6999 Computing and Data Science

Bachelor of Engineering in Computer Science [BEng(CompSc)]

Bachelor of Engineering in Artificial Intelligence and Data Science [BEng(AI&DataSc)]

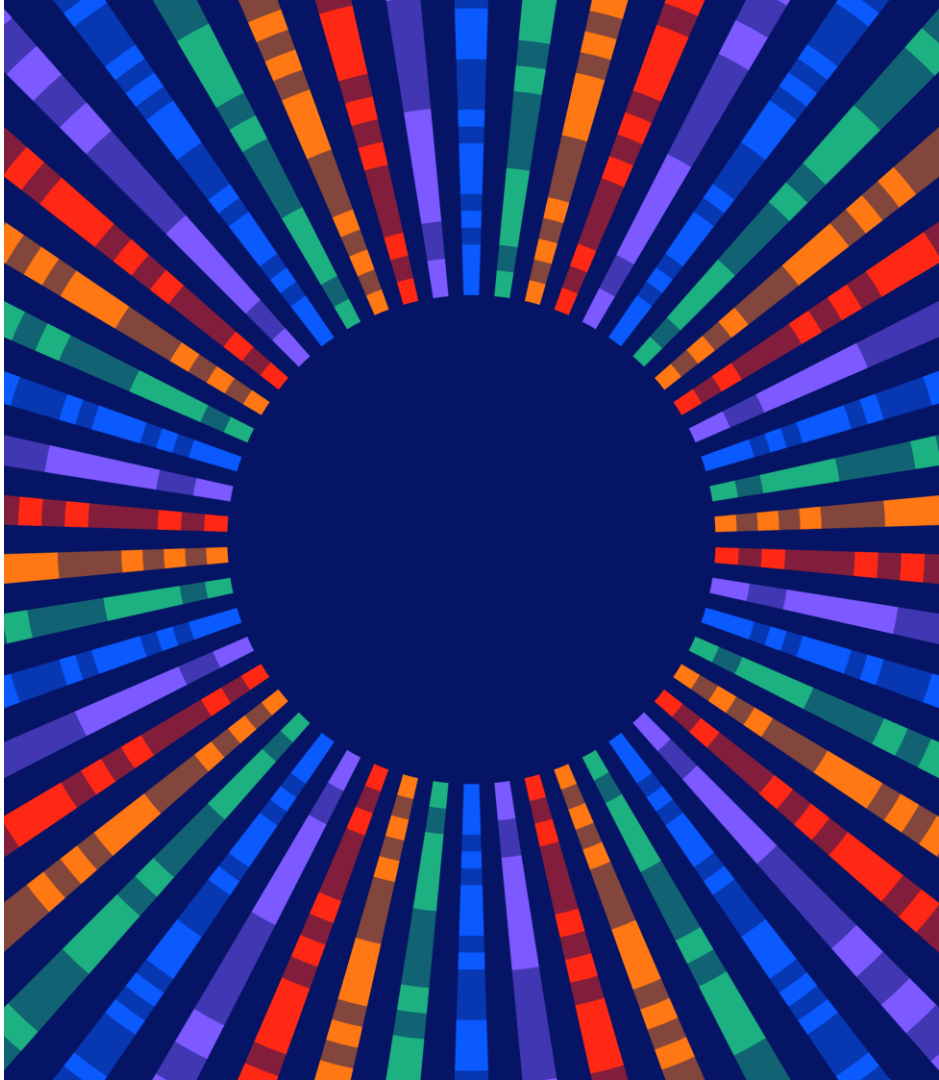
HKU Induction Day 2025
14 August 2025

SCHOOL OF COMPUTING & DATA SCIENCE
The University of Hong Kong

About School of Computing & Data Science (CDS)

