.3 or above</u> are eligible to apply.





Stream Declaration for BME Final Year Graduating Students

i.e. Students who are expected to be graduated in 2020-21 Term 2



Stream Declaration Form:

https://forms.gle/bigTWVpDTkeu3fuf6

Please complete the online google form by 6 June 2021 (Sunday)

** Certified Letter for BME Stream will be issued to students who have fulfilled the course requirement of stream of their admission year



香港中文大學生物醫學工程學系

Department of Biomedical Engineering The Chinese University of Hong Kong





香港中文大學生物醫學工程學系

Department of Biomedical Engineering The Chinese University of Hong Kong



1 August 2020

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

Stream of Specialization

This is to certify that <Student Name> (Student ID: XXXXXXXXX) has fulfilled all the requirements for the stream of specialization in Medical Instrumentation and Biosensors for the B.Eng. degree in Biomedical Engineering.

For verification of student data, please send request to bmeinfo@cuhk.edu.hk or contact us (+852) 3943 1935.



1 August 2020

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

Stream of Specialization

This is to certify that <Student Name> (Student ID: XXXXXXXXX) has fulfilled all the requirements for the stream of specialization in Biomedical Imaging, Informatics and Modeling for the B.Eng. degree in Biomedical Engineering.

For verification of student data, please send request to bmeinfo@cuhk.edu.hk or contact us (+852) 3943 1935.



香港中文大學生物醫學工程學系

Department of Biomedical Engineering The Chinese University of Hong Kong



Yours faithfully,

Professor Raymond K.Y. Tong Chairman Department of Biomedical Engineering The Chinese University of Hong Kong

1 August 2020

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

Stream of Specialization

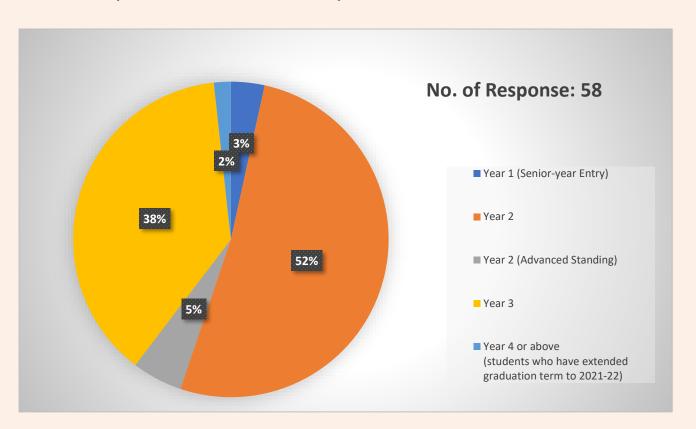
This is to certify that <Student Name> (Student ID: XXXXXXXXX) has fulfilled all the requirements for the stream of specialization in Molecular, Cell and Tissue Engineering for the B.Eng. degree in Biomedical Engineering.

For verification of student data, please send request to bmeinfo@cuhk.edu.hk or contact us (+852) 3943 1935.

Report on Survey Results for Stream Preference & Elective Course Offering in 2021-22

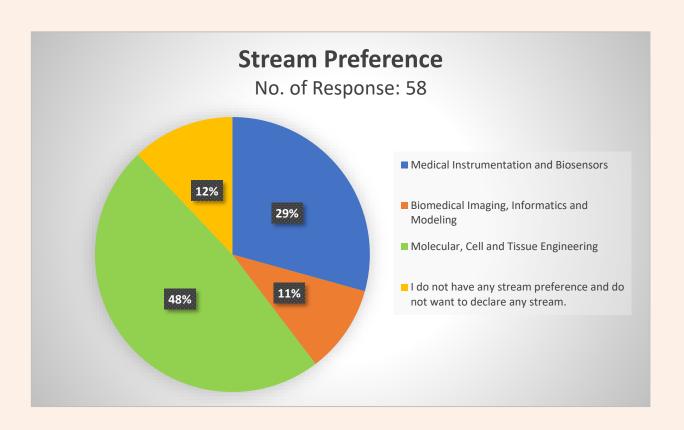
Survey on Preference of Stream & BMEG Elective Courses in 2021-22

