## HKU Engineering 港大工程

# 創新無限

Empower Innovation Explore Infinity







## INSPIRE,

An academic powerhouse that develops engineering talent and fosters interdisciplinary and international collaboration







# INNOVATE

Promote innovation through world-class education and cutting-edge research







## ENGINEERING

Nurture future engineering leaders to provide solutions to global challenges and use technology for the benefit of mankind

 $\bigcirc$ 



Create impact on knowledge-based economy through technology development and entrepreneurship

## WHY **HKU Engineering**



## Strong Legacy

110<sup>+</sup>years of Heritage

One of the Three founding faculties at HKU

## **Outstanding Academic & Research Excellence**



**-**---

**2** Hong Kong Academy of Engineering Sciences Academicians



**Chinese Academy of Engineering Academicians** 



**National Academy of Engineering USA Academicians** 



**Royal Academy of Engineering UK Academicians** 

## Top University in the World



Source: Quacquarell Symonds (QS) World University Rankings 2025 and Asia University Ranking 2024

Source: Times Higher Education (THE) World University Rankings 2024 and Asia University Ranking 2024

#### in Hong Kong

in Asia

#### in the world

## Well-established Subjects

Civil & Structural Engineering 20 in the world

Source: QS World University Rankings by Subject 2024

 Extensive Alumni Network
 42,000<sup>+</sup>

### Professional Recognition

Programmes accredited by



## FLEXIBLE Programme Structure

#### Flexible Programme Structure with Strong Core Focus

HKU Engineering students would be enrolled to the Year 1 Engineering Core courses. Students will start to take discipline courses under their respective curriculum in Year 2. They can consider taking internship in Year 3, and finish the Capstone project (i.e. final-year project) in Year 4.

\* Subject to curriculum requirement



## DIVERSE Programme Options

#### Diverse Programme Options

Under the flexible structure, high-calibre students are allowed to pursue major/ minor options in a variety of disciplines

- JS6303\* Bachelor of Engineering Elite Programme [BEng(Elite)]
- JS6377\* Bachelor of Engineering and Master of Science in Engineering in Artificial Intelligence in Engineering (BEng X + MScEng AIE)
- JS6937<sup>1</sup> Global Engineering and Business Programme [GEBP]
- JS6353 Bachelor of Engineering in Civil Engineering [BEng(CivE)]
- JS6987 Bachelor of Engineering in Computer Engineering/ Electrical Engineering/ Electronic Engineering [BEng(CE)/BEng(EE)/BEng(ElecE)]
- JS6315\* Bachelor of Engineering in Data and Systems Engineering [BEng(DASE)]
- JS6339 Bachelor of Engineering in Mechanical Engineering [BEng(ME)]
- JS6925 Bachelor of Engineering in Biomedical Engineering [BEng(BME)]
- 1 This programme leads to Bachelor of Engineering or Bachelor of Engineering in Biomedical Engineering and Bachelor of Business Administration Double Degree with a study period of five years.

#### **Possible Minor Options**

In general, students have to complete 6 to 8 courses in a minor in addition to their study in the BEng programme.

- Computer Science
- Data Science and Engineering
- Innovation and Design
- German
- Japanese Language
- Economics
- Information Systems and Analytics
- Mathematics
- Environmental Science
- Cognitive Science

and many more.....

#### HKU-Cambridge Undergraduate Recruitment Scheme (Engineering)

The "HKU-Cambridge Undergraduate Recruitment Scheme (Engineering)" (the Scheme) is an extremely competitive scheme for high-calibre students with excellent academic credentials. Under the Scheme, selected BEng students will study at HKU for the first two years, and continue their studies at the University of Cambridge for their third to fifth year of studies. Upon successful completion of the five years of studies, students will be conferred the Master of Engineering, the Bachelor of Arts (Honours) and the Master of Arts degrees by the University of Cambridge, and the Bachelor of Engineering degree by HKU.

\* Only first year students reading for the BEng, BEng(BME) and GEBP are eligible to apply for the Scheme. GEBP students joining this Scheme will automatically lose the option to pursue the Bachelor of Business Administration degree in their final year.

## INTERNATIONAL AND Our Exchange Partners

Students are encouraged to join either the University-level or Faculty-level exchange programmes to study in prestigious institutions **at different destinations** around the world for one semester or one academic year.

