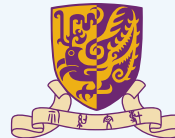




香港中文大學計算機科學與工程學系
Department of Computer Science and Engineering
The Chinese University of Hong Kong



香港中文大學
The Chinese University of Hong Kong

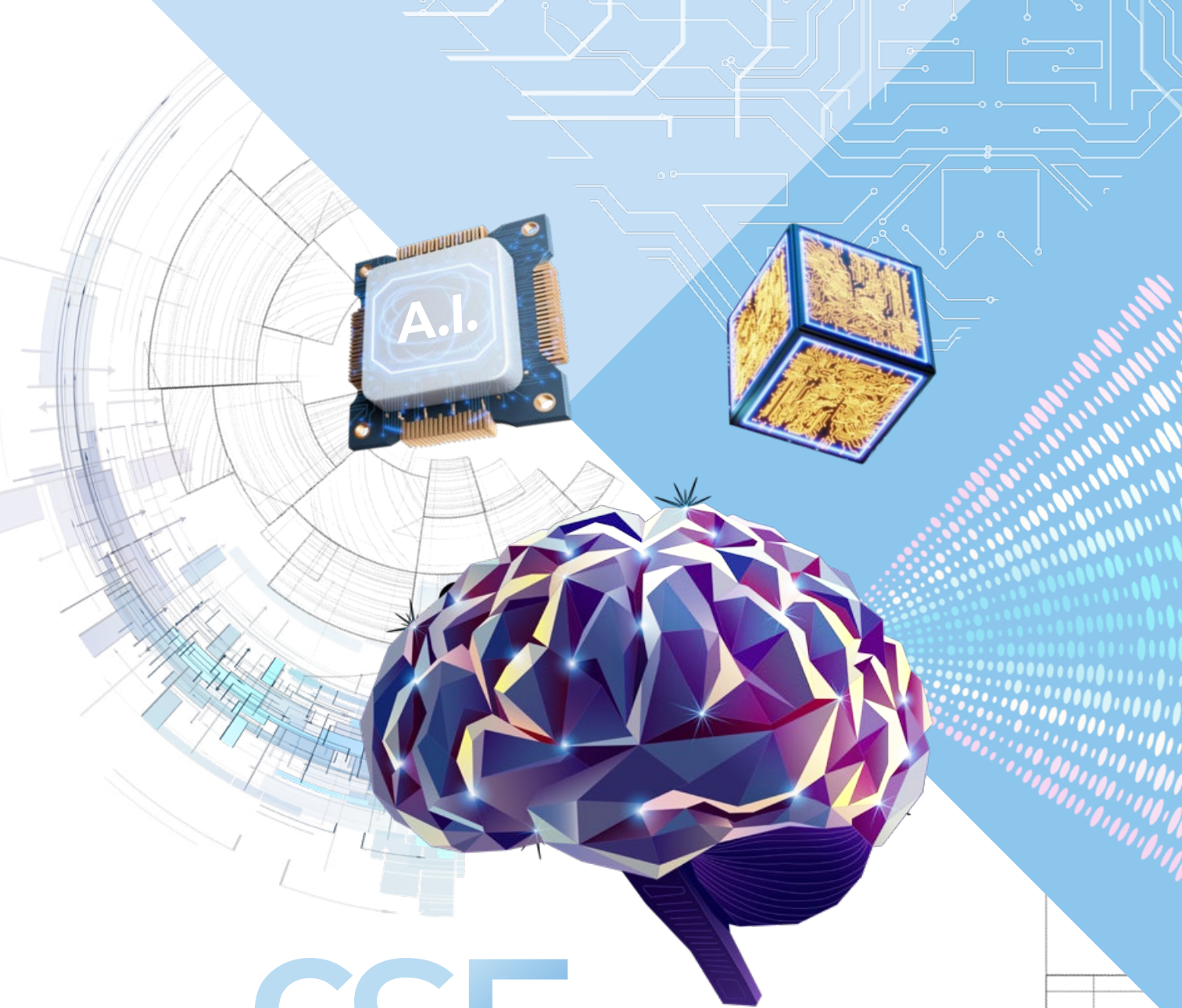
CSE

UNDERGRADUATE PROSPECTUS

Driving Innovation
and Breakthroughs
in Computer
Science Research

The Chinese University of Hong Kong
**Department of
Computer Science
and Engineering**