Empowering Changemakers of the Future

- Newly established school at The University of Hong Kong
- Encompasses the Department of Computer Science and the Department of Statistics and Actuarial Science
- Aims to foster innovation, collaboration, and excellence in the vital fields of
  - Computing
  - Statistical Sciences
  - Data Science
  - Artificial Intelligence



International rankings of HKU

QS WORLD UNIVERSITY RANKINGS

#2
in Asia (2025)

#11
in the world (2026)

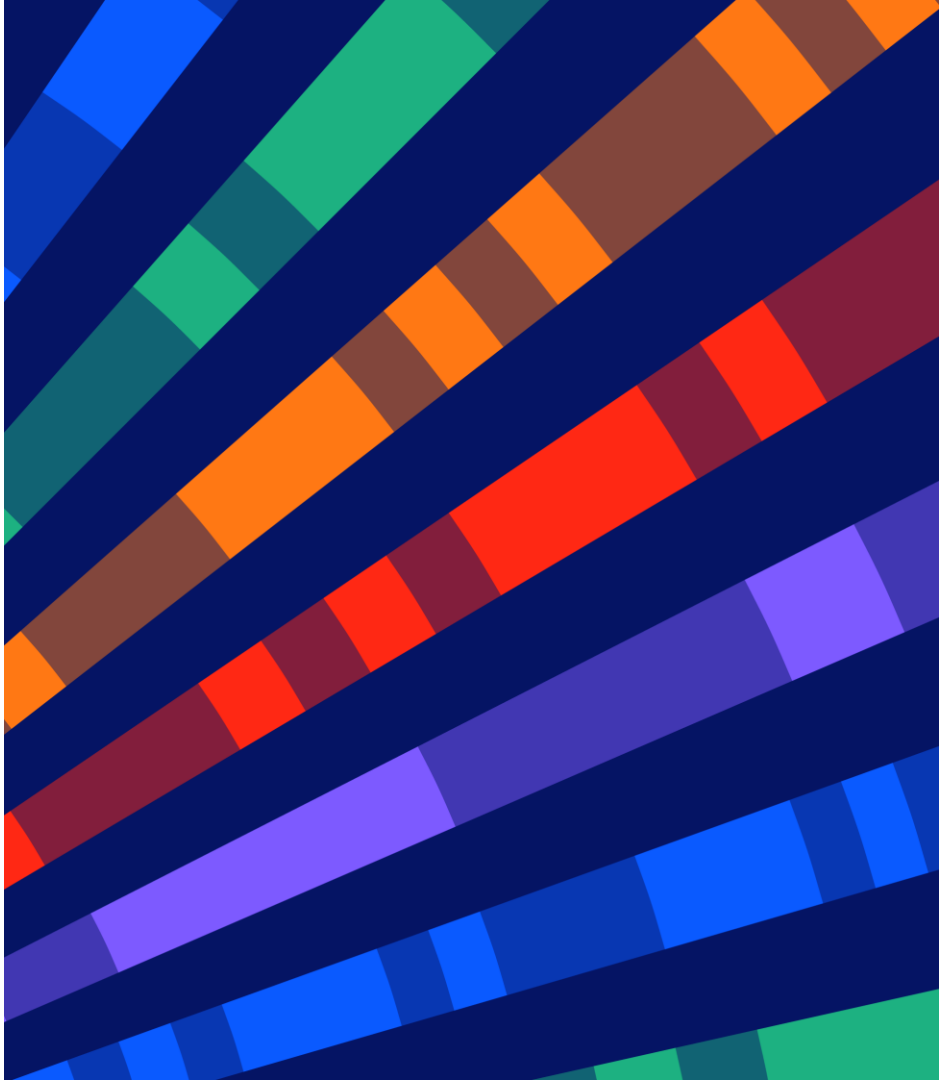
#18
Data Science and Artificial Intelligence (2025)

THE Times Higher Education

#6
in Asia (2025)

#35
in the world (2025)

The University of Hong Kong
School of Computing & Data Science



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Bachelor of Engineering in Computer Science [BEng(CompSc)]

