Admission Talk for HKU 6224 BASc(AppliedAI) and 6248 BASc(FinTech)
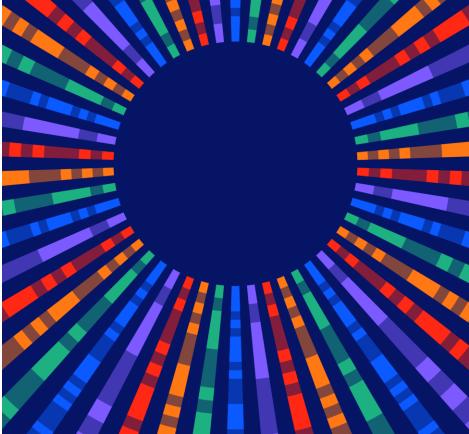
26 October 2024

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

#2
in Asia (2024)

#17
in the world (2025)

#25
Data Science and Artificial Intelligence (2024)

#6
in Asia (2024)

#35
in the world (2025)

The University of Hong Kong
School of Computing & Data Science

Programme Overview

Computer Science &
Data Science

AI &
Applied AI

Statistical Decision
Sciences

FinTech

Actuarial
Science

UG Programmes Offered by the School

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)]

6224 Bachelor of Arts and Sciences in Applied Artificial Intelligence [BASc(AppliedAI)]

6779 Statistical Decision Sciences
Bachelor of Science in Decision Analytics [BSc(DA)]
Bachelor of Science in Risk Management [BSc(RM)]
Bachelor of Science in Statistics [BSc(ST)]

6248 Bachelor of Arts and Sciences in Financial Technology [BASc(FinTech)]

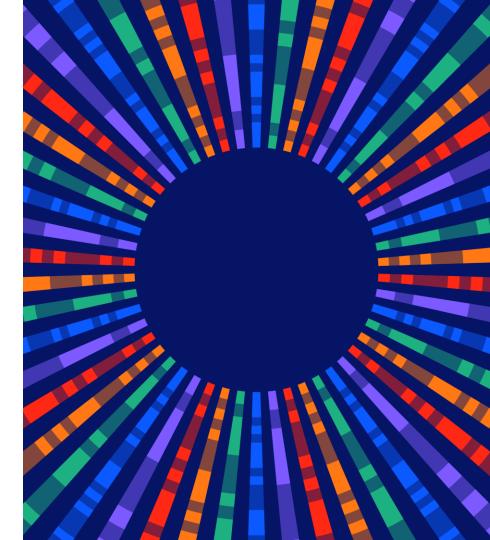**6729 Bachelor of Science in Actuarial Science** [BSc(ActuarSc)]

6224: Bachelor of Arts & Sciences Applied Artificial Intelligence

- BASc(Applied AI)
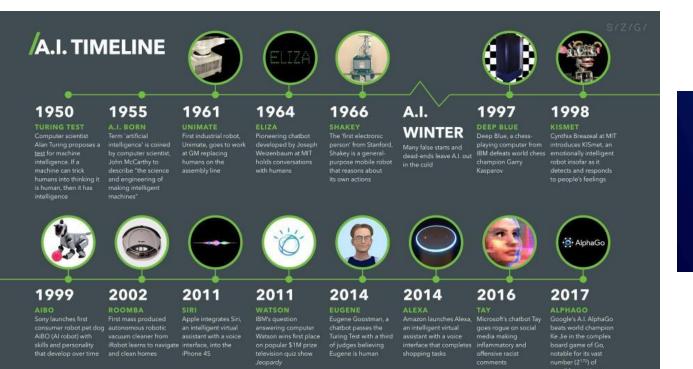
Impact the world with the limitless power of AI
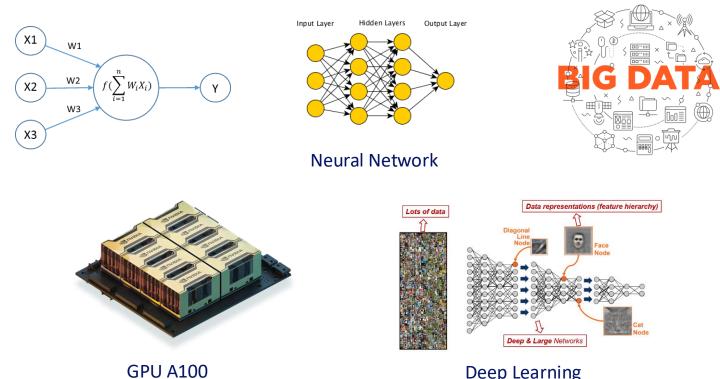
Introduction

AI History

A.I. TIMELINE

1950 — TURING TEST
Computer scientist Alan Turing proposes a test for machine intelligence. If a machine can trick humans into thinking it is human, then it has intelligence

1955 — A.I. BORN
Term 'artificial intelligence' is coined by computer scientist, John McCarthy to describe "the science and engineering of making intelligent machines"

1961 — UNIMATE
First industrial robot, Unimate, goes to work at GM replacing humans on the assembly line

1964 — ELIZA
Pioneering chatbot developed by Joseph Weizenbaum at MIT holds conversations with humans

1966 — SHAKEY
The 'first electronic person' from Stanford, Shakey is a general-purpose mobile robot that reasons about its own actions

A.I. WINTER
Many false starts and dead-ends leave A.I. out in the cold

1997 — DEEP BLUE
Deep Blue, a chess-playing computer from IBM defeats world chess champion Garry Kasparov

1998 — KISMET
Cynthia Breazeal at MIT introduces KISmet, an emotionally intelligent robot insofar as it detects and responds to people's feelings

1999 — AIBO
Sony launches first consumer robot pet dog AiBO (AI robot) with skills and personality that develop over time

2002 — ROOMBA
First mass produced autonomous robotic vacuum cleaner from iRobot learns to navigate and clean homes

2011 — SIRI
Apple integrates Siri, an intelligent virtual assistant with a voice interface, into the iPhone 4S

2011 — WATSON
IBM's question answering computer Watson wins first place on popular $1M prize television quiz show Jeopardy

2014 — EUGENE
Eugene Goostman, a chatbot passes the Turing Test with a third of judges believing Eugene is human

2014 — ALEXA
Amazon launches Alexa, an intelligent virtual assistant with a voice interface that completes shopping tasks

2016 — TAY
Microsoft's chatbot Tay goes rogue on social media making inflammatory and offensive racist comments