#### Locations:

Australia Monash University University of Melbourne University of New South Wales The University of Queensland The University of Sydney Australian National University

#### 🝁 Canada

Queen's University McGill University The University of British Columbia University of Calgary University of Toronto University of Waterloo

#### Denmar

Technical University of Denmark

#### Finland

Aalto University

#### France

CentraleSupélec ECAM LaSalle, Lyon Campus Institut National des Sciences Appliquées de Toulouse INSA Toulouse

#### Germany

Technical University of Darmstadt Technical University of Munich University of Bremen RWTH Aachen University

Ireland Trinity College, Dublin



## Exchange Partners

## Each year, 20%<sup>+</sup> of all engineering students go abroad

Korea, Republic of

Korea Advanced Institute of Science and Technology Korea University Seoul National University

#### Netherlands

Eindhoven University of Technology Erasmus University Rotterdam

#### New Zealand

University of Auckland

#### Singapore

Nanyang Technological University National University of Singapore

#### Spain University of Navarra

Taiwan National Taiwan University National Tsing Hua University

#### Thailand 🚬

Chulalongkorn University

#### C\* Turkey Koc University

University College London King's College London University of Cambridge University of Edinburgh University of Nottingham Imperial College London University College London University of Oxford

#### US

Illinois (University of) at Urbana-Champaign Princeton University University of California University of Visconsin-Madison Boston University Columbia University Cornell University Johns Hopkins University New York University Purdue University Purdue University Stanford University University of Chicago University of Washington

#### Mainland

Peking University Fudan University Tsinghua University Harbin Institute of Technology Shanghai Jiao Tong University

## MAINLAND EXCHANGE My Unique Exchange Experience



#### **Tsang Wai Ho Ricco**

BEng in Mechanical Engineering Exchange: Princeton University, USA

The experience is probably one of the most exceptional periods of my life. It gives HKUers a chance to dramatically broaden their horizons. Voyaging halfway across the globe, we see the prosperous and the quaint, the beautiful and the unpretentious. Learning from the pinnacle of technology and acquainting friends from afar, one will undoubtedly return with the fruits of knowledge and the seeds of friendship.

#### Lau Tak San, Chris BEng in Civil Engineering Exchange: National University of Singapore (NUS), Singapore

I explored Singapore's rich culture and diverse food scene. I made lifelong friends from different parts of the world. The academic rigour at NUS challenged me to excel, while the support from professors and peers allowed me to grow. My exchange experience was a perfect blend of personal growth, academic excellence and unforgettable memories that I will cherish forever.



#### Kwan Ho Hin

#### Exchange to Peking University, Mainland

During the summer of 2024, I had the opportunity to participate in a short-term exchange programme at Peking University. This experience not only enhanced my academic knowledge but also provided me with invaluable cultural insights. What made this exchange even more unforgettable were the new friends I made along the way. They were all unique and fun personalities that I could never forget in my life. I am grateful for the support from the Faculty of Engineering and the chance to engage with both the academic community and the vibrant life of Beijing.

#### Fonda Maydeline

BEng in Industrial Engineering and Logistics Management Exchange: University of Toronto, Canada

Living in a new country enabled me to immerse myself in a different culture, make lifelong friendships, and try a variety of delicious foods. But what made my exchange programme truly exceptional was the chance to study at one of the world's top engineering schools. The professors were supportive and engaging and the campus was especially beautiful during spring when the cherry blossoms were in bloom. I highly recommend anyone to consider participating in an exchange program as it can offer a wealth of new and exciting experiences.

## INTERNSHIP

Experiential learning is an integral part of students' learning experience, and internship/industrial training is a component of utmost importance, which is compulsory for most BEng degree programs. Students typically spend six to eight weeks during the summer after their third year of study on internships.

#### Lau Hok Yee

BEng in Electrical Engineering Internship at CLP Power

During my one-year internship at CLP Power, I had the opportunity to work on projects related to smart grid technology, which was a key component of the company's efforts to provide reliable and sustainable energy to customers. One of my main tasks was to research and analyse the benefits of implementing a smart grid system in Hong Kong, which involved understanding the current energy infrastructure and identifying areas for improvement. Through this project, I gained a deeper understanding of the importance of smart grid technology in improving energy efficiency and reducing carbon emissions. I also

attended training sessions, workshops and visits focused on the latest developments in engineering and technology. This exposure helped me to stay abreast of industry trends and demonstrated the importance of continuous learning in this field. The team at CLP Power was supportive and provided me with guidance and feedback throughout my internship. Overall, my internship at CLP Power **was a valuable experience that allowed me to acquire practical expertise and skills in the area of electrical engineering.** 