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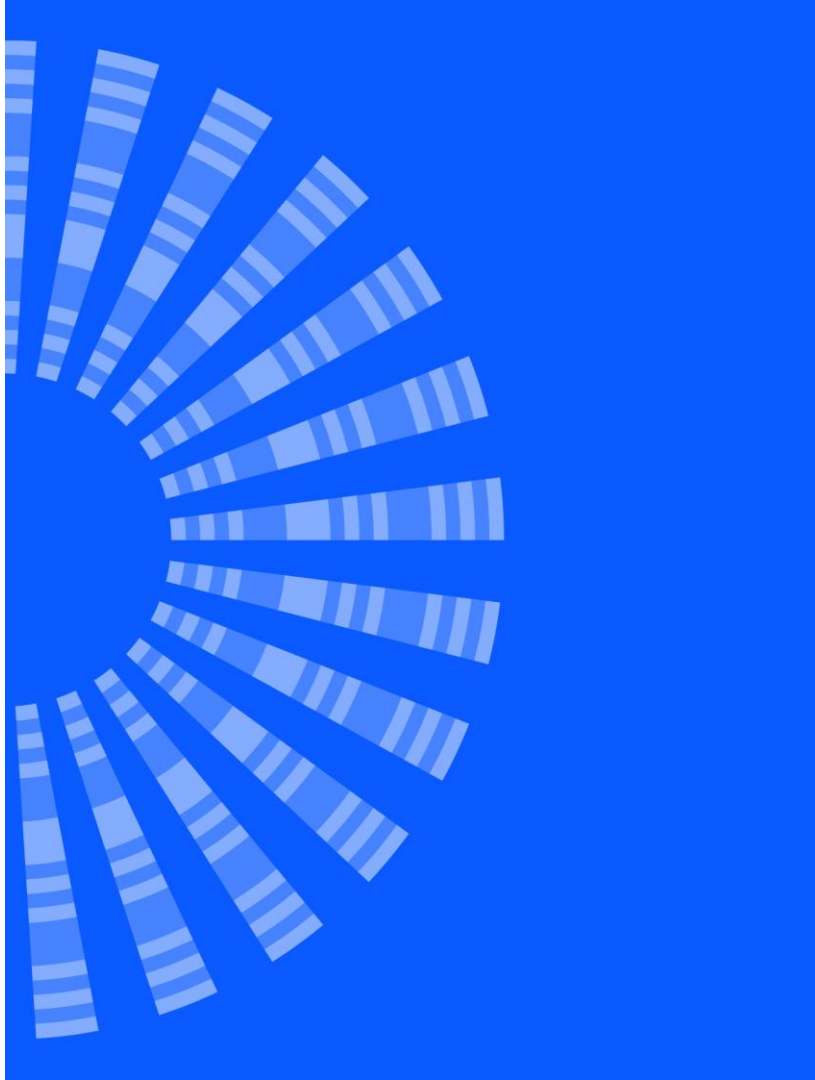

The University of Hong Kong
School of Computing & Data Science

6999 Computing and Data Science

BEng(CompSc) and BEng(AI&DataSc)

Computing and Data Science (programme code: 6999) offers the choices of two professional degree programmes, namely: **(1) Bachelor of Engineering in Computer Science [BEng(CompSc)]**, and **(2) Bachelor of Engineering in Artificial Intelligence and Data Science [BEng(AI&DataSc)]**. Students admitted to 6999 Computing and Data Science are free to choose (i.e., no quota limit applies) either of the aforesaid programmes.

All students will be enrolled with BEng(CompSc) by default; and they can choose the final programme [BEng(CompSc)] or [BEng(AI&DataSc)] freely by the end of their first year.