2017 — ALPHAGO
Google's A.I. AlphaGo beats world champion Ke Jie in the complex board game of Go, notable for its vast number (2^{170}) of possible positions

2022

The Success of AI

Neural Network

GPU A100

Deep Learning

Bachelor of Arts and Sciences (Applied AI)

BASc
Bachelor of
Arts & Sciences

Interdisciplinary programme co-offered by:

HKU Science
FACULTY OF SCIENCE
THE UNIVERSITY OF HONG KONG
香港大學理學院

+

THE UNIVERSITY OF HONG KONG
faculty of architecture

+

+

Faculty of
Social Sciences
The University of Hong Kong
香港大學社會科學學院

+

Faculty of Engineering
THE UNIVERSITY OF HONG KONG

💡 **New option for elite students**
Provides formal academic training to elite students who wish to join the AI profession, in addition to the newly-designed BASc Core Courses

💡 **Interdisciplinary training**
Facilitates a coordinated approach to teaching and learning across different disciplines with combined efforts of the Faculties of Science, Engineering, Social Sciences and Architecture

SCHOOL OF
COMPUTING &
DATA SCIENCE
The University of Hong Kong

Department of
Computer Science
Department of
Statistics & Actuarial Science

DEPARTMENT OF MATHEMATICS
The University of Hong Kong

AI

Bachelor of Arts and Sciences (Applied AI)

💡 Highlights **AI applications** in diverse areas
- ❖ Equips students with the intellectual capacity essential to tackling new challenges
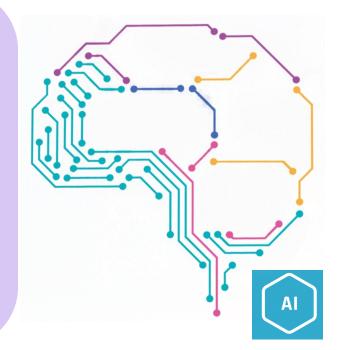
💡 Career prospects:
- ❖ Connects the **exploding demand** of the AI market in different areas and provides students with internship and mentorship experiences

💡 Emphasizes **problem-based learning**
- ❖ Supported by a wide range of core courses and electives in computer science, geography, mathematics, psychology, statistics, and urban studies
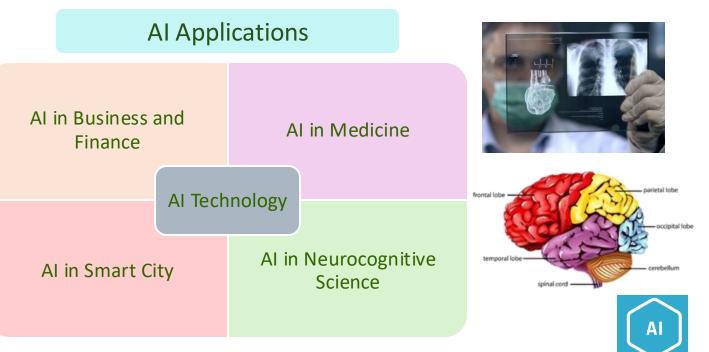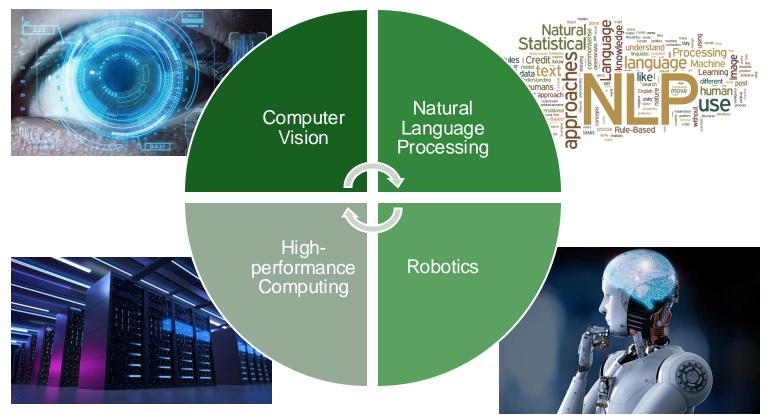
AI

BASc
Bachelor of
Arts & Sciences

Bachelor of Arts and Sciences (Applied AI)

BASc
Bachelor of
Arts & Sciences

AI Applications

AI in Business and Finance	AI in Medicine
AI Technology	
AI in Smart City	AI in Neurocognitive Science

frontal lobe
parietal lobe
occipital lobe
temporal lobe
cerebellum
spinal cord

AI

AI Technology

Computer Vision

Natural Language Processing

High-performance Computing

Robotics

AI in Medicine

AI in Business and Finance
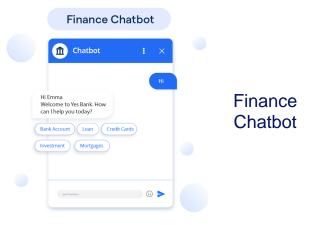
Algorithmic trading

Final year projects directed by researchers from the Artificial Intelligence Research Group of the Faculty of Business and Economics, e.g. Prediction of Stock Returns from Social Media Using Deep Learning
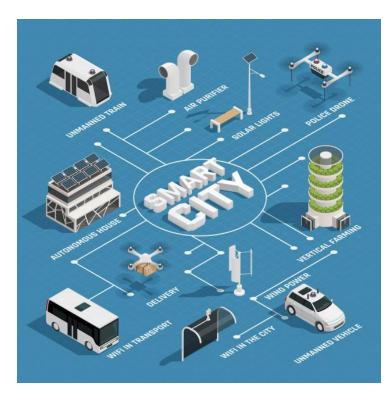
Financial data analytics

Finance Chatbot

AI in Smart City
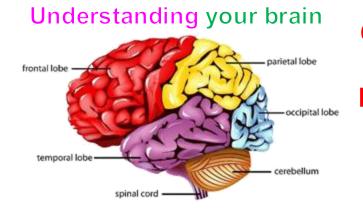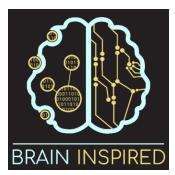
Students may work with researchers from the Institute of Transport Studies of HKU

AI in Neurocognitive Science

Understanding your brain

Cognition

Memory

Behaviour

Perception

Brian disorder

Parkinson's disease

Alzheimer's disease

Artificial intelligence, human brain to merge in 2030s, says futurist Kurzweil

Ray Kurzweil, Google's director of engineering, says we're close to linking our brain with AI

