

BEng(CompSc)

Bachelor of Engineering in Computer Science

工學學士(計算機科學)

JUPAS Code: 6963



THE UNIVERSITY OF HONG KONG

DEPARTMENT OF
COMPUTER SCIENCE



Bachelor of Engineering (Computer Science)

Computer science is a young but fast-growing discipline. Its importance is evident in the profound impact that the use of computers has on our lives. The BEng(CompSc) programme is a programme that offers a solid education in the fundamental and essential areas of computing. It is a timely and practical curriculum that is essential for aspiring students and future IT professionals. On completion of this curriculum, students will be well-equipped with both basic and advanced knowledge in computer science, which aims to better prepare students to launch their career in the IT industry and/or to pursue postgraduate studies in this area.

Highlights of the Programme

Flexibility – Students can select electives from a wide variety of courses and use them as credits for a second major, a minor, double minors or the double-degree programme.

Accreditation – The programme is accredited by the Hong Kong Institution of Engineers (HKIE).

Research Opportunity – Outstanding students are having the opportunities to undertake research under the University Research Fellowship Programme.

Capstone Experience - Students have to join an internship in the industry during the summer after the third year, and work on a final year project which could be a research-based or software-development or industry-based project.

Programme Structure

To obtain the BEng(CompSc) degree, you need to pass at least 240 credits of courses in the following categories:

Component	Types	No. of Courses	Credits
University (UG5) requirements	University Common Core courses	6	36
	English courses	2	12
	Chinese course	1	6
Specialization – Computer Science	General Engineering courses	7	42
	CS Introductory courses	4	24
	CS Advanced courses	5	30
	CS Elective courses	6	36
	Capstone Experience	1	12
	Experiential Learning	1	0
Electives	Elective courses	7	42

Students may organize their study of disciplinary elective courses to specialize in one of the following focuses:

- **AI & Robotics** courses cover intelligence systems, machine learning, and robotics.
- **Big Data Analytics** courses focus on data analytics and the application of big data.
- **CyberSecurity** courses focus on cryptography, cyber attack and defense, applications of blockchain and computer forensics.
- **Financial Computing** courses focus on the technologies and their applications in the finance and business domain.
- **System & Networking** courses cover the design and implementation of computer hardware, software, and distributed systems.
- **Theoretical Computing Science** courses focus on mathematical aspects of computing and are more on theory than practice.

Minor(s) or Second Major

Students may opt for a minor or double minors or a 2nd major in another discipline such as Finance, Mathematics, Physics, Psychology, or Risk Management. The requirement for obtaining a minor is to complete 6 to 8 courses of the corresponding discipline; and for 2nd major, it's 12 to 16 courses. However, students may not be allowed to take a 2nd major which requires more than 90 credits as he/she may not be able to complete the BEng(CompSc) programme in 4 years.

Admission Requirements

Students seeking admission to the BEng(CompSc) programme have to apply for entry under the Faculty of Engineering Common Code Admissions, which allows applicants to use one single code, JS6963, to apply for 7 BEng programmes.

A quota will be imposed for BEng programmes offered by each department of the Faculty of Engineering. Students can choose their desired study programme after their first year of study, on the basis of academic performance.

JUPAS Applicants

In addition to the University entrance requirements, applicants with HKDSE qualification are required to fulfill the following programme entrance requirements:

English Language	Level 3
Chinese Language	Level 3
Mathematics	Level 3
Liberal Studies	Level 2
Two Elective Subjects	Level 3 One of the electives must be Physics or Combined Science with Physics components
Mathematics (Extended Module 1 or Module 2)	Level 3 (Preferred but not required)

(HKU entrance requirements: <https://admissions.hku.hk/apply/jupas>)

Non-JUPAS Applicants

Applicants with other qualifications, such as HKALE, GCSE, IB, Associate Degree and Higher Diploma, and Mainland students will be considered on individual merit basis. More details are available at HKU Admission website: <https://admissions.hku.hk/>

Internship Opportunity

The BEng(CompSc) programme requires students to undertake at least 4 weeks industrial training in the summer after their third year of study for gaining some real-world working experience in the industry. This period of training brings many benefits. For example, relevant working experience gives students a distinct advantage when they look for graduate employment. Employers often invite their interns to continue working beyond the summer as part-time staff. In many cases, this leads to the offer of a full-time position upon graduation.

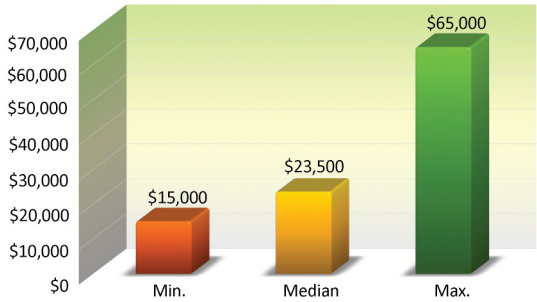
Career Prospects

Our graduates work as IT professionals in different sectors of the society, say banking & finance, the government, education, IT & telecommunication, etc. Many of them are now working in leading international companies and even work abroad with big names, such as Apple and Google. Some graduates started their own business and be an entrepreneur. Alternatively, they can pursue a master or doctoral degree in HK or overseas. Our graduates are welcome by institutions worldwide.

Computer Science graduates are very employable, not just for IT jobs but for other analytical roles too. The problem solving skills and analytical abilities that our graduates developed during their undergraduate study proved to be very valuable in many areas of endeavour.

Employment Survey of 2021 Graduates

Starting Monthly Salary of 2021 Graduates



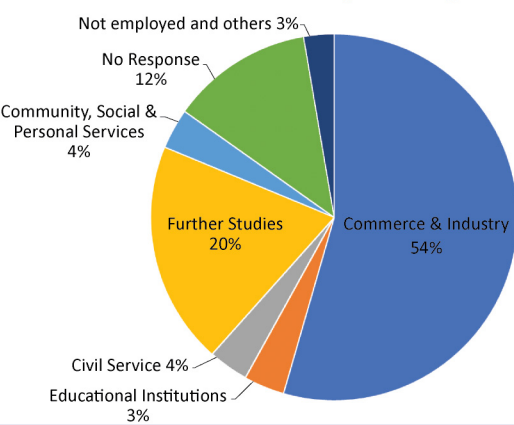
Number of Full-Time Job Offers

No. of offers received	Graduates
One	41%
Two	23%
Three or more	36%

Positions

	IT-related	Others
2020	95%	5%
2021	97%	3%

Where did our 2021 graduates go?



Companies

	2020	2021
IT/Tech./Engg.	53%	50%
Finance/Business	33%	35%
Others	14%	15%

Enquiries

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