Bachelor of Engineering in Computer Science [BEng(CompSc)]

The University of Hong Kong
School of Computing & Data Science

Bachelor of Engineering in Computer Science [BEng(CompSc)]

Comprehensive Knowledge Landscape

- Strong foundation in computer science and its applications
- Covers a wide range of topics:
  - Programming
  - Algorithms
  - Data structures
  - Software engineering
  - Computing infrastructures
  - Artificial intelligence technologies

Bachelor of Engineering in Computer Science has been accredited by The Hong Kong Institution of Engineers

HKIE THE HONG KONG INSTITUTION OF ENGINEERS 香港工程師學會

Bachelor of Engineering in Artificial Intelligence and Data Science [BEng(AI&DataSc)]

The University of Hong Kong
School of Computing & Data Science

Bachelor of Engineering in Artificial Intelligence and Data Science [BEng(AI&DataSc)]

Comprehensive Knowledge Landscape

- Training students for careers in AI and data science
- Covers a wide range of topics:
  - Programming
  - Data modelling
  - Big data systems
  - Law and ethics in AI & DS
  - AI technologies and applications

Curriculum Structure

	No. of Credits	
	BEng(AI&DataSc)	BEng(CompSc)
University Requirements **- Language Enhancement Courses** **- Common Core Courses** **- Digital Literacy Courses** **- Non-credit bearing courses as required by the University**	12 36 6 0	
Foundation Courses	36	
Disciplinary Core Courses (Introductory)	24	
Disciplinary Core Courses (Advanced)	30	
Capstone Experience and Internship	18	
Disciplinary Elective Courses	36	
Elective Courses	42	
Total:	240	

Language Enhancement Courses – English Courses

CAES1001 Academic Communication in English

- Students who achieved Level 5 or above in English Language in HKDSE are exempted from taking this course
- For the list of equivalent qualifications, please refer to Division's first year student handbook 2025-26
- For non-local students with qualifications not listed in the aforesaid equivalent qualification list, you can apply the exemption by taking Academic Speaking and Writing test conducted by CAES.

CAES9542 Technical English for Computer Science

- 1st semester of Year 4

Language Enhancement Courses – Chinese Courses

Local Students: To be advised in Year 3

Putonghua-speaking Students:
CUND9001 / CUND9002 / CUND9003 / CUND9004

International Students:
“Chinese Language” CHIN9501 or CHIN9511 / “Chinese Culture” CHIN9521 or CHIN9522

Please refer to Division’s first year student handbook 2025-26

Common Core Courses

Unless otherwise prescribed in the curriculum regulations and syllabuses, students are required to successfully complete 36 credits in the Common Core Curriculum, comprising at least 6 credits and not more than 12 credits from each Area of Inquiry. Students are not allowed to take more than 24 credits of Common Core courses within an academic year, except for students who are required to make up for failed credits as well as those who take courses offered in the summer semester which are optional. In addition, Common Core courses cannot be taken as free electives.

The five Areas of Inquiry (AoIs) are:

- Scientific and Technological Literacy (course code: CCSTxxxx)
- Arts and Humanities (course code: CCHUxxxx)
- Global Issues (course code CCGLxxxx)
- China: Culture, State and Society (course code: CCCHxxxx)
- Artificial Intelligence (course code: CCAIxxxx)

UG5E1001 Introduction to the Constitution, the Basic Law and the National Security Law

- This is a non-credit bearing course which is required by the University under Regulation UG5(e) of the Regulations for First Degree Curricula as part of the graduation requirements for all current Full-time and Part-time Undergraduates.
- This online course is based on pre-recorded lectures (PRLs) and study materials which are prepared by the Faculty of Law. Students will adopt a self-directed learning approach.
- This course aims to provide a basic introduction of the Constitution, the Basic Law and the National Security Law. The supplementary materials provide students with an opportunity to examine the international perspective on the topics under study.
- Please click here to access the "UG5E1001 Student Guide" on instructions for access to the course. (Login to HKU Portal is required.)