Solomon Israel · CBC News · Posted: Jun 05, 2015 5:00 PM ET | Last Updated: June 9, 2015
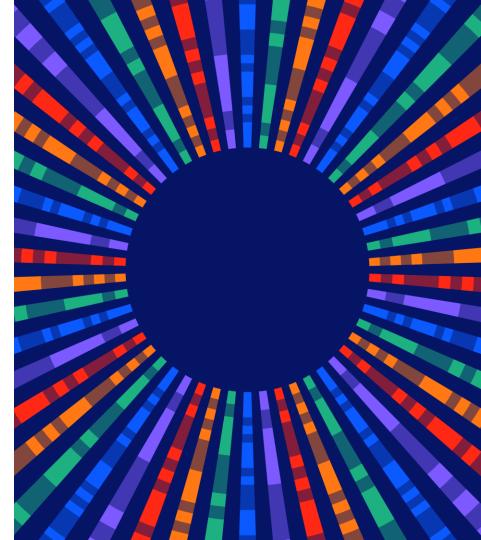
A test subject poses with an electroencephalography cap, which measures brain activity. (Michaela Rehle/Reuters)

Students may work with researchers from Department of Psychology and Faculty of Education.
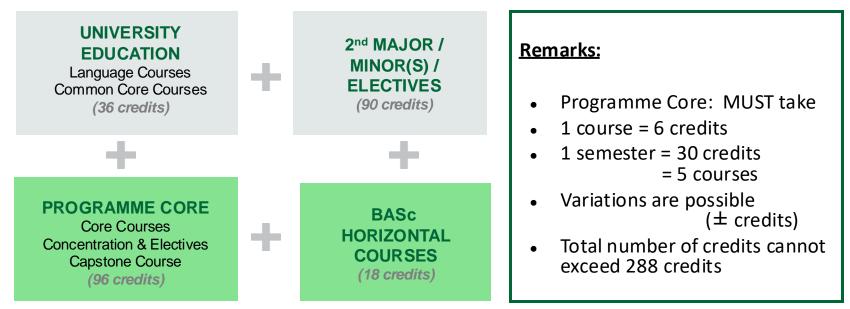
Curriculum Structure & Course Selection

General Structure

Forty 6-credit courses spanning over 4 years of full-time study
(240 Credits)

UNIVERSITY EDUCATION
Language Courses
Common Core Courses
(36 credits)

➕

2nd MAJOR / MINOR(S) / ELECTIVES
(90 credits)

➕

➕

PROGRAMME CORE
Core Courses
Concentration & Electives
Capstone Course
(96 credits)

➕

BASc HORIZONTAL COURSES
(18 credits)

Remarks:

- Programme Core: MUST take
- 1 course = 6 credits
- 1 semester = 30 credits
        = 5 courses
- Variations are possible
        (± credits)
- Total number of credits cannot exceed 288 credits

BASc Horizontal Courses (18 credits)

BASC9001 Approaching Interdisciplinarity: Knowledge Beyond Disciplines
DESN9001 Leadership Beyond Borders
STAT1016 Data Science 101

Multidisciplinary training in leadership, design thinking

Introduction to foundations of human knowledge and data science

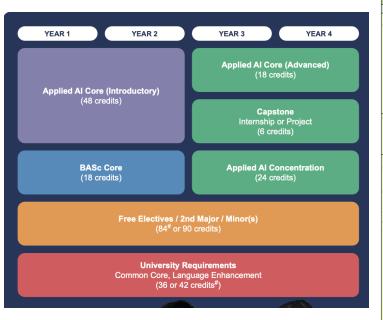Networking with fellow students from other BASc programmes

Programme Core Courses (96 credits)

BASc(AppliedAI) Curriculum*

Core Courses (66 credits)

Code	Course
APAI1001	Artificial intelligence: foundation, philosophy and ethics
COMP1117	Computer programming
COMP2119	Introduction to data structures and algorithms
COMP2120	Computer organization
COMP3340	Applied deep learning
MATH1013	University mathematics II
MATH2014	Multivariable calculus and linear algebra
MATH3904	Introduction to optimization
STAT2601	Probability and statistics I
STAT2602	Probability and statistics II
STAT3612	Statistical machine learning

Capstone Requirement (6 credits)

(If students take the 12-credit 'Applied AI project', they do not need to take a 6-credit elective course.)

At least 6 credits selected from the following courses:

Code	Course
APAI3799	Directed studies in applied AI
APAI4766	Applied AI internship
APAI4798	Applied AI project (12-credit)

Students are reminded to take 3 BASc core courses to fulfil the BASc core course requirement:

Code	Course
BASC9001	Approaching interdisciplinarity: Knowledge beyond disciplines;
DESN9002	Sustainable leadership; and
STAT1016#	Data Science 101

* The curriculum and course offering are subject to changes. Each course is 6-credit bearing unless otherwise stated.
\# Course code and course title to be confirmed.

Concentration (24 credits)

(For fulfilling the requirement of a concentration, students should choose at least 18 credits, with at least 6 credits of which should be at advanced-level, from the corresponding list)

- Technology
- Business and finance
- Medicine
- Smart city
- Neurocognitive science