#### Li Tsz Ying

BEng in Civil Engineering Summer Internship at Civil Engineering and Development Department (CEDD), HKSAR

During my internship at CEDD, I had the opportunity to gain hands-on experience in site safety management and BIM coordination. This experience has equipped me with a comprehensive understanding of the construction industry, specifically the use of BIM modelling for clash analysis in underground utility construction and work sequence simulation. **These skills are essential for my future growth in the field of civil engineering.** I am grateful

for the valuable learning opportunities provided during my time at CEDD, and I believe this experience has been an enriching and rewarding one.

#### Mak Kai Yim

BEng in Biomedical Engineering Summer Internship at St. Paul's Hospital

Last summer, I worked at St. Paul's Hospital as a Biomedical Engineering (BME) intern. Throughout the internship, I had the chance to work on a variety of hospital issues, mainly on practical tasks such as preventive and corrective maintenance of medical devices and documentation like purchase requisitions, contracts, and data entry. In addition, the experience enables me to work in various clinical departments, including the operating theatre, nursery, and isolation ward, where I can deal with emergencies and real-world issues while collaborating with medical professionals and patients. I am able to apply engineering and biomedical knowledge learnt in university, particularly during device maintenance and analysis. Overall, **it was a valuable and rewarding experience that allowed me to better grasp what it would be like to work in the BME sector and nurture my desire for being a biomedical engineer in the future.** 

## EXTENSIVE Student Enrichment Experience

In addition to exchanges and internships, HKU Engineering students can participate in a wide range of student enrichment activities to apply their professional knowledge outside the classroom and contribute by providing social services and solutions to real-world issues.



#### **Project Mingde**

Since 2003, the Department of Civil Engineering has led Project Mingde, engaging faculty members, students, and alumni engineers in various projects' feasibility studies, planning, design, and construction. Notably, in Guangxi and Sichuan, Mainland, nine facilities have been completed, including Mingde Building,

Chaoyang Bridge, and Restoration of Duling Primary School. Additionally, in Hanoi, Vietnam, six facilities such as Library of Trung Dung Primary School and Sanitation Facilities at Tan Hung Secondary School have been successfully constructed. Ongoing projects in Mainland include Restoration of Minle School Composite Building in Xichang and Revitalization of a Silo-cave in Henan, demonstrating the department's continuous commitment to impactful initiatives in community development.



Lau Tsz-him BEng in Civil Engineering Project Mingde – Kitchen of Luong Noi Primary School

I took part in a construction project of Project Mingde in Vietnam, where we built a kitchen for Luong Noi Primary School to ensure food safety and nutrition for the local school children. Throughout this project, I gained hands-on experience in various construction tasks, such as mixing cement mortar, plastering, and tile-laying. In addition to acquiring practical construction skills, we held regular meetings with the contractor and client to address and resolve any issues, ensuring the construction progress and quality. These skills are essential for a career in engineering. Overall, the experience was both educational and fulfilling, providing valuable insights into practical engineering applications in the real world.







#### Undergraduate Research Fellowship Programme

Students interested in research or have plans to pursue further studies after undergraduate programme can conduct research with experienced academics at HKU or prestigious overseas institutions such as Stanford University, UC Berkeley, and Imperial College London. Students with satisfactory performance will be considered for early admission to research postgraduate programmes at HKU.

#### **Capstone Experience**

Capstone Experience focuses on the integration and application of knowledge and skills that students have acquired throughout their undergraduate studies. The most important capstone experience for engineering students is the final-year-project.



#### **Professional Preparation Programme**

The Professional Preparation Programme aims at facilitating students to make informed career choices and broadening their knowledge in the job market, and to enhance students' employability. Students will be equipped with techniques in writing curriculum vitae and attending interviews, as well as nurturing better social networking and communication skills.







Innovation Wing empowers students to take the lead on ambitious technology projects that will shape the future.

Makerspace and assembly areas are equipped with 3D printers and prototyping machines for students to realise their ideas.

#### Tam Wing Fan Innovation Wing One



The transparent facade of Innovation Wing carries an openness and vibrant atmosphere to foster innovations among teachers and students.