CSE

UNDERGRADUATE PROSPECTUS

The Chinese University of Hong Kong
**Department of
Computer Science
and Engineering**

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Driving Innovation
and Breakthroughs
in Computer Science
Research

The Chinese University of Hong Kong

Department of Computer Science and Engineering



Illustrious History

The Department of Computer Science and Engineering (CSE) at The Chinese University of Hong Kong (CUHK) was the first computer science department established in Hong Kong. Its long history reflects not only the Department's pioneering role in computer science and engineering education, but also its sustained commitment to nurturing society's computer science and engineering elite.

CUHK has offered computer courses since 1968. As the demand for trained computer personnel grew, the Department of Computer Science was established, initially within the Science Faculty, in the academic year of 1973/74. Since its founding, the Department has expanded rapidly in terms of both the quality and quantity of its enrolment, curriculum, staff, equipment, research and service to the community. The Department launched its first undergraduate major programme in Computer Science, leading to the BSc degree, in 1978. In 1983, the Computer Science major programme became the first outside the United Kingdom to be accredited by the British Computer Society (BCS). When the Faculty of Engineering was founded in 1991, the Department joined the new Faculty and began offering an undergraduate major programme in Computer Engineering, leading to the BEng degree. The Department was renamed the Department of Computer Science and Engineering in 1995.

Currently, the Department offers programmes leading to BSc, BEng, MSc, MPhil and PhD degrees. It is equipped with state-of-the-art computing equipment and cloud infrastructure for both Computer Science and Computer Engineering research. With a diverse body of students and talent from around the world, the Department strives to create an inclusive environment that fosters academic excellence and interdisciplinary exchange. Graduates from the Department have distinguished themselves in industry and academia in Hong Kong as well as all over the world.



Mission

To push forward the frontiers of computer science and engineering, and to advance the information technology industry in Hong Kong and mainland China through quality education and high-impact, world-class research.

Facts & Figures



1 Turing
Award
Winner

8



ACM
Fellows

16



IEEE
Fellows



1300⁺

Students



120⁺

Staff

Programmes

Information technology (IT) encompasses computer technology used for coding, data storage, communications and rendering, and is a key area for future development in Hong Kong. The most common forms of IT include the Internet, databases, virtual libraries, e-commerce, network security and machine learning. The rapid development of the Internet in recent years has made it an indispensable part of our daily life.

Like the computer science departments in most technologically advanced countries, our Department, the first of such academic department in Hong Kong, has the dual mission of teaching and advancing IT. Its undergraduate curriculum provides a solid foundation in IT, complemented by practical training in IT applications through projects and laboratory work.

Degree programmes our Department currently offers include:

Bachelor of Engineering in Artificial Intelligence: Systems & Technologies

Bachelor of Engineering in Computer Engineering

Bachelor of Science in Computer Science

**Bachelor of Science in Computational Data Science
(Joint Programme with Department of Statistics and Data Science)**

Our Department has offered a comprehensive curriculum for many years, and our ongoing efforts have enabled many of our graduates to secure prominent positions in the IT departments across a wide range of companies and organizations. As a result, new graduates have an invaluable alumni network on which to draw. Graduates of our Department are well-prepared to pursue careers in software development, system design and analysis, information engineering management, and related fields. Some also choose to pursue advanced research in IT.

Overview

AIST

Artificial Intelligence: Systems and Technologies

JUPAS Code: JS4468

- Biomedical Intelligence
- Intelligent Manufacturing and Robotics
- Intelligent Multimedia Processing
- Large-scale Artificial Intelligence – Theory and Systems

CENG

Computer Engineering

JUPAS Code: JS4412

- Computer hardware
- Computer-aided Design
- Embedded System
- VLSI Design & EDA

CSCI

Computer Science

JUPAS Code: JS4412

- Algorithms and Complexity
- Data Analytics
- Database & Information Systems
- Distributed Systems, Networks & Security
- Intelligence Science
- Rich Media

CDAS

Computational Data Science

(joint programme with
Department of Statistics
and Data Science)