Category	Code	Course
AI Technology	COMP3271	Computer graphics
	COMP3356	Robotics
	APAI3010	Image processing and computer vision
	APAI4011	Natural language processing
	APAI4012	High-performance computing
	APAI4099	Special topics of applied AI
AI in Business and Finance	COMP3320	Electronic commerce technology
	MATH3901	Operations research I
	MATH3906	Financial calculus
	STAT3613	Marketing analytics
	STAT4601	Time-series analysis
	APAI4099	Special topics of applied AI
AI in Medicine	STAT3655	Survival analysis
	STAT4610	Bayesian learning
	APAI3021	Modern biostatistics
	APAI4022	Omics data analysis
	APAI4023	Medical image analysis
	APAI4099	Special topics of applied AI
AI in Smart City	URBS1003	Theories and global trends in urban development
	URBS1005	Urban problems, interventions and design thinking
	GEOG2090	Introduction to geographic information systems
	GEOG3202	GIS in environmental studies
	GEOG3420	Transport and society
	APAI4099	Special topics of applied AI
AI in Neurocognitive Science	PSYC1001	Introduction to psychology
	PSYC2007	Cognitive psychology
	PSYC2051	Perception
	PSYC2066	Foundations of cognitive science
	PSYC2067	Seminars in cognitive science
	APAI4099	Special topics of applied AI
Other Elective Courses	COMP3250	Design and analysis of algorithms
	COMP3278	Introduction to database management systems
	MATH3601	Numerical analysis
	MATH3911	Game theory and strategy
	MATH3943	Network models in operations research
	STAT3600	Linear statistical analysis
	STAT3622	Data visualization
	STAT4602	Multivariate data analysis
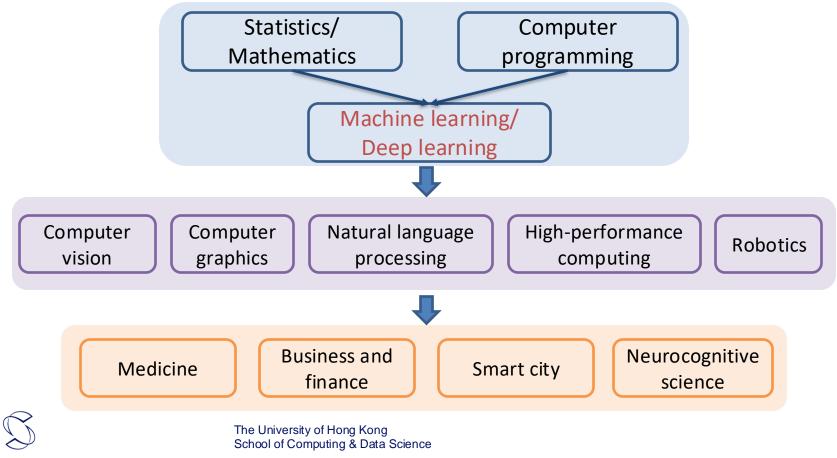
Suggested Study Plan

	YEAR 1	YEAR 2	YEAR 3	YEAR 4

Applied AI Core (Introductory) (48 credits)

Applied AI Core (Advanced) (18 credits)

Capstone Internship or Project (6 credits)

BASc Core (18 credits)

Applied AI Concentration (24 credits)

Free Electives / 2nd Major / Minor(s) (84# or 90 credits)

University Requirements Common Core, Language Enhancement (36 or 42 credits#)
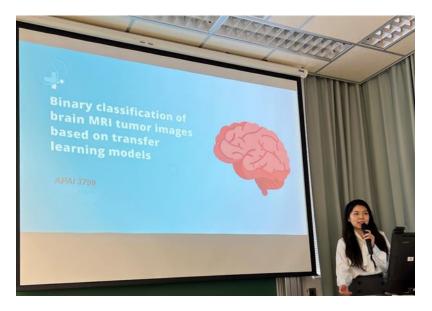
Year		I		II		III		IV	
Semester	One	Two	One	Two	One	Two	One	Two
Disciplinary Core	**APAI1001** Artificial Intelligence: Foundation, Philosophy and Ethics **COMP1117** Computer Programming **MATH1013** University Mathematics II	**MATH2014** Multivariable Calculus and Linear Algebra **STAT2601** Probability and Statistics I	**COMP2119** Introduction to Data Structures and Algorithms **STAT2602** Probability and Statistics II	**COMP2120**[5] Computer Organization	**MATH3904** Introduction to Optimization **STAT3612** Statistical Machine Learning	**COMP3340**[6] Applied Deep Learning		
Other		**COMP2113** Programming Technologies (Pre-requisite of COMP2119)		**STAT3600**[4] Linear Statistical Analysis (Co-requisite/ Pre-requisite of STAT3612) (available in both semesters)				
BASc Core (in purple font) and Disciplinary Elective (in deep blue font)	**BASC9001** Approaching Interdisciplinarity: Knowledge Beyond Disciplines	**STAT1016** Data Science 101 (admission: 2023 and thereafter)	**DESN9002** Sustainable Leadership (admission: 2020 and thereafter)	At least 24 credits from the following courses in Lists A1-5 and B (For fulfilling the requirement of a concentration, students should choose at least 18 credits, with at least 6 credits of which should be at advanced-level, from the corresponding list) **(please also refer to the remarks below):** **AI Technology** (List A1) **COMP3271** — Computer Graphics **COMP3356** — Robotics **APAI3010** — Image Processing and Computer Vision **APAI4011** — Natural Language Processing **APAI4012** — High-performance computing: algorithms and applications **APAI4013** — Applied high-performance computing and parallel programming **APAI4099** — Special Topics of Applied AI **AI in Business and Finance** (List A2) **COMP3320** — Electronic Commerce Technology **MATH3901** — Operations Research I **MATH3906** — Financial Calculus **STAT3613** — Marketing Analytics **STAT4601** — Time Series Analysis **APAI4099** — Special Topics of Applied AI **AI in Medicine** (List A3) **STAT3655** — Survival Analysis **STAT4610** — Bayesian Learning				

Course Structure of AI Programme

Statistics/ Mathematics

Computer programming

Machine learning/ Deep learning

Computer vision

Computer graphics

Natural language processing

High-performance computing

Robotics

Medicine

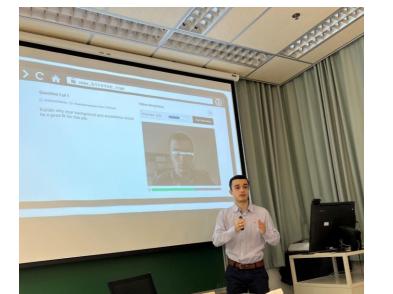Business and finance

Smart city

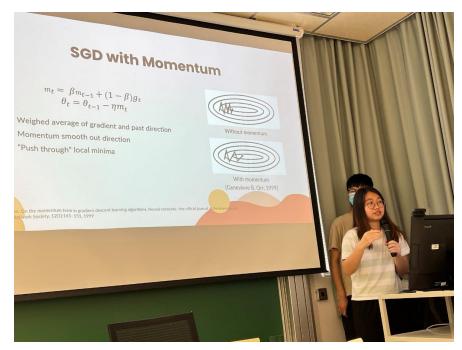Neurocognitive science

AI, ethic, law and beyond

Capstone AI Projects

Generalizable machine learning technology with application in medical image analysis

