



**Bachelor of Science in Quantitative Finance [BSc(QFin)] Curriculum Requirements (Total: 240 credits)**  
*(Please refer to the BSc(QFin) Degree Syllabuses of the 2026-2027 intake for details.)*

**1. UG5 Requirements (12 courses; 54 credits)**

- (a) Language Courses (3 courses; 12 credits): (i) CAES1001 Academic Communication in English + (ii) CAES9920 Academic Communication for Business and Economics + (iii) CBBA9003 Practical Chinese for BEcon/BEcon&Fin/BFin(AMPB)/BSc(QFin) Students

- CAES1001 Academic Communication in English (ACE) is a compulsory, non-credit bearing course for all undergraduate students. Students must enrol in CAES1001 in either Semester 1 or 2 of Year 1 unless exemption has been granted.

Students who have achieved Level 5 or above in English Language in HKDSE, or equivalent, in the year of admission (*i.e. 2026, unless otherwise specified in the “[Notes on CAES1001 Academic Communication in English](#)”*; and **test result obtained after admission to the University will not be considered**) are exempted from the ACE requirement. To apply for exemption from the ACE requirement, students should complete the online application form at the Faculty website (<https://ug.hkubs.hku.hk/support-and-development/useful-info/downloadable-forms>) by the deadline.

- Non-local Putonghua/Mandarin-speaking candidates should complete a 6-credit Chinese Language Enhancement Programme course for non-local Putonghua/Mandarin-speaking students (*i.e.* CUNDxxxx course) in lieu of CBBA9003 Practical Chinese for BEcon/BEcon&Fin/BFin(AMPB)/BSc(QFin) Students.

Students who did not study Chinese language during their secondary education and have not reached the required proficiency level to take CBBA9003 should write to the Board of the Faculty to apply for exemption from the Chinese language enhancement requirement and take a course in either Chinese language\* (“CHIN9501 Chinese as a Foreign Language I” or “CHIN9511 Cantonese as a Foreign Language I”) or Chinese culture (“CHIN9521 The Fundamentals of Chinese Characters” or “CHIN9522 Exploration of Major Cultural Themes across Chinese History”) offered by the Chinese Language Centre of the School of Chinese in lieu. To apply for exemption from the Chinese language enhancement requirement, students should complete the application form at the Faculty website (<https://ug.hkubs.hku.hk/support-and-development/useful-info/downloadable-forms>) and return it to the Faculty Office by the deadline.

*\*Note: Students taking a Chinese language course may be assigned to a higher-level course (CHIN9502-CHIN9508 or CHIN9512-CHIN9513) based on the results of a placement test.*

- (b) Common Core Courses (6 courses; 36 credits)

Students shall complete a total of 36 credits in the Common Core Curriculum, comprising at least 6 credits and not more than 12 credits of from each Area of Inquiry (AoI) with not more than 24 credits being selected within one academic year except where candidates are required to make up for failed credits. Please refer to the Common Core website (<https://commoncore.hku.hk/>) for details.

- (c) Artificial Intelligence Literacy Courses (2 courses; 6 credits): (i) AILT1001 Artificial Intelligence Literacy I + (ii) AILTxxxx Artificial Intelligence Literacy II or other microcredential AI Literacy course

- Students are strongly advised to take AILT1001 either in Semester 1 or 2 of Year 1 as it is a prerequisite for taking the second Artificial Intelligence Literacy course required for graduation. Please refer to the AILT1001 website (<https://ailt.cds.hku.hk/>) for more information.
- The Faculty currently offers two 3-credit Artificial Intelligence Literacy II courses: AILT9021 AI and the Future Economy and AILT9022 AI-Powered Business Applications. While students may fulfil the requirement by completing any Artificial Intelligence Literacy II course, students are strongly encouraged to take either AILT9021 or AILT9022.

- (d) Other Non-credit Bearing Courses Required by the University (1 course; 0 credits): UGRE1001 Introduction to the Constitution, the Basic Law and the National Security Law

UGRE1001 Introduction to the Constitution, the Basic Law and the National Security Law is an online course which adopts a self-directed learning approach. Students have the flexibility to take the course in any semester throughout their period of study. Enrolment on the course is automatic. Please refer to the CEDARS website (<https://www.cedars.hku.hk/ugre1001>) for more information.