JUPAS Code: JS4416

- Computational Data Science
- Computational Medicine
- Computational Physics
- Computational Social Science



Artificial Intelligence: Systems and Technologies Programme



Artificial Intelligence (AI) is an emerging engineering discipline that focuses on the technological innovations that enable computing systems to behave and discover new knowledge with human-like intelligence. It is a broad area that covers many specializations, such as machine learning, deep learning, knowledge representation/inference, large-scale computing systems and distributed systems, logic/constraint programming, human-computer interactions, natural language processing, big data analytics, etc. On one hand, it has evolved in multiple disciplines, such as finance, medicine, manufacturing, robotics, multimedia, telecommunications, computational linguistics, etc., and there is now a huge demand of AI specialists in both local and global employment markets. On the other hand, there are critical challenges on how to innovate and design solid and rigorous solutions for AI, as well as how to properly address the ethical and societal issues with AI.

Our Artificial Intelligence: Systems & Technologies (AIST) programme aims to equip students with the capabilities of designing and implementing AI systems and technologies that can analyze, reason about, and infer knowledge from massive information, backed by rigorous foundations of mathematics, basic sciences, data structures, statistics, algorithms, distributed computing, etc. Such capabilities enable students to develop cutting-edge AI solutions that are of practical interest to academia, industry and society.

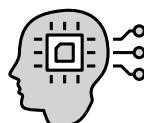
The AIST programme emphasises fundamental mathematics, sciences, theories, and complement the knowledge with practical systems skill sets. Four optional specialized streams are offered for students to choose according to their own interests:



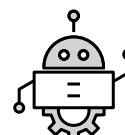
**Biomedical
Intelligence**



**Intelligent Multimedia
Processing**



**Large-scale Artificial
Intelligence
– Theory and Systems**



**Intelligent
Manufacturing and
Robotics**

Details of the AIST programme can be viewed at: <https://www.cse.cuhk.edu.hk/admission/aistn/>

Admission Requirements

The AIST programme aims to admit high caliber students who demonstrate outstanding abilities in English, mathematics and science subjects. Excellent academic backgrounds, together with a problem-solving mindset, will be essential to comprehend the knowledge and tackle future challenges with AI.

1. JUPAS Admission (JUPAS Code: JS4468)

HKDSE Subject	Minimum Level	Subject Weighting
HKDSE Core Subjects		
English Language	4	1.25
Chinese Language	3	1.25
Mathematics (Compulsory Part)	5 [^]	1.75
Citizenship and Social Development	A (Attained)	-
HKDSE Elective Subjects		
Any two subjects	3	#

[^] Applicants with level 4 in Mathematics (Compulsory Part) and good results in other HKDSE subjects will be exceptionally considered on a case-by-case basis.

The AIST programme accepts any subject as elective. Preferred subjects include Mathematics Extended Module 1 or 2, Biology, Chemistry, Physics, and Information and Communication Technology. Subject weighting of 1.75 is given to Mathematics Extended Module 1 or 2; 1.5 is given to other preferred subjects; and 1 is given to any other subjects.

Selection is based on the Best 5 HKDSE subjects with subject weighting applied. Bonus points will be awarded to the 6th and 7th subjects, if any.

Notes: No penalty will be imposed for applicants with more than one sitting of HKDSE results. AIST will NOT accept Category B (Applied Learning) subjects as extra electives.

2. Non-JUPAS (Local) / International Student Admission

Applicants with other qualifications can apply through non-JUPAS admission schemes. These qualifications include Associate Degree / Higher Diploma, HKALE, GCE AL, IB, SAT/AP and other overseas qualifications for university admission. Applications will be assessed on a case-by-case basis. Please refer to the website of Office of Admissions and Financial Aid (<http://admission.cuhk.edu.hk/>) for further information.

Applicants will be considered on the basis of their education background and academic achievements. To make the applications more competitive, applicants are expected to demonstrate outstanding abilities in English, mathematics and science subjects.