AI Video Analytics Tool for Human Behavioural Intelligence

Capstone AI Projects

Generalizable training algorithms for deep learning based image Classification
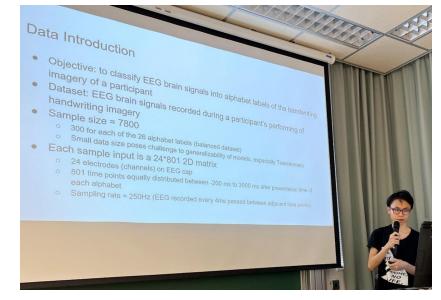
Prediction of Stock Returns from Social Media Using Deep Learning

Capstone AI Projects
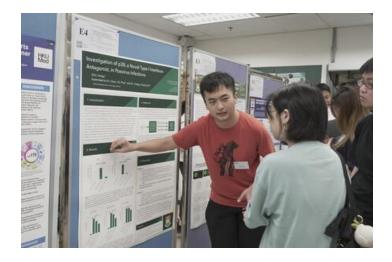
Recognition of imagined handwritten content from brain signals

Undergraduate Research Opportunities

- Summer Research Fellowship (SRF)
- Overseas Research Fellowship (ORF)
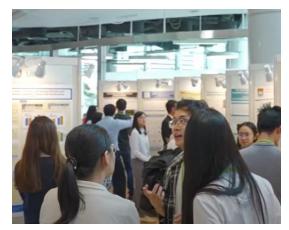
Undergraduate Research Opportunities

- Undergraduate Research Fellowship Program (URFP)

- A video shared by a previous student (URFP & BASc(Applied AI)_Xiao_Ziyan.mp4)

Information & Supports

Career Prospects

The programme connects the exploding demand of the AI market in diverse areas, such as:

- Science & technology
- Environmental protection
- Medical informatics
- Healthcare
- Business
- Banking & finance
- Urban development
- Neurocognitive science

Career Advising Programme (CAP)

- Tailored consultation on CV and cover letter writing

- One-to-one or group consultation on interview skills, e.g. mock interview

- Tailored modules of Professional Preparation Programme (PPP)
  - Case Analysis & Presentation
  - Choosing between Job Offers

- Corporate Mentorship Programme (CMP)

- Career talks

- Company visits

- Alumni sharing

- Career Fair

Internship / Job Online-application System

Department of 統計及精算學系
Statistics & Actuarial Science

Home | About Us | People | Research | Study Programmes | For Students | News & Events | Useful Links

- BSc
- BSc(ActuarSc)
- MStat
- Research Postgraduate
- Student Internship
- Student Intranet
- Scholarships
- Career Advising Programme (CAP) NEW

The Internship Programme

➡️ Login to Internship/Job Online-application System

> **Benefits to Students**

There is no better training than obtaining solid hands-on experience in the real workplace. Our Internship Programme serves precisely this purpose. As an intern, the student will gain insight into the challenging world and daily activities of an Actuary/Statistician while strengthening his/her technical, analytical and communication skills.

Under the Internship Programme, BSc(ActuarSc) students, students who declare Decision Analytics / Risk Management / Statistics as their First Major, and our postgraduate students are eligible to use the Department's Internship/Job Online-application System, where related internships and other job openings including graduate positions will be posted.

Our alumni may wish to know that normally they will still be eligible to use the System after graduation from our Department.

Internship / Job Online-application System

Department of 統計及精算學系
Statistics & Actuarial Science

Internship / Job Online-application System

UID :		Major :	Actuarial Science
Name :		E-mail :	@hku.hk
Last Status :	Available working period: From: 2017-07-01 To: 2019-12-31	Contact Phone :	

| PPP Score : | | Letter & CV Submitted : | 0.0 | Mock Interview : | 0.0 | Case Analysis & Presentation : | 0.0 |

Current Job List • **Application History** • **Past Internship/Jobs** •

Records shown 1 - 13 of 13

Jobtype	Company Name	Job Title / Job Description / Form	Closing date	Action
Internship_AS&ST	Chubb Life Hong Kong	Actuarial Interns (Jan-Jun 2018) SP 1114	2017-08-27	Submit completed application via email at ____@chubb.com
Internship_AS&ST	AXA China Region Insurance Co Ltd	Intern (Jan-Jun 2018) FL 1138	2017-08-27	APPLY

Internship / Job Online-application System

11. After I accept a full-time internship position that overlaps with the academic school period from September 1 to May 31, I will apply for leave of absence from the Department via the Faculty of Science office as soon as possible. Please note that the Department reserved the right NOT to approve any cancellation for leave of absence that has already been approved.

12. **I understand that I may be disqualified for nomination of all prospective internship and graduate job opportunities for any reported violation of the above obligations.**

|	
Application Form / Cover Letter (compulsory) *If an application form is available, you must submit your filled form as required here.*	[Choose File] No file chosen
CV / Resume (compulsory)	[Choose File] No file chosen
Scanned HKU Transcript / Exam Result (compulsory) *Please capture the page which shows ALL your Course Names, Exam Grades and your current CGPA in HKU Portal and then save it as PDF.*	[Choose File] No file chosen
Other Supporting Document(s)	[Choose File] No file chosen (combine all relevant supporting documents into one PDF file.)
PC Skill	 (Max. 100 characters)
Language Skill	DSE English or Equivalent [NA ▾] DSE Chinese or Equivalent [NA ▾] HKAL English or Equivalent [NA ▾] HKAL Chinese or Equivalent [NA ▾] HKCEE English or Equivalent [NA ▾] HKCEE Chinese or Equivalent [NA ▾]

[Apply]   [Cancel]
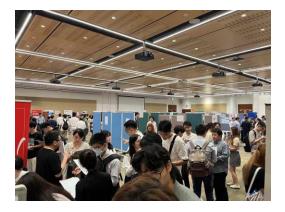
SAAS Career Fair 2023 & 2024

Support for Internships

- Partner with Industrial Leaders (in year 3 or year 4)
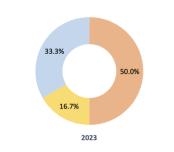
Graduate Employment Survey 2023

Employment Sector

Commerce & Industry **100%**

Basic Salary of 2023 BASc(AppliedAI) Graduates

	Min.	Mean	Median	Max.
	$20,000	$26,667	$25,000	$45,000

List of Employer and Job Title^

Commerce & Industry	
Employer	**Job Title**
Castco Testing Centre Limited	• AI Engineer
Cathay Pacific Airways Limited	• Graduate Trainee
Huawei Technologies Co., Ltd	• Software Engineer
Logistics and Supply Chain MultiTech R&D Centre (LSCM)	• Junior Programmer
The Laboratory of Data Discovery for Health	• Occupation's name not reported
Organisation's name not reported	• Quantitative Developer