Sample Study Plan for BEng(AI&DataSc) [for 2025-26 intake] (for students with HKDSE Math Extended Module 1 or 2 ++)

		Semester 1		Semester 2	
Year 1 (57 cu)	UG5 Requirements && (21 cu) Foundation (36 cu)	COMP1117	Computer programming	COMP1110	Computing & data science in everyday life
		MATH1013	University mathematics II	COMP2113	Programming technologies
		CC	University Common Core	MATH2012	Fundamental concepts of mathematics
		CC	University Common Core	MATH2014	Multivariable calculus & linear algebra
		CC	University Common Core		
		CAES1001 # / AILT1001	Academic Communication in English / AI Literacy I	CAES1001 # / AILT1001	Academic Communication in English / AI Literacy I
Year 2 (63 cu)	UG5 Requirements && (21 cu) AI&DataSc Core (30 cu) Electives (12 cu)	COMP2119	Introduction to data structures & algorithms	COMP3314	Introduction to machine learning
		SDST2601	Probability & statistics I	SDST2602	Probability & statistics II
		COMP2501	Introduction to data science	Free Elective	Elective course in any disciplines
		Free Elective	Elective course in any disciplines	CC	University Common Core
		CC	University Common Core		
		CC / AILTxxxx	University Common Core / AI Literacy II	CC / AILTxxxx	University Common Core / AI Literacy II
Year 3 (66 cu)	UG5 Requirements && (6 cu) AI&DataSc Core (24 cu) Electives (30 cu)	COMP3270	Introduction to artificial intelligence	COMP3340	Introduction to deep learning
		COMP3312	Law & ethics in data science	COMP3278	Introduction to database management systems
		AI&DataSc Elective	Elective course in AI&DataSc	AI&DataSc Elective	Elective course in AI&DataSc
		Free Elective	Elective course in any disciplines	Free Elective	Elective course in any disciplines
		Free Elective / xxxxxxxx	Elective course in any discipline / Chinese for CDS students	Free Elective / xxxxxxxx	Elective course in any discipline / Chinese for CDS students
	Summer (6 cu)	COMP3512	Internship		
Year 4 (54 cu)	UG5 Requirements && (6 cu) Capstone Experience (12 cu) Electives (36 cu)	COMP3522	Real-life AI & data science	COMP4501 / COMP4502	AI & Data Science in discipline project Final year project
		CAES9542	Technical English for computer science	AI&DataSc Elective	Elective course in AI&DataSc
		AI&DataSc Elective	Elective course in AI&DataSc	AI&DataSc Elective	Elective course in AI&DataSc
		AI&DataSc Elective	Elective course in AI&DataSc	Free Elective	Elective course in any disciplines
		Free Elective	Elective course in any disciplines		

++ For students who achieved Level 2 or above in HKDSE Math Extended Module 1 or 2; for other qualifications, please consult Faculty for advice.

Unless otherwise exempted through having achieved Level 5 or above in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent.

&& UG5(e) requirement – Successful completion of a non-credit bearing course(s) for fostering students' whole-person development

Sample Study Plan for BEng(AI&DataSc) [for 2025-26 intake] (without HKDSE Math Extended Module 1 or 2 ††)