Curriculum Structure and Credit Requirements

The curriculum is built on a credit-unit system, and the normative period of study is four years. Students have to complete 123 units and satisfy requirements under separate categories. Non-JUPAS students with qualifications such as Associate Degree / Higher Diploma / GCE AL / IB, etc. may be admitted with advanced standing and could be exempted from up to 23 units. The overall curriculum structure is as follows:

Components	Year 1 Entry
	Credit Units
Major Programme	75
Faculty Package	9
Foundation Courses	16
Major Required Courses	28
Major Electives	22
University Common Core	39
English	8
Chinese	5
University General Education	13
College General Education	6
Understanding China	1
Hong Kong in the Wider Constitutional Order	1
Digital Literacy and Computational Thinking	3
Physical Education	2
Free Electives	9
Total Credits Required for Graduation	123



Career Prospects

As there is now a manpower shortage of AI specialists in both local and global employment markets, with the support of a pool of top-tier talents in AI and sophisticated scientific research facilities, our programme therefore aims to train talented **AI engineers/ scientists** for the following industries: **biomedical engineering/science, information and computing technologies, manufacturing and robotic**, as well as **intelligent multimedia processing** for various Internet companies.

COMPUTER SCIENCE AND ENGINEERING

Students who would like to pursue **Computer Engineering (CENG)** or **Computer Science (CSCI)** will be admitted to the CSE Department through “department-based” admission to the Computer Science and Engineering (BCSE) programme. Upon completing their first year of study, BCSE students will then be invited to declare their major in CENG or CSCI. Students with outstanding HKDSE results and good academic performance in their first year of study are guaranteed their first choice of major.

While both CENG and CSCI are rigorously founded on problem-solving by programming, data structure, and algorithm design, CENG distinguishes itself from other programmes by offering specialized training for students in areas such as mobile embedded systems, microprocessors, VLSI design, hardware-aided security, and supercomputing. On the other hand, CSCI focuses more on software innovation and aims to train students with a flexible curriculum that covers diverse and specialized areas.



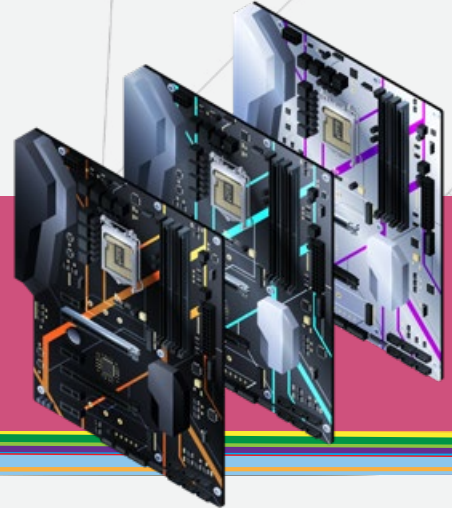
CENG

Distinctive Path to
Hardware Mastery

CSCI

Forefront of Software
Innovation and
Development

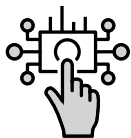
Computer Engineering Programme



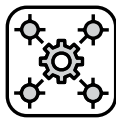
Established in 1991, the CENG programme focuses on both computer hardware and software aspects. Students will study fundamental knowledge of computer engineering, from computer architecture and interfacing to programming, embedded systems and application development, etc. They will also be guided to integrate knowledge and theories into practical set-up. With the rapid development of VLSI and microprocessors, and thus gadgets like smartphones and tablets, students will have the opportunities to apply their professional knowledge to inspiring future devices. The programme is accredited by the Hong Kong Institution of Engineers (HKIE).

Innovation and advancement in technology in the future will go far beyond our imagination today. Pursuing the CENG programme will be your first step to equipping yourself in order to cope with the challenges in this high-tech era.

The CENG curriculum consists of courses in the following areas:



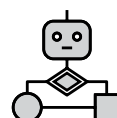
Applications



Computer
Hardware



Computer
Software



Computer-
aided Design



Digital
Hardware
Technologies



Internet of
Things (IoT)



Very large-scale
integrated (VLSI)
circuit design



System
connectivity

Other advanced topics include:

- Hardware-accelerated bio-related processing
- Hardware-aided security
- Multi-core systems and architecture
- Reconfigurable computing
- Super-computing

Computer Engineering Streams:

- Embedded Systems
- VLSI Design and EDA

Details of the CENG programme can be viewed at: <https://www.cse.cuhk.edu.hk/admission/cengn/>

Computer Science Programme



Launched in 1978, the programme has a wide coverage of studies, including algorithms, artificial intelligence, big data analytics, computer and network security, database systems, machine learning, programming languages, etc. From introductory courses to the more advanced topics, having accompanied with tutorials and projects for hands-on experience, students will progressively learn and develop a problem-solving mindset to tackle any possible challenges in computer-related fields. The CSCI programme is accredited by the Hong Kong Institution of Engineers (HKIE) and has gained an international reputation for its excellent research and teaching.