Job Satisfaction

33.3% — 50.0% — 16.7%

2023

■ Very satisfied ■ Satisfied ■ Average ■ Not satisfied

Job Relevancy

20.0% — 40.0% — 40.0%

2023

■ Closely related ■ Partially related - only job nature
■ Partially related - only industry ■ Not related at all

Scholarships

Winnie S M Tang Scholarship in Applied Artificial Intelligence

In celebration of the Faculty of Science Oak Anniversary in 2019, Dr Winnie S M Tang, an alumna of the Faculty of Science, pledged to establish a scholarship scheme for undergraduates. Two scholarships, each of the value of HK$20,000, shall be awarded to outstanding BASc(AppliedAI) students on the basis of academic merit.
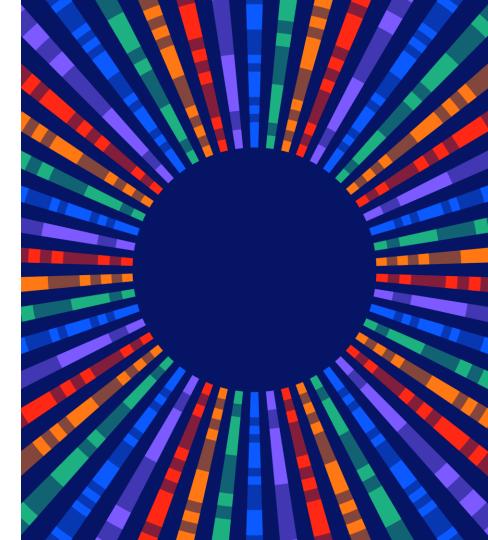
Yu Kam Tim Chan Siu Hing Award in Artificial Intelligence and Data Science

In celebration of the Faculty of Science Oak Anniversary in 2019, Mr Yu Kam Tim and Mrs Yu Chan Siu Hing, both alumni of the Faculty of Science, pledged to establish an award scheme for undergraduates. Two awards, each of the value of HK$10,000, shall be awarded to outstanding BASc(AppliedAI) students in alternate years.
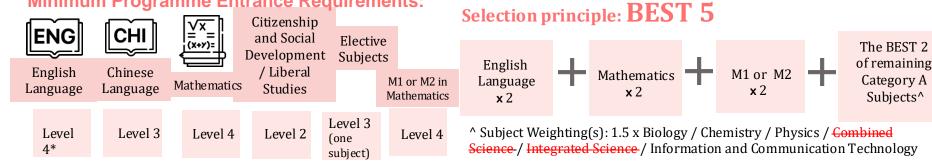
Admissions & Requirements

Admissions Requirements – JUPAS

Minimum Programme Entrance Requirements:

ENG English Language	**CHI** Chinese Language	Mathematics	Citizenship and Social Development / Liberal Studies	Elective Subjects	M1 or M2 in Mathematics
Level 4*	Level 3	Level 4	Level 2	Level 3 (one subject)	Level 4

*Candidates with level 4 in English Language, if admitted, will be required to take 6 additional credits in Core University English to complete their degree studies

2025 Admissions Quota: 37

Selection principle: BEST 5

English Language x 2 + **Mathematics x 2** + **M1 or M2 x 2** + **The BEST 2 of remaining Category A Subjects^**

^ Subject Weighting(s): 1.5 x Biology / Chemistry / Physics / ~~Combined Science~~ / ~~Integrated Science~~ / Information and Communication Technology

2024 JUPAS Weighted Admissions Score:
Total score of Best 5 with M1/M2
52 ~ 57

HKDSE 'level to score' conversion

Category A Core and Elective Subjects and Extended Module 1 or Module 2 of Mathematics							
Level	1	2	3	4	5	5*	5**
Score	1	2	3	4	5.5	7	8.5

2024 Admissions Statistics – Non-JUPAS

GCEAL
Lowest admissions score
3A*

IB
Lowest admissions score
39

SAT/AP
Lowest admissions score
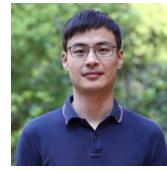3AP (Grade 5) +
SAT 1450/ 2AP (Grade 4)

The number of places for Non-JUPAS and Gaokao is not determined and may be subject to various factors including applicants' qualification, number of applications, etc.
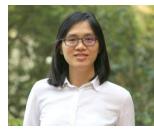
Who's who?

Programme
Co-Directors

Prof. Lequan Yu
(Statistics, RRS 226)

Prof. Patrick NG
(Mathematics, RRS 424)

Prof. Yizhou YU
CS Coordinator

Course Selection Adviser

Internship Adviser

Prof. Liangqiong
QU (RRS 121)

Prof. Yuenwen LEI
(RRS 319)

Dr. Eric LI
(RRS 117)

Administration
General Office (RRS, 3rd floor)
Department of Statistics &
Actuarial Science

Enquiries

Department of Statistics and Actuarial Science

Room 303, Run Run Shaw Building

The University of Hong Kong

Tel: (852) 3917 2466   Fax: (852) 2858 9041

Email: ugenq@hku.hk

Website: https://saasweb.hku.hk

Facebook: https://www.facebook.com/hkustatisticsactuarialscience

Website

Facebook Page

SCHOOL OF
COMPUTING &
DATA SCIENCE
The University of Hong Kong

HKU Bachelor of Arts and Sciences in Financial Technology [BASc(FinTech)]

JUPAS Programme Code: 6248

The University of Hong Kong
School of Computing & Data Science

What is FinTech?

| Financial Technology | Technology underpins the transformation and growth of the financial industry |

Digital Payment
Fast, cashless payments via mobile devices

Tap&Go 拍住賞

Alipay

Wechat pay

FPS

G Pay
Pay

PayMe

Virtual Bank
Online banks offering 24/7 services without physical branches

ZA

W

mox

livi

A

PAO bank

FusionBank
富融銀行

What is FinTech?