		Semester 1		Semester 2	
Year 1 (57 cu)	UG5 Requirements && (27 cu) Foundation (24 cu) Electives (6 cu)	COMP1117	Computer programming	COMP1110	Computing & data science in everyday life
		MATH1011	University mathematics I ††	COMP2113	Programming technologies
		CC	University Common Core	MATH1013	University mathematics II
		CC	University Common Core	CC	University Common Core
		CC	University Common Core		
		CAES1001 # / AILT1001	Academic Communication in English / AI Literacy I	CAES1001 # / AILT1001	Academic Communication in English / AI Literacy I
Year 2 (63 cu)	UG5 Requirements && (15 cu) Foundation (12 cu) AI&DataSc Core (24 cu) Electives (12 cu)	COMP2119	Introduction to data structures & algorithms	COMP3314	Introduction to machine learning
		COMP2501	Introduction to data science	SDST2601	Probability & statistics I
		MATH2012	Fundamental concepts of mathematics		
		MATH2014	Multivariable calculus & linear algebra	Free Elective	Elective course in any disciplines
		Free Elective	Elective course in any disciplines	CC	University Common Core
		CC / AILTxxxx	University Common Core / AI Literacy II	CC / AILTxxxx	University Common Core / AI Literacy II
Year 3 (66 cu)	UG5 Requirements && (6 cu) AI&DataSc Core (30 cu) Electives (24 cu)	COMP3270	Introduction to artificial intelligence	COMP3340	Introduction to deep learning
		COMP3312	Law & ethics in data science	COMP3278	Introduction to database management systems
		SDST2602	Probability & statistics II	AI&DataSc Elective	Elective course in AI&DataSc
		AI&DataSc Elective	Elective course in AI&DataSc	Free Elective	Elective course in any disciplines
		Free Elective / xxxxxxxx	Elective course in any discipline / Chinese for CDS students	Free Elective / xxxxxxxx	Elective course in any discipline / Chinese for CDS students
	Summer (6 cu)	COMP3512	Internship		
Year 4 (54 cu)	UG5 Requirements && (6 cu) Capstone Experience (12 cu) Electives (36 cu)	COMP3522	Real-life AI & data science	COMP4501 / COMP4502	AI & Data Science in discipline project Final year project
		CAES9542	Technical English for computer science	AI&DataSc Elective	Elective course in AI&DataSc
		AI&DataSc Elective	Elective course in AI&DataSc	AI&DataSc Elective	Elective course in AI&DataSc
		AI&DataSc Elective	Elective course in AI&DataSc	Free Elective	Elective course in any disciplines
		Free Elective	Elective course in any disciplines		

†† Students without DSE Extended Module 1 or 2 should take MATH1011 before taking MATH1013; for other qualifications, please consult Faculty for advice.

Unless otherwise exempted through having achieved Level 5 or above in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent.

&& UG5(e) requirement – Successful completion of a non-credit bearing course(s) for fostering students' whole-person development

Sample Study Plan for BEng(CompSc) [for 2025-26 intake] (for students with HKDSE Math Extended Module 1 or 2 ++)

		Semester 1		Semester 2	
Year 1 (57 cu)	UG5 Requirements && (21 cu) Foundation (36 cu)	COMP1117	Computer programming	COMP1110	Computing & data science in everyday life
		MATH1013	University mathematics II	COMP2113	Programming technologies
		CC	University Common Core	MATH2012	Fundamental concepts of mathematics
		CC	University Common Core	MATH2014	Multivariable calculus & linear algebra
		CC	University Common Core		
		CAES1001 # / AILT1001	Academic Communication in English / AI Literacy I	CAES1001 # / AILT1001	Academic Communication in English / AI Literacy I
Year 2 (63 cu)	UG5 Requirements && (21 cu) CS Core (30 cu) Electives (12 cu)	COMP2119	Introduction to data structure & algorithms	COMP2120	Computer organization
		COMP2121	Discrete mathematics	COMP3314	Introduction to machine learning
		Free Elective	Elective course in any disciplines	SDST2601	Probability & statistics I
		CC	University Common Core	Free Elective	Elective course in any disciplines
		CC	University Common Core		
		CC / AILTxxxx	University Common Core / AI Literacy II	CC / AILTxxxx	University Common Core / AI Literacy II
Year 3 (66 cu)	UG5 Requirements && (6 cu) CS Core (24 cu) Electives (30 cu)	COMP3251 / COMP3252	Algorithm design / Algorithm design and analysis	COMP3234 / COMP3278	Computer & communication networks / Introduction to database management systems
		COMP3230	Principles of operating systems	COMP3297	Software engineering
		CS Elective	Elective course in computer science	CS Elective	Elective course in computer science
		Free Elective	Elective course in any disciplines	Free Elective	Elective course in any disciplines
		Free Elective / xxxxxxxx	Elective course in any discipline / Chinese for CDS students	Free Elective / xxxxxxxx	Elective course in any discipline / Chinese for CDS students
	Summer (6 cu)	COMP3412	Internship		
Year 4 (54 cu)	UG5 Requirements && (6 cu) Capstone Experience (12 cu) Electives (36 cu)	COMP4801	Final year project	COMP4801	Final year project
		CAES9542	Technical English for computer science	CS Elective	Elective course in computer science
		CS Elective	Elective course in computer science	CS Elective	Elective course in computer science
		CS Elective	Elective course in computer science	Free Elective	Elective course in any disciplines
		Free Elective	Elective course in any disciplines		