Computer science is constantly creating new opportunities in various fields. The CSCI programme will empower you to gain knowledge of state-of-the-art technologies. You will be the next computer scientist who innovates and changes the world.

The CSCI programme covers the following areas:



Artificial
Intelligence



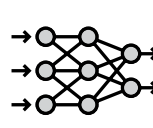
Big Data
Analytics



Bioinformatics



Computer
and Network
Security



Computer
Systems and
Networking



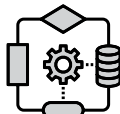
Databases



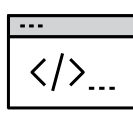
Information
Systems



Internet



Multimedia
Technology



Programming
Languages



Software
Engineering



Theoretical
Computer
Science

Computer Science Streams:

- Data Analytics
- Database and Information Systems
- Distributed Systems, Networks and Security
- Intelligence Science
- Rich Media
- Theoretical Computer Science

Details of the CSCI programme can be viewed at: <https://www.cse.cuhk.edu.hk/admission/cscin/>

Admission Requirements

4-Year Curriculum (Year 1 Entry)

1. JUPAS Admission (JUPAS Code: JS4412)

HKDSE Subject	Minimum Level	Subject Weighting
HKDSE Core Subjects		
English	3	1
Chinese	3	1
Mathematics	4	1.5
Citizenship and Social Development	A (Attained)	-
HKDSE Elective Subjects		
Any one science subject [^]	3	M1/M2: 1.75, Other science subjects: 1.5
Any one subject	3	M1/M2: 1.75 Other preferred subjects: 1.5# Any other subjects: 1

[^] Science subjects include Biology / Chemistry / Physics / Mathematics Extended Module 1 or 2 / Information and Communication Technology.

[#] Preferred subjects include Biology / Chemistry / Physics / Information and Communication Technology / Design and Applied Technology / Mathematics Extended Module 1 or 2.

Selection is based on the Best 5 HKDSE subjects with subject weighting applied. Bonus points will be awarded to the 6th and 7th subjects, if any.

2. Non-JUPAS (Local) / International Student Admission

Applicants with other qualifications can apply through non-JUPAS admission schemes. These qualifications include Associate Degree / Higher Diploma, HKALE, GCE AL, IB, SAT/AP and other overseas qualifications for university admission. Applications will be assessed on a case-by-case basis. Please refer to the website of the Office of Admissions and Financial Aid (<http://admission.cuhk.edu.hk/>) for further information.

2-Year Curriculum (Senior Year Entry)

Students with a Higher Diploma / Associate Degree from local institutions can apply for senior year admission to Computer Engineering or Computer Science. Please refer to the website of the Office of Admissions and Financial Aid (<https://admission.cuhk.edu.hk/application/hong-kong-sub-degree/overview/>) for further information.

Curriculum Structure and Credit Requirements

The curriculum is built on a credit-unit system, and the normative period of study is four years. Students have to complete 123 units and satisfy requirements under separate categories. Non-JUPAS students with qualifications such as Associate Degree / Higher Diploma / GCE AL / IB, etc. may be admitted with advanced standing and could be exempted from up to 23 units.

We also offer a 2-year curriculum for outstanding students with local Associate Degree/ Higher Diploma qualifications. Students admitted to the 2-year curriculum are required to complete at least 69 units for graduation.