58 students responded to the survey

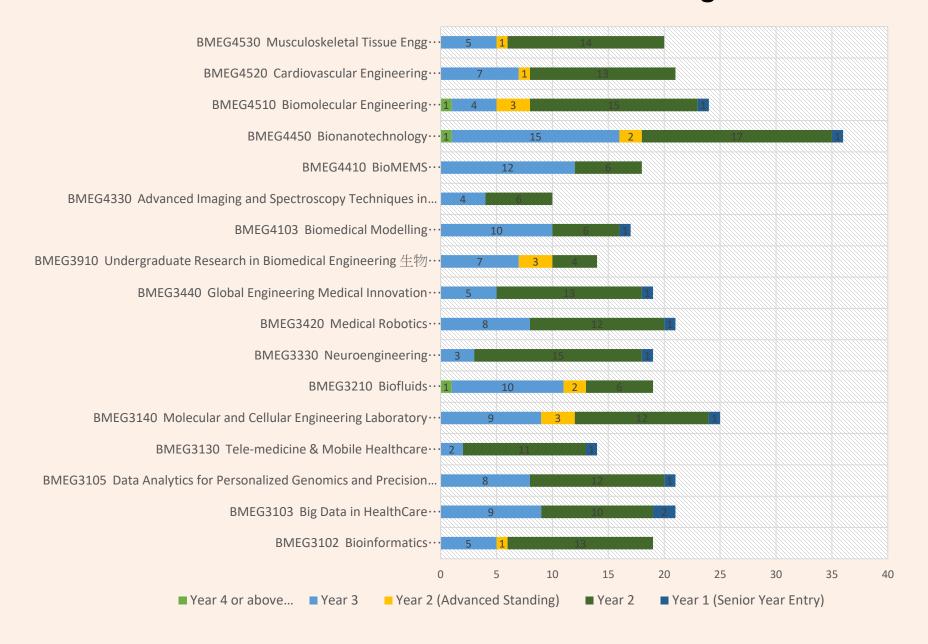


Students' Stream Preference:

- 1st Molecular, Cell and Tissue Engineering (MCTE)
- 2nd Medical Instrumentation and Biosensors (MIB)
- 3rd Biomedical Imaging, Informatics and Modeling (BIIM)



Students' Preference of BMEG Elective Course offering in 2021-22



Proposed BMEG elective course offering in 2021-22 for consideration *TBC – subject to the final teaching assignment (final teaching assignment is not yet confirmed, the course offering plan and offering term may vary)