Innovation Wing One empowers students to take the lead on ambitious technology projects that will shape the future. Located at the heart of the campus, this iconic facility offers 2,400m<sup>2</sup> of space with comprehensive prototyping facilities and equipment such as 3D printers, laser cutting and engraving machines, electronic workbenches, and a range of thematic workshops on advanced technologies like Al and robotics. With all of these state-of-the-art resources readily available, students can bring their most innovative ideas to life, turn their dreams into reality, and make a tangible impact in the world.

Knowledge exchange and peer learning are the keys to success. Our energetic and enthusiastic Student Interest Groups (SIGs) bring together not only engineering students, but also students from other faculties who share common interests to collaborate on student-led projects. Come join us at Innovation Wing and let's innovate together!



#### Tam Wing Fan Innovation Wing One

Contact No : (852) 3910 2388 Email : innowing@hku.hk Website : https://innowings.engg.hku.hk/innowing1/





Supported by the Innovation and Technology Commission of the HKSAR, Hong Kong Academy of Engineering Sciences (HKAES) and HKU coorganise HKAES TechTalk series for promoting the latest developments in innovation and technology among the general public.

Innovation Wing Two facilitates synergistic interaction and collaboration with professionals and researchers from various disciplines.

#### **Tam Wing Fan Innovation Wing Two**



Email

Innovation Wing Two is located at G/F of Run Run Shaw Building and is connected with Innovation Wing One via a covered walkway. It serves as an essential platform to disseminate the Faculty's latest research achievements, findings and outputs to the broader HKU and Hong Kong communities.

A wide variety of research-related activities, including themed exhibitions and regular TechTalks, are conducted by our faculty members and their PhD students. These activities enhance community engagement, showcase the Faculty's research strength, and attract academics and industry professionals to facilitate in-depth communications and collaborations. This approach enables the Faculty's to advance its cutting-edge research initiatives while expanding its research network within academia and industry on a global scale.



#### Tam Wing Fan Innovation Wing Two

Contact No : (852) 3910 2391 : innowingtwo@hku.hk Website : https://innowings.engg.hku.hk/innowing2/

## Innovation Academy

Faculty of Engineering, HKU

#### **Innovation Academy**

Housed in Innovation Wing, the Innovation Academy was established with an aim to nurture future innovators to generate impactful ideas and products. A series of inspirational programmes and activities are organized to achieve three goals: Inspire, Equip and Showcase. It ranges from sharing by innovators, hands-on skills workshops, student-initiated courses, pitching to Engineering Inno Show, and has actively engaged academic staff, students and other stakeholders such as industrial advisors.

The Academy provides students with opportunities to get an up-close look at the latest technological developments by visiting regions like Mainland, Japan and Australia. And with the support from "Funding Scheme for student projects / activities by Tam Wing Fan Innovation Fund and Philomathia Foundation Innovation Fund", students can bring their ideas to life and even showcase them at international conferences, symposiums and competitions.



Students are enthusiastic to join eye-opening study tours to explore the technological developed countries.



Students pitch their innovative ideas and receive constructive feedbacks from the judges.



**>>>>** -

The Engineering Inno Show offers students an opportunity to showcase and demonstrate student-led projects.



Students can apply for funding to support the development of their projects.



Innovation Academy encourages students to showcase their projects at international conferences, symposiums and competitions.



#### **Innovation Academy**

Contact No. Email Website

- : (852) 3910 2394
- : innoacademy@hku.hk
- : https://innoacademy.engg.hku.hk/

## OUTSTANDING Student Achievements

At HKU Engineering, we focus on nurturing students with all-rounded development. Students are encouraged to acquire hands-on experience and equip themselves with a global outlook.



James Dyson Award 2024 Hong Kong Winner - Air Ring 48 (AR48)



James Dyson Award 2024 Hong Kong Runners Up - NeuroHarbor



Second Place - Design, Build and Fly at the British Model Flying Association 2024 University and Schools Payload Challenges



Second Runner-Up at the Cathay Hackathon 2023



Best Return Champion and the First Runnerup of the Best Strategy Design Award at the Algo Trading Challenge 2023-24



Pioneer Award at FinTech80 Chengdu Hackathon 2023



lst runner-up, 2nd runner-up and Best Performance Award in The Robocon 2023 Hong Kong Contest



Championship of IMechE The Greater China Design Competition 2023

## OUTSTANDING Student Achievements (Continued)

Over the years, the Faculty has been celebrating the remarkable achievements of our students, who excelled in local and international competitions.