The overall curriculum structure is as follows:

Year 1 Entry		Senior Year Entry	
Computer Engineering (CENG)	Computer Science (CSCI)	Computer Engineering (CENG)	Computer Science (CSCI)

Components	Credit Units			
Major Programme	75		52	
Faculty Package	9	9	6	3
Foundation Courses	17	16	0	7
Major Required Courses	37	33	34	27
Major Electives	12	17	12	15
University Common Core	39		12-16	
English	8		2-5	
Chinese	5		0	
University General Education	13		5	
College General Education	6		2-3	
Understanding China	1		1	
Hong Kong in the Wider Constitutional Order	1		1	
Digital Literacy and Computational Thinking	3		0	
Physical Education	2		1	
Free Electives	9		Remaining units	
Total Credits Required for Graduation	123		69	

Career Prospects

Over the years, **CSE has built up a large alumni network in the computer industry not only in Hong Kong, but also in the USA and Mainland China.** Many of our graduates have taken up important positions in various organizations and companies, such as the HKSAR government, HSBC, Intel, Microsoft, IBM and Google, etc. Quite a number of our graduates have started their own businesses and become successful entrepreneurs. Others have continued their postgraduate studies and taken up teaching and research work in prestigious institutions both locally and overseas. Through this network, **our graduates can enjoy comparative advantages in professional career development.**

Chief Information Officer / Chief Executive Officer / Entrepreneur

IT Project Manager / IT Consultant / IT Security Specialist

Software Engineer / Computer Hardware Engineer / System Engineer / Mobile Application Developer / Programmer / Game Designer / IT Trainees

Double Degree

The Faculty of Engineering, in collaboration with the Faculty of Business Administration here at the CUHK, offers a **double degree option in Engineering and Business Administration.**

CSE students of this double degree option would pursue their first bachelor's degree at the Faculty of Engineering with a major in either CENG or CSCI. Upon completion of the first degree, they would then pursue their second bachelor's degree in Integrated Business Administration (IBBA) at the Faculty of Business Administration. Students would be awarded a Bachelor of Engineering (B.Eng.) (for those majoring in CENG) or a Bachelor of Science (B.Sc.) (for those majoring in CSCI), and a Bachelor of Business Administration (BBA) majoring in Integrated Business Administration (IBBA) upon completion of studies.

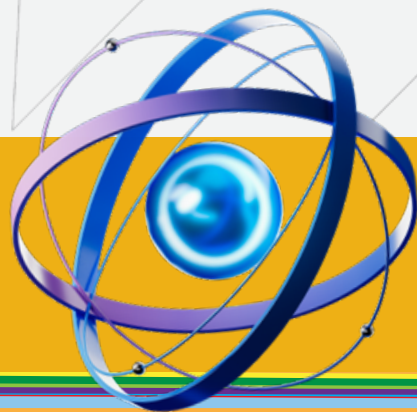
Special features of this option:

- The double degree option in Engineering and Business Administration is designed as a 4 + 1 programme under the 4-year curriculum. The second degree programme would last for one year and is run on a self-financing basis.
- Students will complete the first degree before commencement of the second degree. The second degree is optional and students may choose to opt out of the programme in the end if they wish.
- Students of this double degree option will need to take some IBBA courses during the study for their first degree. If they eventually choose not to pursue the second degree in BBA, they may apply for a Minor in IBBA in recognition of the credit units earned from these courses instead if they fulfill the relevant academic requirements of the IBBA Minor programme.

Details of the Double degree Option: <http://www.erg.cuhk.edu.hk/erg/ergbba>

Computational Data Science

Joint Programme with Department of Statistics and Data Science



The data-driven era creates strong interests and needs of analyzing, storing, distributing, and sharing massive amounts of data using sophisticated data analytics and machine learning algorithms and methodologies, with applications in multiple disciplines including science, social science, finance, public health, medicine, engineering, and telecommunications. Huge job demand for data analysts in both local and global employment markets has been witnessed.

This new programme focuses on in-depth academic training in the domain of computational data science. It aims to equip students with the capabilities of applying both

1. high-performance parallel and distributed computing for big data manipulation, and
2. data-driven statistical procedures, methodologies and theories for mining patterns, making predictions, and discovering sciences from large and complex datasets.

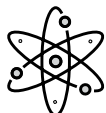
Such capabilities enable students to develop cutting-edge massive data analytics and management solutions that are of practical interest to academics, industry, and society.