Course Code	Stream	Course Title	Unit(s)	2017-18	2018-19	2019-20	2020-21	2021-22
								Pending
BMEG3102	BIIM	Bioinformatics	3	Term 2	Term 2	Term 2	Term 2	*TBC
BMEG3103	BIIM	Big Data in HealthCare	3	-	-	X	X	X
BMEG3105	BIIM	Data Analytics for Personalized Genomics and Precision Medicine	3	-	-	Х	X	*TBC
BMEG3130	MIB	Tele-Medicine and Mobile Healthcare	3	Χ	Term 1	X	Term 1	X
BMEG3140	МСТЕ	Molecular and Cellular Engineering Laboratory	3	-	-	-	Term 2	Term 1
BMEG3210/ESTR3212	MIB/MCTE	Biofluids	3	Χ	Term 2	X	X	Term 2
BMEG3330/ESTR3602	MIB	Neuroengineering	3	Term 2	Term 2	X	Term 2	Term 2
BMEG3420/ESTR4200	MIB	Medical Robotics	3	Term 2	Term 2	X	Χ	Term 1/2
BMEG3440	MIB/BIIM/ MCTE	Global Engineering Medical Innovation	3	-	-	-	Term 2	Term 2
BMEG3910	-	Undergraduate Research in Biomedical Engineering	3	Term 1 & 2				
BMEG4103	BIIM	Biomedical Modelling	3	Term 1	X	X	X	X
BMEG4320	BIIM	Biomedical Imaging Applications / AI & Imaging for Biomedical Engineering* (NEW course in 2021-22)	3	X	X	X	X	Term 1
BMEG4330/ESTR4201	MIB/BIIM	Advanced Imaging and Spectroscopy Techniques in Biomedicine	3	X	Term 2	Term 1	X	X
BMEG4410/ESTR4203	MIB/MCTE	BioMEMS	3	Term 1	X	Term 2	X	Term 1
BMEG4450/ESTR4202	MIB/MCTE	Bionanotechnology	3	Term 2	Term 2	Term 2	X	Term 2
BMEG4510/ESTR4204	MCTE	Biomolecular Engineering	3	Term 1	Term 1	X	Term 1	X
BMEG4520	MIB/MCTE	Cardiovascular Engineering	3	Х	X	Term 1	Term 2	Term 2
BMEG4530/ESTR4214	MCTE	Musculoskeletal Tissue Engineering	3	Term 2	Term 2	Term 2	Term 2	X

Course Offering in 2021-22

NEW.

BMEG4320 Al & Imaging for Biomedical Engineering

- New Elective Course in Biomedical Imaging, Informatics and Modeling (BIIM)
 Stream
- Course Offering: 2021-22 Term 1
- Subject to approval

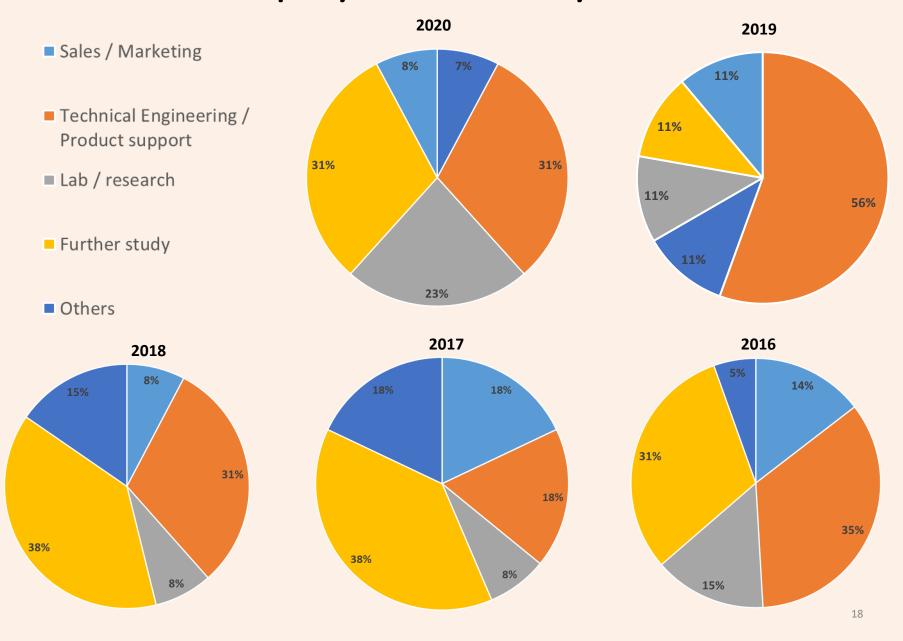
Course Description:

This course provides knowledge and technical background on the current available AI and imaging technologies developed for biomedical engineering applications. The AI part focus on introducing recent cutting-edge advances in computer vision, deep learning, neural networks, robotics, and machine intelligence and their applications in clinical diagnostics, medical operations, tissue engineering, and regenerative medicine. The imaging part emphasis lies on introducing advanced biomedical imaging modalities, including QCT, pQCT, microCT for animals and human, nano-CT, multimodal MRI, ultrasound, and other advanced imaging modalities. It also covers applications of biomedical imaging in diagnosis, prevention and treatment of aging related disorders of cardiovascular, neurodegeneration and other relevant living systems. Selected topics relating to use the above AI and imaging technologies for evaluation of scaffold biomaterials, repair of musculoskeletal tissues, diagnostics and evaluation of neurodegeneration diseases and cancers, and so on will be covered.

