



BASc(FinTech) Programme

Introduction of the programme, its
structure, and enrollment details

Introduction to BAsc(FinTech) Programme

- Financial Technology
 - is about application of information & communication technologies to the provision of financial services, which changes the nature of commerce and end-user expectations for financial services.
 - has a profound impact on the development of the global and local financial industries.
 - is an area with high demand of talents to support the fast-growing FinTech industry.

Introduction to BAsc(FinTech) Programme

- BAsc(FinTech) programme
 - is jointly offered by the Department of Computer Science, the Faculty of Engineering and the Faculty of Business and Economics
 - its objective is to nurture financial technologists and entrepreneurs with essential knowledge in both finance and technology
 - is an inter-disciplinary study which covers computing, finance, and legal regulations
 - requires the integration of computing technologies and financial knowledge to solve real-world problems related to financial services with the understanding on relevant legal regulations and policies
 - include soft topics from other disciplines for broadening the students' knowledge and views and prepare the students to face the fast-growing FinTech industry

Programme Learning Outcomes

Upon successful completion of the curriculum, students should be able to:

PLO a	apply knowledge of computing technologies to finance applications appropriate to the programme outcomes and to the discipline
PLO b	apply knowledge of computing technologies to the abstraction and conceptualization of financial applications
PLO c	analyze financial problems, and identify and define the computing technologies appropriate to its solution
PLO d	design, implement, and evaluate a computer-based system, process, component, or programme to solve financial applications with appropriate consideration for public health and safety, social and environmental considerations
PLO e	function effectively on teams to accomplish a common goal
PLO f	demonstrate an understanding of professional, ethical, legal, security and social issues and responsibilities
PLO g	communicate effectively with a range of audiences
PLO h	analyze the local and global impact of financial technology on individuals, organizations, and society
PLO i	recognize the need for and an ability to engage in continuing professional development
PLO j	use current techniques, skills, and tools necessary for computing practice to solve financial problems with an understanding of the limitations

University Education Aims (UEAs)