Special features of the curriculum:

- Solid inter-disciplinary curriculum;
- "Computer Science/Statistics + X" programme;
- Several specializations (i.e., the X component) that apply the core knowledge of computational data science to different science, engineering, and medicine disciplines:



Computational
Data Science



Computational
Physics



Computational
Medicine



Computational
Social Science

Details of the CDAS programme can be viewed at: <https://www.cdas.cuhk.edu.hk/>

Admission Requirements

1. JUPAS Admissions (JUPAS Code: JS4416)

HKDSE Subject	Minimum Level	Subject Weighting
English	4	1
Chinese	3	1
Mathematics (Compulsory Part)	4	2
Citizenship and Social Development	A (Attained)	-
Two Elective Subjects	3	#

The CDAS programme accepts any subject as elective, with a subject weighting of:

- 2 for Mathematics Extended Module 1 or 2;
- 1.5 for Economics, Biology, Chemistry, Physics and Information and Communication Technology;
- 1 for any other subjects.

Selection is based on the Best 5 HKDSE subjects with subject weighting applied.

2. Non-JUPAS (Local) / International Student Admission

Applicants with other qualifications can apply through non-JUPAS admission schemes. These qualifications include Associate Degree / Higher Diploma, HKALE, GCE AL, IB, SAT/AP and other overseas qualifications for university admission. Applications will be assessed on a case-by-case basis. Please refer to the website of Office of Admissions and Financial Aid (<http://admission.cuhk.edu.hk/>) for further information.



Curriculum Structure and Credit Requirements

The curriculum is built on a credit-unit system, and the normative period of study is four years. Students have to complete 123 units and satisfy requirements under separate categories. Non-JUPAS students with qualifications such as Associate Degree / Higher Diploma / GCE AL/ IB, etc. may be admitted with advanced standing and could be exempted from up to 23 units.

The overall curriculum structure is as follows:

Year 1 Entry	
Components	Credit Units
Major Programme	75
Faculty Package	9
Foundation Courses	18
Major Required Courses	24
Research Component Courses	6
Major Electives	18
University Common Core	39
English	8
Chinese	5
University General Education	13
College General Education	6
Understanding China	1
Hong Kong in the Wider Constitutional Order	1
Digital Literacy and Computational Thinking	3
Physical Education	2
Free Electives	9
Total Credits Required for Graduation	123



Career Prospects

Computational data science is a rapidly evolving interdisciplinary field that is in high demand. This program prepares graduates for careers that require the deep knowledge and skills of machine learning, database management, and high-performance computing with an adequate statistics background. Future graduates will be prepared for careers that create order and derive meaning from huge amounts of data. They could **work as business intelligence analysts, data mining engineers, data modelers, data scientists, engineers and developers, data warehouse architects and research analysts**, etc.

6-unit research-driven project course

All students of our programme are required to take a 6-unit research-driven project course to work with professors of the University Central Cluster on real-world interdisciplinary problems. Via the project, students will learn how to formulate scientific or industrial problems into data science problems and tackle them with computational and statistical methods. As a result, our graduates will be well-prepared to join the workforce to solve practical computational data science problems upon graduation.

Diverse Learning Experience and Enhancement Programmes



Engineering Leadership, Innovation, Technology and Entrepreneurship Stream (ELITE Stream)

The ELITE Stream is offered by the Faculty of Engineering to students with excellent academic performance. Its aims are to nurture outstanding engineering students and to develop their potentials through additional challenging coursework and invaluable extra-curricular activities. Any student who meets the entrance requirements is eligible for the Stream. The award of the ELITE Stream to qualified students will be officially recorded on the academic transcript.

A series of stimulating and inspiring courses will be offered exclusively for ELITE students. There will be a student society, special exchange opportunities, social and scholarly events specially organized for ELITE students.

Details of the entrance and coursework requirements and the declaration procedures for the ELITE Stream can be viewed at: www.erg.cuhk.edu.hk/erg/elite.



Undergraduate Summer Research Internship

The Faculty Undergraduate Summer Research Internship programme is launched to offer CUHK engineering undergraduate students with funding support to undertake a research project under the supervision of professors in the summer. The objectives are to give students exposure to research environment and groom them for graduate studies and overseas summer research schemes.

Details of the Scheme can be viewed at: <https://www.erg.cuhk.edu.hk/erg/SummerResearchInternship>.