Policy of Course Cancellation Due to Low Enrollment Rate

- Minimum enrollment no. for elective courses: 12
- Elective courses may be cancelled if the enrollment no. is <u>BELOW 12</u> after the course registration period of the semester
- General Office will inform students who registered the course will be cancelled and provide assistance to students for course registration

Graduate Employment Survey

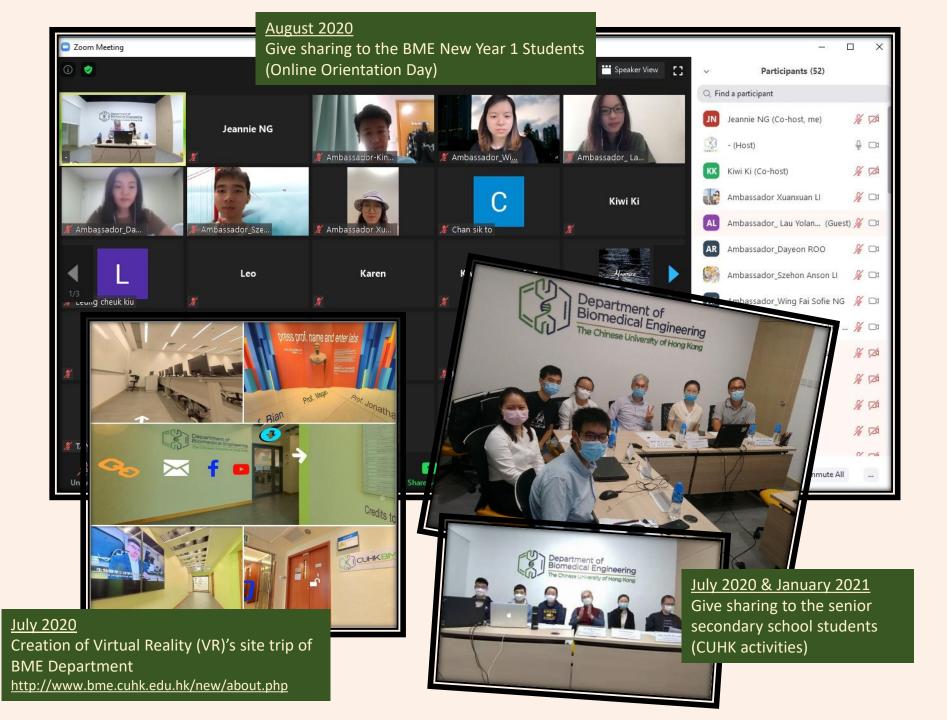


BME Student Ambassadors 2020-21

Name	Admission Channel	Year of Study	Gender	Contact
LAU Yolanda Fong Yung	Non-JUPAS Local	Year 3	F	1155113627@link.cuhk.edu.hk
LEUNG Chi Kit Boris	Non-JUPAS Local	Year 3	М	1155124628@link.cuhk.edu.hk
LI Xuanxuan	Non-JUPAS International	Year 3	F	1155123725@link.cuhk.edu.hk
NG Wing Fai Sofie	Non-JUPAS Local	Year 3	F	1155113921@link.cuhk.edu.hk
Dayeon ROO	Non-JUPAS International	Year 3	F	1155122982@link.cuhk.edu.hk
MAK Kin Shing Wickey	Non-JUPAS Local	Senior-entry (admitted in 2019-20)	М	1155131964@link.cuhk.edu.hk
LI Szehon Anson	JUPAS	Year 2	М	1155141910@link.cuhk.edu.hk