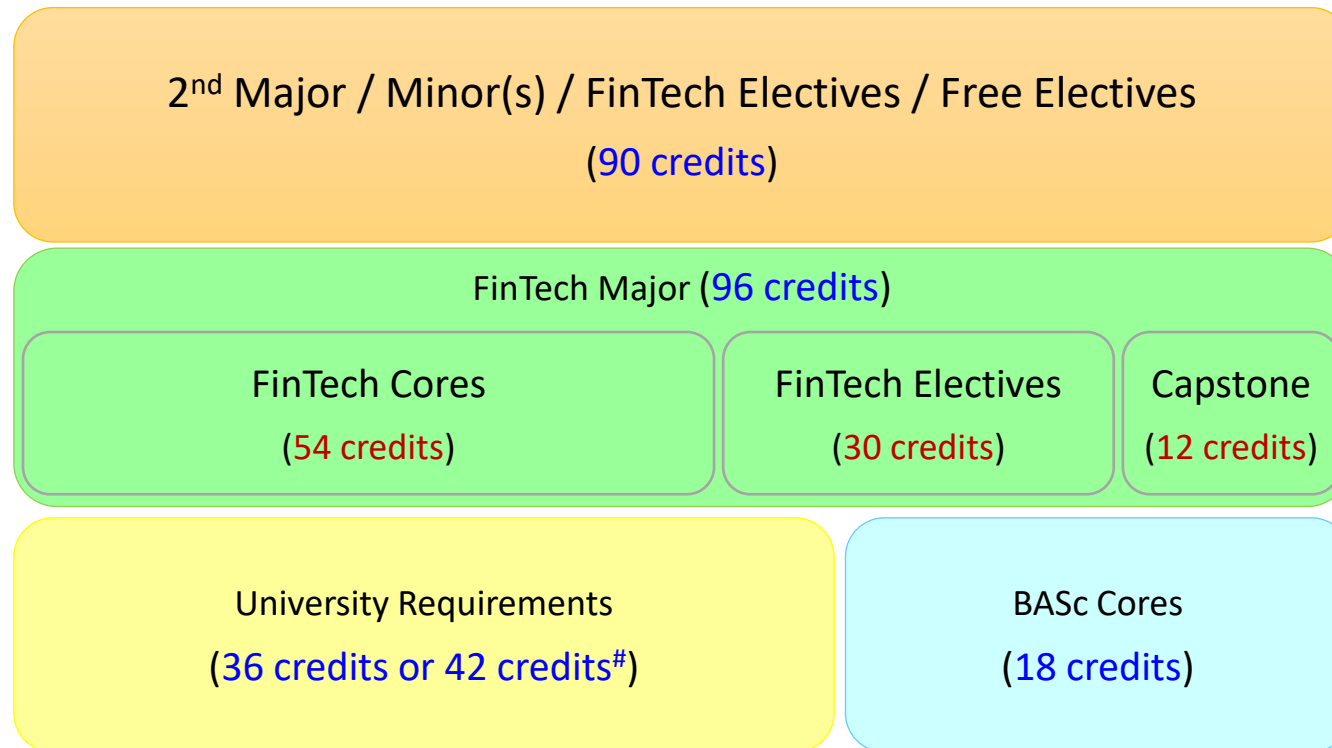
<https://tl.hku.hk/tl/>

- Alongside the content knowledge students gain from their studies, HKU aims to ensure that students graduate with a defined skill set
 - Aim 1: Pursuit of **academic/professional excellence**, critical **intellectual inquiry** and **life-long learning**
 - Aim 2: **Tackling** novel situations and ill-defined **problems**
 - Aim 3: Critical **self-reflection**, greater **understanding of others**, and **upholding** personal and professional **ethics**
 - Aim 4: Intercultural communication, and **global citizenship**
 - Aim 5: **Communication and collaboration**
 - Aim 6: Leadership and advocacy for the **improvement of the human condition**

Relationship of BASc(FinTech) PLOs to HKU UEAs

HKU Educational Aims	Programme Learning Outcomes
Pursuit of academic professional excellence, critical intellectual enquiry and life-long learning	PLO a PLO b PLO c PLO d PLO i PLO j
Tackling novel situations and ill-defined problems	PLO c PLO j
Critical self-reflection, greater understanding of others, and upholding personal and professional ethics	PLO f PLO h
Intercultural understanding and global citizenship	PLO f PLO g PLO h
Communication and collaboration	PLO e PLO g
Leadership and advocacy for the improvement of the human condition	PLO d PLO e PLO h

Programme Structure



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.

Programme Structure

- University Requirements
 - English in the Discipline (6 credits)
 - Chinese language (6 credits)
 - Common Core courses (**24 credits**)
 - Non-credit bearing course
 - Core University English (if required - 6 credits)
- BAsc Core courses
 - Approaching Interdisciplinarity: Knowledge Beyond Disciplines (6 credits)
 - Data Science 101 (6 credits)
 - Sustainable Leadership (6 credits)
- FinTech Major
 - Core Courses (54 credits)
 - Computer programming I
 - Foundations of FinTech Programming
 - Linear algebra, probability and statistics
 - Introduction to financial technologies
 - Distributed ledger and blockchain
 - Introduction to financial accounting
 - Introductory microeconomics
 - Corporate finance
 - Regulation of financial markets
 - FinTech Elective Courses (30 credits)
 - AI, Machine Learning, Security, NLP, Big Data, E-Payment, Investment, Derivatives, IT Law, Finance Regulation, etc.
 - Capstone Project (12 credits)

Download Students' Handbook

- Download the Handbook for First Year Students 2024-25
 - (Prepared by the Faculty Office of Engineering)

https://engg.hku.hk/Portals/0/UG/Induction_Handbook_2024-25.pdf

University Requirements

- **Chinese course** - CENG9001 Practical Chinese for Engineering students
 - Local students - Take the course at **Year 3**
 - Putonghua-speaking students - should take CUND9002 or CUND9003 instead (recommend at **Year 1**)
 - International students - can apply for exemption for CENG9001
 - (i) either take a credit-bearing Cantonese or Putonghua language course for international students; OR
 - (ii) take an elective course in lieu
 - Please refer to **page 9** of the 2024-25 Students' Handbook
- **Common Core courses** - total 4 courses
 - One course from each Area of Inquiry
 - (i) Science, Technology and Big Data (course code: CCSTxxxx)
 - (ii) Arts & Humanities (course code: CCHUxxxx)
 - (iii) Global Issues (course code CCGLxxxx)
 - (iv) China: Culture, State and Society (course code: CCCHxxxx)

University Requirements

- **English course** - CAES9542 Technical English for computer science
 - 1st semester **at Year 4** (**together** with the Capstone FYP course)
- **# English course** – CAES1000 Core University English
 - This course is not in the syllabus of the FinTech programme.
 - Students with HKDSE English **level 5 or above** (or equivalent) are exempted from taking CAES1000.
 - For the list of equivalent qualifications, please refer to **page 6** of the Students' Handbook.
 - Please also take note of the notification on **page 7**.
 - Students **without DSE level 5 or above** (or equivalent), they **are required** to take CAES1000 as supplementary credits and **complete 246 credits** for graduation.
 - You are required to take the course **at Year 1**
 - Please take note of the information on **page 7** for the enrollment arrangement.

University Requirements

- UG5E1001 Introduction to the Constitution, the Basic Law and the National Security Law
 - A non-credit bearing course
 - An online course that adopts a self-directed learning approach
 - Students can take this course in any semester throughout their period of study
 - Further details about the course, please visit the follow site:

<https://www.cedars.hku.hk/ge/ug5e1001.html>

BASc Cores

- Total three courses
 - A requirement for all BASc students.
 - **BASC9001** Approaching Interdisciplinarity: Knowledge Beyond Disciplines - Year 1 first semester
 - **STAT1016** Data Science 101 - Year 1 second semester
 - **DESN9002** Sustainable Leadership - Year 2 first semester

1st Year Enrolment

Normal loading: 5 courses in each semester

It's advisable to limit your course load to no more than 5 subjects during your first semester. University-level teaching and learning can be quite different from what you're used to in high school, so it's important to give yourself time to adjust and adapt.