**2. Compulsory Major in Quantitative Finance (QFin) (16 courses; 96 credits)**

- (a) Faculty Core Courses (FCC) (4 courses; 24 credits): (i) ACCT1101 Introduction to Financial Accounting + (ii) ECON1210 Introductory Microeconomics + (iii) FINA1310 Corporate Finance + (iv) Statistics Course (SDST2601 Probability and Statistics I)

- FCC can only be double-counted across major-major, but not major-minor combination. Should the FCC constitute the requirements of a second major or a minor offered by the Faculty, students will be required to complete an equivalent number of credits of free electives (for major-major combination) or advanced level minor disciplinary electives (for major-minor combination) in lieu of the overlapped FCC.
- Double-counting is NOT allowed for courses other than the FCC. Students will be required to complete an equivalent number of credits of advanced level disciplinary electives under the major/minor concerned in lieu of the overlapped courses.

- Please refer to the induction powerpoint for further explanation on double-counting.

(b) Disciplinary Core Courses (9 courses; 54 credits): (i) *COMP1117* Computer Programming + (ii) *ECON1220* Introductory Macroeconomics + (iii) *ECON2280* Introductory Econometrics + (iv) *FINA2320* Investments and Portfolio Analysis + (v) *FINA2322* Derivatives + (vi) *FINA3350* Mathematical Finance + (vii) *FINA3351* Spreadsheet Financial Modelling + (viii) *MATH1013* University Mathematics II + (ix) *MATH2014* Multivariable Calculus and Linear Algebra

- Students who would like to build a strong mathematics foundation may apply to the Faculty Office for taking *MATH2211* Multivariable Calculus and *MATH2101* Linear Algebra I in lieu of *MATH2014* Multivariable Calculus and Linear Algebra. To match the required credits, *MATH2211* shall substitute *MATH2014* while *MATH2101* shall be counted as a free elective to satisfy the BSc(QFin) curriculum requirements.
- Students who would like to have more in depth knowledge in financial mathematics may apply to the Faculty Office for taking *MATH3906* Financial Calculus in lieu of *FINA3350* Mathematical Finance to satisfy the BSc(QFin) curriculum requirements. Please refer to the induction powerpoint for further details.

(c) QFin Disciplinary Electives (2 courses; 12 credits): Please refer to [Attachment I](#) for the list of QFin disciplinary electives.

(d) Capstone Course (1 course; 6 credits): *FINA4341* Quantitative Risk Management or *FINA4354* Financial Engineering

### 3. Free Electives (15 courses; 90 credits)

Free electives are courses in any disciplines except Common Core and Chinese Language Enhancement courses. These include (1) courses used to fulfil an optional second major and/or minor(s) requirements or (2) QFin disciplinary electives that are not counted towards fulfilling the requirements for the 96-credit Major in Quantitative Finance.

*[Note: Second major and minor(s) are optional and must be declared via SIS. The earliest time students can declare their second major/minor(s) is the preliminary course enrolment period in Year 2. The latest time students can declare or change their second major/minor(s) is the end of the add/drop period in Semester 1 of Year 4.]*

**The BSc(QFin) degree regulations and syllabuses, course descriptions, and course outlines are downloadable from the Faculty website (<https://ug.hkubs.hku.hk>). For enquiries regarding the BSc(QFin) curriculum, please contact the Faculty Office by email to [fbe.undergrad@hku.hk](mailto:fbe.undergrad@hku.hk). It is important that you state your full name, university number, curriculum, and year of study in the email.**