FinTech

| Financial Technology | Technology underpins the transformation and growth of the financial industry |

Blockchain and Cryptocurrency
Redefining trust in finance through decentralization

- Smart Contract, Stablecoin
- Web3, CBDC

AI for Finance
Smarter decisions with AI-driven insights

- Robo-advisors, Personal Finance
- Algo-trading

6248 BASc(FinTech)

The BASc(FinTech) nurtures leaders with <u>interdisciplinary</u> knowledge and skills for the finance industry in the ever-changing world

We equip students with a solid foundation in technology, finance, and law
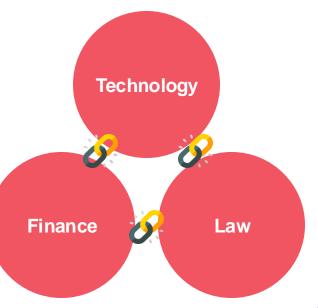
We offer FinTech-focused courses that emphasize the connection across disciplines

Students can freely choose the specialization they want to pursue

Technology

Finance

Law

6248 BASc(FinTech)

> Jointly offered by School of Computing and Data Science (Technology) & Faculty of Business & Economics (Finance), with strong support from Faculty of Law

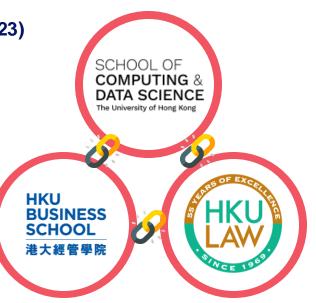**Hong Kong Monetary Authority | CBDC Expert Group (Oct 2023)**

- Research on future e-HKD

- Experts from HKU computer science, business school, and law school

Mr Howard Lee, Deputy Chief Executive of the HKMA, said, "The HKMA has been actively fostering government-industry-academia collaboration in CBDC research. We are pleased to join forces with leading academic experts as part of our exploration of key policy and technical issues surrounding wholesale and retail CBDCs. The CBDC Expert Group will serve as a crucial component in reinforcing Hong Kong's forefront position in CBDC research."

CBDC Expert Group
Memorandum of Understanding Signing Ceremony

Mr Colin Pou, Executive Director (Financial Infrastructure) of the Hong Kong Monetary Authority (fourth from left, front row), signs Memorandums of Understanding with five local universities whose faculty members are participants of the Central Bank Digital Currency Expert Group.

SCHOOL OF
COMPUTING & DATA SCIENCE
The University of Hong Kong

HKU BUSINESS SCHOOL
港大經管學院

55 YEARS OF EXCELLENCE
HKU LAW
SINCE 1969

The University of Hong Kong
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Core Technologies:

- E-payment technology
- Blockchain technology
- Big-data analytics
- AI technologies
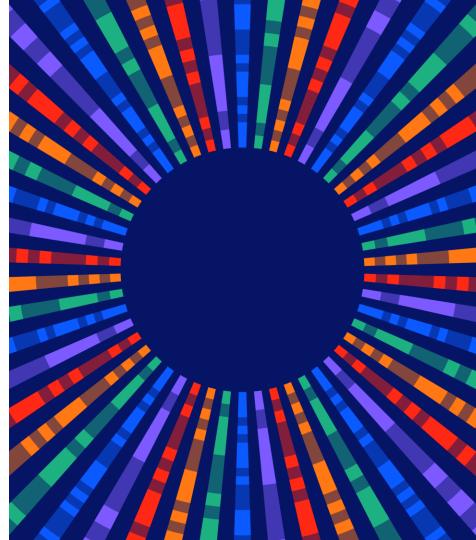- Cyber security
- **RegTech**

We cover all

BIG DATA

How technology can facilitate regulatory processes in Finance (Law + Tech + Finance) – <u>unique in HKU</u>

Curriculum Structure

Requirement: Complete 40 6-credit courses in 4 years as a full-time student [#]

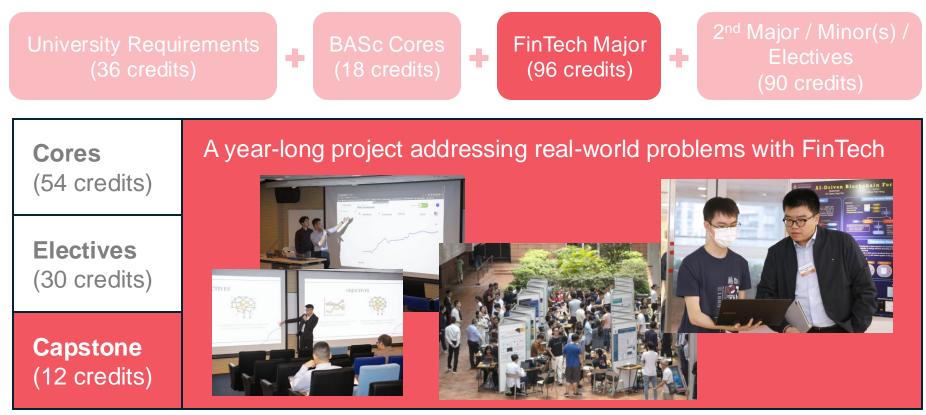| University Requirements (36 credits) | **+** | BASc Cores (18 credits) | **+** | FinTech Major (96 credits) | **+** | 2nd Major / Minor(s) / Electives (90 credits) |

Students without level 5 or above in HKDSE English Language (or equivalent) are required to take 6 additional credits in Core University English and complete 246 credits for graduation.

Requirement: Complete 40 6-credit courses in 4 years as a full-time student #

| University Requirements (36 credits) | **+** | BASc Cores (18 credits) | **+** | FinTech Major (96 credits) | **+** | 2nd Major / Minor(s) / Electives (90 credits) |

Cores (54 credits)	**Technology**	• Introduction to financial technologies • Distributed ledger and blockchain • Computer programming • Foundations of FinTech programming
	Statistics	• Linear algebra, probability and statistics
Electives (30 credits)	**Business**	• Introduction to financial accounting • Introductory microeconomics • Corporate finance
Capstone (12 credits)	**Law**	• Regulation of financial markets

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Cores (54 credits)

Electives (30 credits)

Capstone (12 credits)

(selected courses from over 20 options)

Technology
- E-payment and crypto-currency
- Financial computing
- Electronic commerce technology
- Artificial intelligence and machine learning
- Text analytics and natural language processing in finance and fintech
- Cyber security

Finance
- Investments and portfolio analysis
- Derivatives
- Mathematical finance