Grand Champion in Cash Algo Global Trading Challenge



Champion Award in the Green Energy Dreams Come True Competition 2023/24 (Tertiary) organised by the Hong Kong Electric Company Limited



Silver Award in the ASMPT Technology Award 2023



Race Tech William Kimberley Award in the Formula Student UK 2022 Concept Class competition



Champion of Emerging Engineers Award 2024 (Hong Kong region) organised by the Institution of Civil Engineers



An Engineering student project team set the Guinness World Record "The fastest 50m Swim by a Robotic Fish" for the second time



Top 10 Outstanding Tertiary Student of Hong Kong 2022



Champion of The ICE HKA G&S Model Building Competition



### BEng Elite (JUPAS code: JS6303)

The Bachelor of Engineering Elite Programme is designed to prepare engineering students for leadership roles in rapidly evolving industries driven by frontier technology developments.

By offering students the freedom to choose their BEng degree programme and providing academic advising and industrial mentorship, the programme aims to unlock each student's unique potential. Entrance and overseas exchange scholarships enhance learning experiences, while participation in the BEng X + MScEng AIE scheme (JS6377) offers interdisciplinary training opportunities. Students will focus on core engineering courses in Year 1 and freely select their BEng programme<sup>#</sup> in Year 2. Special Academic Advisors and Industrial in curriculum design and industry connections.

BEng programmes: Civil Engineering, Computer Engineering, Electrical Engineering, Electronic Engineering, Data and Systems Engineering, Mechanical Engineering within the Faculty of Engineering, or Artificial Intelligence and Data Science, Computer Science offered in the School of Computing and Data Science



#### **Career Prospects**

- Diverse engineering career paths
- Business
- Research
- Education
- · Social and community sectors



#### **Faculty of Engineering**

 Contact No
 : (852) 3917 2803

 Email
 : enggugad@hku.hk

 Website
 : https://www.ugadmissions.engg.hku.hk/beng-elite-programme



## BEng X + MScEng AIE (JUPAS code: JS6377)

The Bachelor of Engineering and Master of Science in Engineering in Artificial Intelligence in Engineering (BEng X + MScEng AIE) programme is designed to equip Bachelor-degree engineers with modern Artificial Intelligence (AI) Master-degree skills to address future engineering challenges.

Students can choose any majors within the Faculty of Engineering e.g. Civil Engineering, Computer Engineering, Electrical Engineering, Electronic Engineering, Data and Systems Engineering, Mechanical Engineering as their BEng degree, before pursuing a Master of Science in Engineering in Artificial Intelligence in Engineering (BEng X + MScEng AIE) in a 4+1 year programme and a scholarship of HKD120,000 for enrolling in the AI in Engineering MSc degree programme. This interdisciplinary approach allows students to gain solid foundations in their chosen engineering discipline while integrating AI techniques into their studies. Through active learning, internships, and hands-on activities, students will be prepared for successful engineering careers in industries undergoing rapid transformation due to AI advancements.



#### **Career Prospects**

- Diverse engineering career paths
- Business
- Research
- Education
- Social and community sectors



#### **Faculty of Engineering**

 Contact No
 : (852) 3917 2803

 Email
 : enggugad@hku.hk

 Website
 : https://www.ugadmissions.engg.hku.hk/beng-x-msceng-aie



### Global Engineering and Business Programme (JUPAS code: JS6937)

The Faculty of Engineering and the HKU Business School jointly offer a **Global Engineering and Business Programme (JS6937)**. This is an interdisciplinary programme in which student will acquire professional knowledge in both Engineering and Business from a global perspective. Students can receive two degrees, namely **Bachelor of Engineering/ Bachelor of Engineering in Biomedical Engineering and Bachelor of Business Administration** after the completion of five years of study at HKU.

Bachelor	of Engineering/
Bachelor	of Engineering in Biomedical Engineering

**Bachelor of Business Administration** 

University and Engineering core courses	Year 1 🔶	Study 9 business courses from 5 major options:	
<ul> <li>University and Engineering disciplines courses</li> <li>Civil Engineering</li> <li>Electronic Engineering</li> <li>Mechanical Engineering</li> <li>Computer Engineering</li> <li>Electrical Engineering</li> <li>Data and Systems Engineering</li> <li>Biomedical Engineering</li> </ul>	Year 2 - 4	<ul> <li>Entrepreteurship, Design and Innovation</li> <li>Finance</li> <li>Human Resource Management</li> <li>Information Systems and Analytics</li> <li>Marketing</li> </ul>	
Complete Engineering programme requirements and receive BEng degree	By end of Year 4		
	Year 5	Study BBA on self-financing basis and receive	