• 1st Semester

- BAsC core
 - **BASC9001 Approaching Interdisciplinarity: Knowledge Beyond Disciplines**
- FinTech cores
 - **ENGG1330 Computer programming I**
 - **FITE1010 Introduction to financial technologies**
 - **ECON1210 Introductory microeconomics**
- One common core course **or** Core university English (*only for students who do not have DSE English level 5 or above or equivalent*)

• 2nd Semester

- BAsC core
 - **STAT1016 Data Science 101**
- One common core course
- FinTech cores
 - **FITE2000 Foundations of fintech programming**
 - **ACCT1101 Introduction to financial accounting**
- A free elective course
 - Or** MATH1011 University Math I for students without DSE M1/M2 or equivalent
 - Or** Core university English (*only for students who do not have DSE English level 5 or above or equivalent*)

To satisfy the prerequisite requirement of MATH1853. For other qualifications, please refer to **page 10** of the Students' Handbook.

Recommended Subclasses

You should select courses for both semesters 1 & 2 during August 20 enrollment period; however, only enroll FITE2000 in the 2nd semester add/drop period as you need to pass ENGG1330 before enrolling this course.

• 1st Semester

- ENGG1330 Computer programming I
 - Lecture: Thu 10:30 - 12:20
 - Suitable Tutorial subclasses:
 - 1A - MON 09:30-11:20
 - 1D - MON 16:30-18:20
 - 1G - TUE 16:30-18:20
 - 1J - FRI 09:30-11:20
 - 1L - FRI 14:30-16:20
 - 1M - FRI 16:30-18:20
- ECON1210 Introductory microeconomics
 - ECON1210**B** [Mon: 14:30 – 15:20, Thu 13:30 – 15:20]
 - ECON1210**D** [Wed: 09:30 – 12:20]

• 2nd Semester

- ACCT1101 Introduction to financial accounting
 - ACCT1101**Q** [Thu: 13:30 – 16:20]
 - ACCT1101**S** [Mon: 14:30 – 15:20, Thu: 13:30 – 15:20]

For ECON1210 & ACCT1101, FBE reserves 30 quota for each subclass; will release the unused quota by Sept 4.

Sample Study Plans

- BAsc(FinTech) Academic Advising Page:
<https://www.cs.hku.hk/programmes/basc-fintech/academic-advising>
 - BAsc(FinTech) [2023/24 & 2024/25]
 - BAsc(FinTech) with 2nd Major in Computer Science
 - BAsc(FinTech) with 2nd Major in Entrepreneurship Design and Innovation
 - BAsc(FinTech) with Minor in Computer Science
- The samples serve as illustrative purpose. Beware of the pre-requisite and time-tabling issues. Students who opt for a 2nd Major or Minor are responsible for planning for their own course of studies.

Majors / Minors

- Numerous choices:
<https://aas.hku.hk/list-of-major/>,
<https://aas.hku.hk/list-of-minor/>
- May have admission prerequisite/study restriction
- Download and study the syllabus of the Major or Minor programme
 - Understand the syllabus
 - How many core courses? When are they being offered?
 - Observe the pre-requisite requirements and restrictions
 - Beware of the timetable issue
- Recommend consult the corresponding Temporary Advisor(s) of the offering department/faculty before making your course selection

FAQs Related to 2nd Major / Minors

- When should I start taking courses?
 - Taking a 2nd Major or double minors:
 - Better start taking courses in 1st year
 - For Minor, can start at 2nd year
- When do I have to register for the option?
 - If you opt for Major / Minor(s), you can declare it after completion of the first year study
- Can I change from a Major to a Minor?
 - In principle, yes
 - Most of the Introductory courses for the Major and Minor are similar or the same.
 - You can make changes to the declaration of Minor or Major during the Course enrollment and ADD/DROP period

Further Enquires

- BAsc(FinTech) programme
 - Programme Director – Prof. Qi Liu
(First Year Advisor)
 - Email: liuqi@cs.hku.hk
 - Academic Advisor – Dr. Anthony Tam
(First Year Advisor)
 - Email: atctam@cs.hku.hk
- For enrollment issues and general enquiries, please Faculty Office
 - Office: Room G01A, G/F, Haking Wong Building
Email: enggugt1@hku.hk

Information

- Regulations and Syllabus for the degree of BAsC(FinTech)
 - <https://engg.hku.hk/Teaching-Learning/BEng-BAsC/Academic-Programmes/Regulations-Syllabuses>
- BAsC(FinTech) Web site:
 - <https://www.cs.hku.hk/fintech-home>
 - Advising Page: <https://www.cs.hku.hk/programmes/basc-fintech/academic-advising>
- First Year Experience Website
 - <https://firstyear.hku.hk/>