International Exchange

The University has exchange agreements with over 280 higher education institutions in over 35 countries/regions covering Asia, Australia, Europe and the Americas, including the world's top universities: the Massachusetts Institute of Technology (MIT) (USA), Stanford University (USA), the California Institute of Technology (Cal Tech) (USA), the University of Toronto (Canada), the University of Liverpool (UK), the Technical University of Denmark (Denmark), the National University of Singapore (Singapore), the Nanyang Technological University (Singapore), the University of New South Wales (Australia), Osaka University (Japan), Seoul National University (Korea), Tsinghua University (China), Peking University (China), etc.



Placement and Internship Programme (PIP)

To assist students in fostering their future career development, the Faculty has initiated the Placement and Internship Programme (PIP) since 1975. Many students take the option of a one-year industrial full-time placement before they continue their final year of study. They can be involved in a supervised training in an organization normally for a period of twelve months, during which they will be exposed to the real industrial working environment and will take part in practical projects working with experienced engineering professionals. The comprehensive and intensive training can provide students with valuable work experience.

The Faculty also collaborates with companies to hold recruitment talks, technology seminars and workshops periodically such that students can keep abreast of the industrial trends.

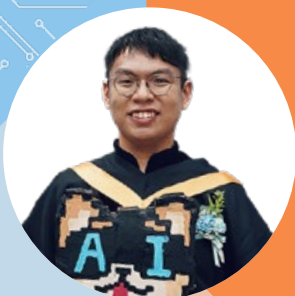
For more information, please visit <https://pip.erg.cuhk.edu.hk>.



Local and International Competitions

A variety of non-classroom activities throughout the school year will be arranged. In particular, students will have opportunities to join international or regional programming and engineering competitions, including the ACM-ICPC International Collegiate Programming Contest, the Intel Cup Undergraduate Electronic Design Contest – Embedded System Design Invitational Contest, the "Challenge Cup" Extracurricular Academic Science and Technology Works Competition, the Asia Student Supercomputer Challenge (ASC), the Robocon Hong Kong Contest, etc., and also supercomputing contests such as Knowledge Discovery and Data Mining Cup, Microsoft Imagine Cup, etc. Through these competitions, students will learn how to address real-world problems with computer science and engineering. Both the hands-on experience and ranking from the competitions will be a huge plus for students' future job search and career development.

Alumni's Words



Henry Chiu

2023 AIST Graduate
Start-Up Founder
OAO Limited

A Journey of Growth, Connection, and Innovation

During my enriching journey at CUHK, I have created cherished memories and embraced numerous opportunities that have profoundly shaped me. As a member of the pioneering batch of the AIST program, my fellow classmates and I encountered uncertainties, yet we discovered abundant pathways for personal and academic growth. The close-knit community within our major fostered strong bonds with classmates and underclassmen, enabling us to forge lasting connections.

Thanks to the invaluable connections and knowledge I have gained at CUHK, I have been able to apply my academic expertise in AIST to successfully launch and operate my own startup with some CSE friends I met in the programme. This university has played a pivotal role in shaping my career path and creating opportunities for personal growth. The resources provided by CUHK, especially the PI Centre and EPIN, have contributed significantly in our achievements. With support from CUHK, we have been able to transform our aspirations into reality.

“ I will be forever grateful for the transformative experience and lifelong connections I have gained during my time at CUHK. ”



Ethen Yuen

2024 CSCI Graduate
Software Engineer
Nex Team Inc.

My CUHK Journey in Computer Science and Competitive Programming

What I liked about the Computer Science curriculum is the emphasis on theoretical knowledge, taught through courses like Data Structures, Formal Languages and Automata Theory, and Principles of Programming Languages. The importance of these courses is often overlooked by many as they seem too abstract and impractical. However, they have been fundamental in building my understanding of how computers work. I think that is what differentiates studying Computer Science from solely trying to land a job as a Software Engineer.

Studying Computer Science at CUHK has been an incredible journey filled with challenges. Most of my time at CUHK was spent on the CUHK ICPC Programming Team, operated under the CSE Department. Throughout the years, we spent hours every day discussing algorithms and practicing our skills through contests. Thanks to the Department's support, we could travel and compete with world-class Asian programmers. I'm proud of our team's achievements, including winning Gold Awards at multiple regionals and the continental final.

“ It shows that Hong Kong can nurture talents whose abilities are on par with the best in the world. ”



CSE

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