#### **Career Prospects**

- Engineering sector
- Government
- Business
- Social and community sectors
- · Academic and research advancement



#### **Faculty of Engineering**

Email : enggugad@hku.hk Website : https://www.ugadm

e : https://www.ugadmissions.engg.hku.hk/gebp



### BEng in Civil Engineering (JUPA5 code: J56353)

Civil Engineers play a significant role in the design, construction and management of infrastructure to ensure the safety and sustainability of buildings, roads, railways, bridges, dams, and tunnels. They oversee stormwater drainage systems, wastewater treatment, and infrastructure functionality for safe, efficient operations. Our **Bachelor of Engineering in Civil Engineering** programme is a comprehensive and versatile 4-year programme providing students with the academic qualifications towards the professional status of a civil engineer. The core subject areas of studies included Construction Management, Environmental Engineering, Geotechnical Engineering, Structural Engineering, and Transportation Engineering. The programme offers focuses in Environmental Engineering, Smart Transport and Logistics, or Urban Informatics.



Site Visit organized by the Civil Engineering Society



Departmental Scholarship Presentation Ceremony 2024



#### **Career Prospects**

- Government Works Departments
- Engineering Consulting firms
- Construction companies
- Developers
- Public organisations (e.g. MTRC, Airport Authority)

#### **Department of Civil Engineering**

Contact No Email Website

#### o : (852) 3917 2286 : civdept@hku.hk : http://www.civil.hku.hk/



## BEng in Computer/Electrical/Electronic Engineering

(JUPAS code: JS6987)

The Department of Electrical and Electronic Engineering (EEE) offers three distinct programme choices tailored to various sub-fields within EEE. **Computer Engineering (CE)** focuses on Ambient Computing, Big Data Processing, and Robotic & Autonomous Systems, exploring reconfigurable computing, energy-efficient computer architecture, data engineering, machine intelligence, humanoid robots, and autonomous machines. **Electrical Engineering (EE)** includes Smart Power Systems, Modern Electric Transportation, and Intelligent Built Environment, covering power systems, renewable energy, electric railways, energy-efficient lighting, and smart buildings. **Electronic Engineering (ElecE)** delves into Nanoelectronics, Next-generation communications, and Data and Al systems, encompassing circuits & IC design, fiber optics, WiFi, 5G 6G, multimedia signals, electronic commerce, and data analytics.







#### **Career Prospects**

- Government
- Transportation and Public Utilities
- Technology and Finance
- Academic and Research Advancement



#### **Department of Electrical and Electronic Engineering**

Contact No Email Website

: (852) 3917 7093 : undergrad-admission@eee.hku.hk : https://www.eee.hku.hk



## BEng in Data and Systems Engineering

(JUPAS code: JS6315)

The BEng(DASE) programme is meticulously designed to integrate foundational knowledge with cutting-edge technologies, enabling the optimisation of real-world systems. Students are immersed in a diverse curriculum covering system analytics, operational research, mathematical optimisation, and system simulation and modeling. The programme also provides exposure to innovative technologies such as artificial intelligence, robotics, and intelligent systems, enhancing the learning experience. Through a blend of rigorous coursework and practical training, students combine theoretical concepts with advanced technology, preparing them to engage in real-world projects and research that drive technological innovation. The programme focuses on data analytics and computing, as well as robotics and intelligent systems, with an aim to equip students for dynamic careers across various industries.

#### **Career Prospects**

- Robotics and automation
- Logistics and transportation
- Finance and banking
- Healthcare engineering
- Manufacturing
- Academic and research advancement



#### **Department of Data and Systems Engineering**

Contact No Email Website

No : (852) 3917 2586 : dase@hku.hk : https://www.dase.hku.hk



### BEng in Mechanical Engineering (JUPA5 code: J56339)

This programme is designed to equip graduates with the skills and knowledge necessary for successful careers in various professional fields. The curriculum provides a solid foundation in engineering science, covering essential subjects such as thermodynamics, fluid mechanics, solid mechanics, materials technology, and dynamics & control. Students have the flexibility to specialise in areas of interest, including aeronautical engineering, biomedical engineering, control & robotics, energy & environment, mechanics & materials, nanotechnology, product design & manufacture, and thermo-fluids. The programme offers different focuses such as Robotics, Drones and Control, Aerospace Engineering, Intelligent Built Environment, Materials Science and Engineering, Environmental Engineering, and Energy Engineering.