Law
- Introduction to information technology law
- Law, Innovation, Technology, Entrepreneurship: Tech Startup Law
- Regulatory, operational, and valuation issues in finance institutions
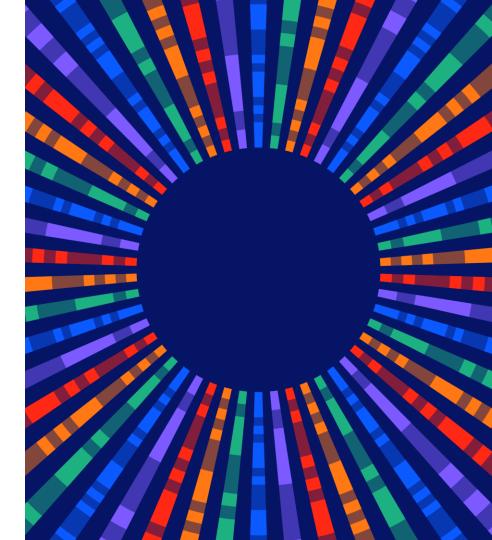
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University Requirements (36 credits)	**+**	BASc Cores (18 credits)	**+**	FinTech Major (96 credits)	**+**	2nd Major / Minor(s) / Electives (90 credits)

Cores (54 credits)	A year-long project addressing real-world problems with FinTech
Electives (30 credits)	
Capstone (12 credits)	

Students without level 5 or above in HKDSE English Language (or equivalent) are required to take 6 additional credits in Core University English and complete 246 credits for graduation.

Supports & Prospects

HKU-SCF FinTech Scholarships

Up to 5 entrance scholarships of $50,000 and 2 full scholarships (renewable up to $200,000), exclusively for BASc(FinTech) students with outstanding academic performance

Summer FinTech Internship Programme

Connect our students with the FinTech and IT industries, such as Standard Chartered Bank, Mox Bank, etc., to gain practical experience, build professional networks, and develop employer-valued skills.

Career Prospects

FinTech

Broad career pathway as they could take up positions in FinTech industry, finance industry, as well as IT industry

- **1,000 New jobs in FinTech** (FinTech Anti-epidemic Scheme for Talent Scheme – FAST)
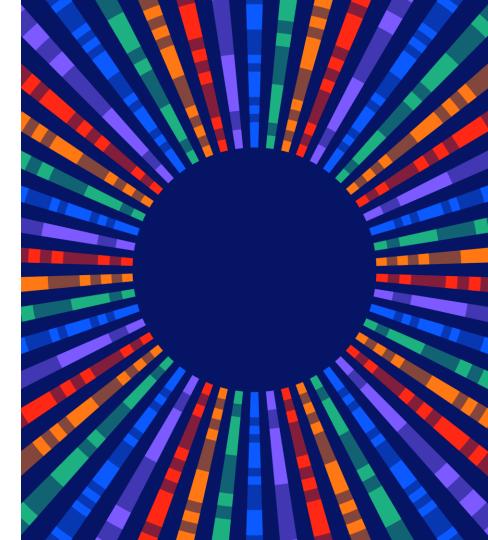- HKMA : **FinTech 2025 strategy** driving FinTech Development of Hong Kong

Professionally:
- Blockchain developer
- Apps developer
- Compliance expert
- Cybersecurity analyst
- Researchers in the FinTech discipline

According to a survey conducted by the University in 2023, the gross monthly income of our FinTech fresh graduates:
- **Average is $33,568**
- **Maximum is $57,420**

Admissions & Requirements

What's the admission requirements?

FT FinTech

Entrance requirements (JUPAS)

- **English Language – Level 4**
- **Chinese Language – Level 3**
- **Mathematics (Core) – Level 3**
- **Citizenship and Social Development – Attained**
- **Two electives – Level 3**

(*) Candidates with level 4 in English Language, if admitted, will be required to take Core University English to complete their degree studies

(**) Level 3 in Extended Module 1 or 2 of Mathematics is preferred but not required.

Statistics

2025 Selection Criteria:

Best 5: English + Mathematics + 3 subjects (M1/M2 included)

	2021	2022	2023	2024
Average JUPAS scores	35.0 (Best 6)	35.9 (Best 6)	36 (Best 6)	30.9 (Best 5)

HKDSE Level obtained in Category A - Senior Secondary Subjects	1	2	3	4	5	5*	5**
Level conversion to scores under the New Bonus Points system	1	2	3	4	5.5	7	8.5

For Non-JUPAS applicants (e.g., GCE A-Level, IB), more details at

https://www.cds.hku.hk/prospective-students/undergraduate/

First year intake: up to 40+ including local and non-local students

Words from Our Students

Winky LEONG
- *BASc(FinTech) graduate*

"This programme not only provides a **strong balance of essential technical and non-technical courses** to enable us succeed in such a rapidly changing world, but it also offers a wide range of course options. This **allows us to explore different FinTech careers we are interested in.**"

Owen WONG Ngo Yin
- *BASc(AppliedAI) graduate*
- *Quantitative Research Analyst at eFusion Capital Limited*

"This programme was a transforming experience that **gave me a solid foundation in AI and machine learning. Participating in the AlgoGene Algo Trading Challenge** helped me improve my practical skills and gain confidence in real-world applications."

Algo Trading Challenge

Credit Suisse Coding Challenge

PwC HackaDay

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Programme Highlights

FinTech

- **Interdisciplinary**

- **FinTech Focus**

- **Essential Legal Studies**

- **Flexible Curriculum**

- **Internship and Research Opportunities**
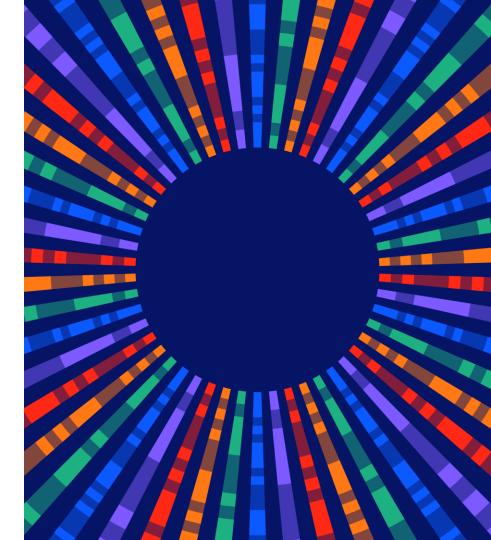
Any questions?
Feel free to ask here!

 English

 中文

Thank you!

Contact us

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Tel: 3917-2180

Website: cds.hku.hk

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