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Sample Study Plan for BEng(CompSc) [for 2025-26 intake] (without HKDSE Math Extended Module 1 or 2 ††)

		Semester 1		Semester 2	
Year 1 (57 cu)	UG5 Requirements && (27 cu) Foundation (24 cu) Electives (6 cu)	COMP1117	Computer programming	COMP1110	Computing & data science in everyday life
		MATH1011	University mathematics I ††	COMP2113	Programming technologies
		CC	University Common Core	MATH1013	University mathematics II
		CC	University Common Core	CC	University Common Core
		CC	University Common Core		
		CAES1001 # / AILT1001	Academic Communication in English / AI Literacy I	CAES1001 # / AILT1001	Academic Communication in English / AI Literacy I
Year 2 (63 cu)	UG5 Requirements && (15 cu) Foundation (12 cu) CS Core (24 cu) Electives (12 cu)	COMP2119	Introduction to data structure & algorithms	COMP2120	Computer organization
		COMP2121	Discrete mathematics	COMP3314	Introduction to machine learning
		MATH2012	Fundamental concepts of mathematics	MATH2014	Multivariable calculus & linear algebra
		Free Elective	Elective course in any disciplines	Free Elective	Elective course in any disciplines
		CC	University Common Core		
		CC / AILTxxxx	University Common Core / AI Literacy II	CC / AILTxxxx	University Common Core / AI Literacy II
Year 3 (66 cu)	UG5 Requirements && (6 cu) CS Core (30 cu) Electives (24 cu)	COMP3251 / COMP3252	Algorithm design / Algorithm design and analysis	COMP3234 / COMP3278	Computer & communication networks / Introduction to database management systems
		COMP3230	Principles of operating systems	COMP3297	Software engineering
		SDST2601	Probability & statistics I	CS Elective	Elective course in computer science
		CS Elective	Elective course in computer science	Free Elective	Elective course in any disciplines
		Free Elective / xxxxxxxx	Elective course in any discipline / Chinese for CDS students	Free Elective / xxxxxxxx	Elective course in any discipline / Chinese for CDS students
	Summer (6 cu)	COMP3412	Internship		
Year 4 (54 cu)	UG5 Requirements && (6 cu) Capstone Experience (12 cu) Electives (36 cu)	COMP4801	Final year project	COMP4801	Final year project
		CAES9542	Technical English for computer science	CS Elective	Elective course in computer science
		CS Elective	Elective course in computer science	CS Elective	Elective course in computer science
		CS Elective	Elective course in computer science	Free Elective	Elective course in any disciplines
		Free Elective	Elective course in any disciplines		

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Unless otherwise exempted through having achieved Level 5 or above in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent.