IEEE RAS Quadruped Robot Challenges 2024





#### **Career Prospects**

- Building Construction and Consulting
- Commerce and Industry
- Finance, Insurance and Investment
- Government
- Transportation and Public Utilities
- · Academic and Research Advancement

#### **Department of Mechanical Engineering**

Contact No Email Website

No : (852) 3917 2635 : mech@hku.hk : https://www.mech.hku.hk/ 1-week summer school MECH0101 for secondary school students



### BEng in Biomedical Engineering (JUPA5 code: J56925)

BEng(BME), this interdisciplinary programme is jointly offered through Faculty of Engineering and LKS Faculty of Medicine, with an aim to cultivate a new generation of engineers capable of improving health and quality of life through innovative engineering solutions. Rooted in basic sciences, mathematics, engineering, and life sciences, the curriculum covers various contemporary BME disciplines and provides hands-on experiential learning opportunities. Students develop expertise in applying engineering principles to advance biomedical practices and research, while also emphasising professional, ethical, and social responsibility in healthcare. Specializations include Advanced biomedical signals and systems, Biomaterials and tissue engineering, Biomechanics and biotransport, Biomedical imaging technologies, Omics technologies, and Digital health and AI medicine. Graduates find career opportunities in biotechnology/medical technology companies, universities, hospitals, public sectors, and start-ups.







#### **Career Prospects**

- Global/ Local Biotechnology/ Medical Technology
- Education
- Hospitals
- Public Sector
- Start-ups
- Academic and Research Advancement



#### **Biomedical Engineering Programme**

Contact No: (852) 3917 2803Email: bmeengg@hku.hkWebsite: https://www.engineering.hku.hk/bmeengg/

## ADMISSION Requirements



#### **Programmes**

JUPAS Code Programme Code

**Programme Name** 

Faculty-based Admission		
JS6303	BEng(Elite)	Bachelor of Engineering Elite Programme
JS6377	BEng X + MScEng AIE	Bachelor of Engineering and Master of Science in Engineering in Artificial Intelligence in Engineering
JS6937*	GEBP	Global Engineering and Business Programme

\* This programme leads to Bachelor of Engineering/ Bachelor of Engineering in Biomedical Engineering and Bachelor of Business Administration Double Degree)

Departmental-based Admission		
JS6353	BEng(CivE)	Bachelor of Engineering in Civil Engineering
JS6987	BEng(CE)/BEng(EE)/ BEng(ElecE)	Bachelor of Engineering in Computer/Electrical/ Electronic Engineering
JS6315	BEng(DASE)	Bachelor of Engineering in Data and Systems Engineering
JS6339	BEng(ME)	Bachelor of Engineering in Mechanical Engineering
JS6925	BEng(BME)	Bachelor of Engineering in Biomedical Engineering





### **Admission Requirements**

#### **JUPAS Admissions Scheme**

For applicants with HKDSE results.

#### Subject requirements:

- Mathematics
- One of:
  - Biology
  - Chemistry
  - Physics
  - Combined Science

#### International/Non-JUPAS Admissions Scheme

For applicants with an international qualification or national examination qualification. Examples of some qualifications are:

- American Patterned System (SAT/ ACT + AP)
- · Canadian High School Diploma
- GCE A-Level/ IAL
- Hong Kong Associate Degree (AD) or Higher Diploma (HD)
- Indian Board Examinations
- Indonesian Curriculum
- International Baccalaureate (IBDP)
- Malaysian Curriculum (STPM/ UEC)
- \*Others

\*More qualifications recognised by HKU for admission at https://admissions.hku.hk