Yolanda Boris Xuanxuan Sofie Dayeon Wickey Anson



BME Student Ambassadors

RECRUITMENT 2021-22



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

- nurture peer connections between junior and senior students
- helps new students explore CUHK's learning environment
- develop social network through sharing and interactions with BME buddies

Eligible Applicants

Year 2 or above undergraduate students who are:

- Enthusiastic about serving BME
- Creative, cheerful and confident
- Sincere to share and patient to listen

Recognition

Certificate of Appreciation will be awarded to Student Ambassadors

Apply Now! **Online Application Form**

Application Deadline: 17 May 2021 (Monday)

Biomedical Engineering Outstanding Achievement Scholarships 2020-21

Number of Award

EIGHT awards of \$10,000 each

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. contributions to BME Department and/or Profession
 - Other achievement, e.g. sports, competitions, voluntary work
- √ Financial needs

Awardees in 2019-20:

Name	Year of Study in 2019-20
CHEUNG Suen	Year 1
LIN Yi Ting Jonathan	Year 1
WANG Han Yi Jennifier	Year 1
LAU Yolanda Fong Yung	Year 2
SHYNGYS Moldir	Year 2
CHENG Chak Kit	Year 3
MELISOV Dayan	Year 3
TUNG Lok Him	Year 4



For details and application procedure, we will email to students on around May 2021, application deadline will be on early July 2021. Please be alerted of our notification email later on.

BME Society

Medanoia 生醫流轉 – 11th Biomedical Engineering Society





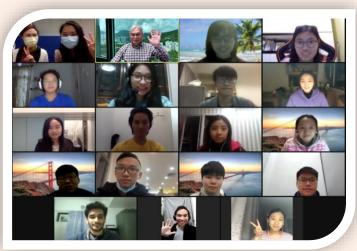
Member		Position
NIP, Yung Lok (Jason)	聶榕樂	President
WONG, Hoi Lam (Kaka)	黄凱琳	Internal Vice President & Representative of New Colleges
CHEUNG, Yee Ping (Casey) 張以平	External Vice President
WONG, Chee Ching (CC)	黃芷晴	Secretary & Representative of United College
SZE, Hoi Kuen (Patrick)	施海權	Financial Secretary
LEE, Wing Yin (Pandora)	李穎妍	Representative of Chung Chi College & Publication and Design Secretary
CHAN, Yat Hei (Thomas)	陳日曦	Representative of Shaw College & Publication and Design Secretary
CHANG, Hongyi (Robin)	常弘毅	Representative of New Asia College & Recreation Secretary



BME Activities

January - June 2021

Buddy Scheme



March - April 2021 Photo Day





April - May 2021
Alumni Sharing

TODAY!!

BME Career Forum

Registration is required https://forms.gle/wREbX9UPhFTG5nwu6



26 March 2021 (Friday) 4:30 – 6:30p.m.







** Registration is required

Zoom login Information will be emailed to the registered students.

Hosts

Department of Biomedical Engineering, CUHK

Se Prof. Raymond Tong & Prof. Aaron Ho <</p>

Speakers:

- Lectrical and Mechanical Services Department (EMSD)
- Se Ms. Carmen Sin

 ✓ Engineer/Health Sector/Kowloon Central

 Material

 Material

- AML Holding Limited

★ Stryker Asia Pacific

- **★** Sanwa Biotech Limited
 - Mr. William Yim

 Executive Chairman & CTO

 Output

 Executive Chairman & CTO

 Executive Chairman & CTO

 Output

 Executive Chairman & CTO
- ♣ Associated Medical Supplies Company Limited

 Solution Suppl

Enquiries: 3943 1935 / bmeinfo@cuhk.edu.hk