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6999 Computing and Data Science

Exciting opportunities

Internships:

Apply skills and knowledge in real-world settings and gain practical experience

Final year project:

Apply skills to a specific problem or project in the field of computer science, AI and data science

Student exchange programme:

Equip students knowledge, skills, and values needed to become influential citizens in today's globalised world

6999 Computing and Data Science

Past Internships

Academic Integrity

Plagiarism is a serious offence in the academic world. It constitutes academic theft – the offender has ‘stolen’ some intellectual property and presented it as his or her own. Plagiarism speaks to a person’s integrity and honesty, stifles creativity and originality, and defeats the fundamental purpose of education.

In this University, plagiarism is a disciplinary offence. Any student who commits the offence may face disciplinary action. It is the responsibility of all students at all levels to familiarize themselves with proper academic practice of writing, citation and referencing. For detailed information about plagiarism, please visit the website at https://tl.hku.hk/plagiarism/.

Progression and Discontinuation

Unless otherwise permitted by the Board of Studies, students will be recommended for discontinuation of their studies if:

- They fail to complete successfully 36 or more credits in two consecutive semesters (not including the summer semester), except where they are not required to take such a number of credits in the two given semesters; or
- They fail to achieve an average Semester GPA of 1.0 or higher for two consecutive semesters (not including the summer semester); or
- They have exceeded the maximum period of registration specified in the Regulations for the Degree of BEng(AI&DataSc)/BEng(CompSc).

Disciplinary Matters

- The University upholds the highest standards of academic integrity
- Apart from plagiarism, cheating or misconduct by the student will be considered by the Disciplinary Committee
- The Committee will decide the penalty on each case, ranging from reprimand, suspension of studies or even expulsion from the University depending on the seriousness of the offence

Regulation and Syllabus for 6999 programme

Please refer to the Regulation and Syllabuse posted on the Division website at https://www.csai.cds.hku.hk/

FUTURE READINESS

fri.hku.hk

These two online courses are specifically designed to help year one students successfully transition to university life and provide you with the foundational skills needed to excel in your academic journey

* *First year students have been pre-enrolled*

Preparation for University: Essentials for Success

Introduction to Research Methods

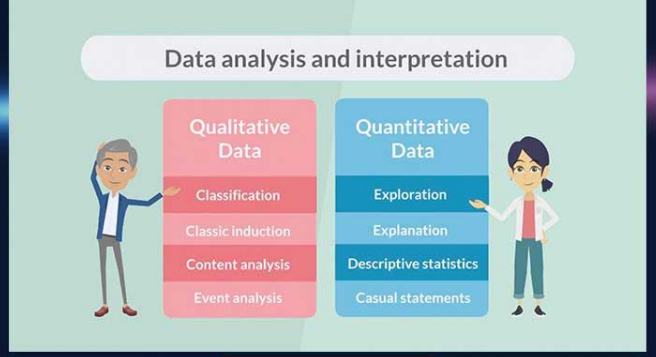
FUTURE READINESS

Completion of each course will earn you one out-of-classroom academic credit*

Bonus: if you complete both courses by the end of October, you will get a free HKU T-shirt

*Out-of-classroom academic credits are transcriptable credits in blocks of three as a recognition of out-of-classroom learning experiences; they do not count against the 240-credit graduation requirement for a normative four-year programme.

fri.hku.hk



Other Useful Information

Academic Advising and Scholarships Office

https://aas.hku.hk/

Academic Support and Examinations Section, Registry

https://www.ase.hku.hk/

CEDARS

https://cedars.hku.hk

Examinations Office

https://www.exam.hku.hk/

Information Technology Services & Student Information System

https://www.its.hku.hk/

University Health Service (UHS)

https://www.uhs.hku.hk/

Further Enquires

Programme Director of BEng(CompSc)	Programme Director of BEng(AI&DataSc)	School Academic Advisor
		
Prof. CHAN, Hubert T.H. Associate Professor CB-429	**Prof. LUO, Ruibang** Associate Professor CB-422	**Dr. TAM, Anthony T.C.** Lecturer CB-305

Thank you!

Contact us
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SCHOOL OF
COMPUTING &
DATA SCIENCE
The University of Hong Kong