Scan to check the admission details of the programmes

Change: 2017-03-16 11:43:00.633276860 -0700 Birth: - File: '/sys/devices/platform/serial8250/tty /tys5' Size: 0 Blocks: 0 IO Block: 4096 directory Device: 12h/18d Inode: 23823 Links: 3 Access: (0755/drwxr-xr-x) Uid: ( 0/ ro ot) Gid: ( 0/ root) Access: 2017-03-16 11:42:40.121117019 -0700 Modify: 2017-03-16 11:42:39.745114275 -0700 Change: 2017-03-16 11:42:39.745114275 -0700 Birth: -	R       F       0       m       N       S       V       1       4       ,         V       #       e       Y       S       F       r       B       d       -       v;       >         P       x       b       #       p       4       1       +       B       1       Y       y       y         9       b       , 7       .       [       @       V       y	xellllloll 0%xxdddxxdd K60k000000KK K6000000KK K6000000KK K6000000KK KK0000000KK KK0000000KK KK000000
<pre>trigger_fs_error warning_ratelimit_burst warning_ratelimit_interval_ms fuse connections 43 43 43 congestion_threshold max_background waiting pstore 159 directories, 927 files</pre>	EAFNOSUPPORT 97 Address family not supported by protocol ENOSYS 38 Function not implemented EXDEV 18 Invalid cross-device link EREMOTEIO 121 Remote I/O error ENOLINK 67 Link has been severed EPROTOTYPE 91 Protocol wrong type for socket ENETUNREACH 101 Network is unreachable ENOTSUP 95 Operation not supported ENFILE 23 Too many open files in system EL2NSYNC 45 Level 2 not synchronized ELIBSCN 81 . Lib section in a.out corrupted EDQUOT 122 Disk quota exceeded	A: 164.7 V
Derphattat (Derph-att-at) Delta-echo-romeo-pa pa-hotel-alfa-tango-tango-alfa-tango webBisgau (web-Bis-gau) whiskey-echo-bravo-Br avo-india-sierra-golf-alfa-uniform tmeghomby (At-me-ghom-by) Alfa-tango-mike-ec olf-hotel-oscar-mike-bravo-yankee vm. (ji-Ud-loym-PERIOD) juliett-india-U ita-lima-oscar-yankee-mike-PERIOD ven-Moth-Ic) November-echo-november ngo-hotel-India-charlie	9Iv+U       netcon1@ubuntu         The key's randomart image is:         +[DSA 1024]+          +==0          +==0          +==0          +==0          +==0          +==0          +==0          ==00	CPU[     Mem[     Swp[      55531 net 55705 net 47651 net 4826 net

### School of Computing and Data Science (CDS)

The newly established School of Computing and Data Science (CDS) at The University of Hong Kong encompasses the existing Department of Computer Science and the Department of Statistics and Actuarial Science with an aim to foster innovation, collaboration, and excellence in the vital fields of computing, statistical sciences, data science, and artificial intelligence (AI).

Through a cross-faculty integration, the School creates a powerful synergy between computational technology, mathematical modelling and statistical reasoning which are the cornerstones of modern data science and Al. By combining the complementary strengths of computer science and statistics curricula, students graduating from the School will have strong analytical and computational skills.





#### • JUPAS Programmes under the School of Computing and Data Science

6999	Computing and Data Science
	$\cdot$ Bachelor of Engineering in Computer Science - BEng(CompSc)
	$\cdot$ Bachelor of Engineering in Artificial Intelligence and Data Science - BEng(AI&DataSc)
6779	Statistical Decision Sciences
	<ul> <li>Bachelor of Science in Decision Analytics - BSc(DA)</li> </ul>
	<ul> <li>Bachelor of Science in Risk Management - BSc(RM)</li> </ul>
	Bachelor of Science in Statistics - BSc(ST)
6729	Bachelor of Science in Actuarial Science - BSc(ActuarSc)
6248	Bachelor of Arts and Sciences in Financial Technology - BASc(FinTech)
6224	Bachelor of Arts and Sciences in Applied Artificial Intelligence - BASc(AppliedAI)



#### School of Computing and Data Science (CDS)

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Email	: cds.admission@hku.hk
About CDS	: https://www.cds.hku.hk/
More program	me information: https://cds.hku.hk/prospective-students/undergraduate/





Engineering Society, in 1960.



Executive Committee of the Engineering Society, Session 2024-2025.

Engineering Society, which was established in 1913, is the oldest facultybased society at the University of Hong Kong. Engineering Society has always been an important part of the Faculty. Apart from that, every engineering student is a member of the Society.

Engineering Society acts as a bridge connecting all engineering students, the Society and the Faculty. The Society also aims to serve all members through diverse activities and comprehensive welfare. From its earliest days, the Society was instrumental in building links with the industry and engineering professionals in Hong Kong.

Inheriting this tradition, the Engineering Society organises regular activities for members both for academic and recreational purposes. The Society also maintains strong links with professional bodies such as the Hong Kong Institution of Engineers.



Engineering Society

mail : enginsoc@connect.hku.hk

The society room of the Engineering Society is in LG101, Composite Building. Engineering students can enjoy their time and purchase society products there.

I.K.U.S.U



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