*Last updated in August 2026*

## QFin Disciplinary Electives

| Course Code                    | Course Title                                                            | Suggested Year of Study | Credits |
|--------------------------------|-------------------------------------------------------------------------|-------------------------|---------|
| COMP2119                       | Introduction to Data Structures and Algorithms                          | 2 or 3 or 4             | 6       |
| ECON3225                       | Big Data Economics                                                      | 3 or 4                  | 6       |
| ECON3283 <i>or</i><br>SDST4601 | Economic Forecasting <i>or</i><br>Time-series Analysis                  | 3 or 4                  | 6       |
| FINA2350                       | Text Analytics and Natural Language Processing in Finance and Fintech   | 3 or 4                  | 6       |
| FINA2390                       | Financial Programming and Databases                                     | 2 or 3 or 4             | 6       |
| FINA3322 <i>or</i><br>SDST4607 | Credit Risk <i>or</i><br>Credit Risk Analysis                           | 3 or 4                  | 6       |
| FINA3323                       | Fixed Income Securities                                                 | 2 or 3 or 4             | 6       |
| FINA3325                       | Alternative Investments                                                 | 3 or 4                  | 6       |
| FINA3353                       | Regulatory, Operational and Valuation Issues in Finance Institutions    | 3 or 4                  | 6       |
| FINA4341                       | Quantitative Risk Management ( <i>if not taken as capstone course</i> ) | 4                       | 6       |
| FINA4354                       | Financial Engineering ( <i>if not taken as capstone course</i> )        | 4                       | 6       |
| FINA4359                       | Data Analytics, Quantitative Finance, and Blockchain Finance            | 3 or 4                  | 6       |
| IIMT3601                       | Database Management                                                     | 2 or 3 or 4             | 6       |
| MATH3405                       | Differential Equations                                                  | 3 or 4                  | 6       |
| MATH3603 <i>or</i><br>SDST3603 | Probability Theory <i>or</i><br>Stochastic Processes                    | 3 or 4                  | 6       |
| SDST2602                       | Probability and Statistics II                                           | 2 or 3 or 4             | 6       |

(\*Note: Many courses listed above are usually offered once a year in Semester 1 or 2 or may not be offered every year. Please take this into account in your course planning and check with relevant faculties in advance.)

## Pre-requisites/Co-requisites

| Course Category                                 | Course   | Year        | Pre-requisite(s)                                                                                            | Co-requisite(s)                                                                                          |
|-------------------------------------------------|----------|-------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Faculty Core Courses                            | FINA1310 | 1           | ACCT1101                                                                                                    |                                                                                                          |
|                                                 | SDST2601 | 2           | /                                                                                                           | MATH2014 or (MATH2101 and MATH2211)                                                                      |
| QFin Disciplinary Core Courses                  | MATH1013 | 1           | Level 2 or above in Module 1, or Module 2 of HKDSE Mathematics or equivalent or (MATH1009 or MATH1011)      |                                                                                                          |
|                                                 | MATH2014 | 1           | MATH1013 or (MATH1851 and MATH1853)                                                                         |                                                                                                          |
|                                                 | ECON2280 | 2           | ECON1210 and (ECON1280 or IIMT1640 or MATH1853 or SDST1601 or SDST1602 or SDST1603 or SDST2601 or SDST2901) |                                                                                                          |
|                                                 | FINA2320 | 2           | ECON1210 and FINA1310                                                                                       | ECON1280 or IIMT1640 or SDST1600 or SDST1601 or SDST1602 or SDST1603 or SDST2601 or SDST2901 or MATH1853 |
|                                                 | FINA2322 | 2           | ECON1210 and FINA1310                                                                                       |                                                                                                          |
|                                                 | FINA3350 | 3           | FINA2322                                                                                                    |                                                                                                          |
|                                                 | FINA3351 | 3           | FINA2322 and (FINA2320 or SDST3609)                                                                         |                                                                                                          |
| QFin Disciplinary Electives/<br>Capstone Course | COMP2119 | 2 or 3 or 4 | COMP2113 or COMP2123 or ENGG1340                                                                            |                                                                                                          |
|                                                 | ECON3225 | 3 or 4      | ECON2280 or ECON3284                                                                                        |                                                                                                          |
|                                                 | ECON3283 | 3 or 4      | ECON2280                                                                                                    |                                                                                                          |
|                                                 | SDST4601 | 3 or 4      | SDST3600                                                                                                    |                                                                                                          |
|                                                 | FINA2390 | 2 or 3 or 4 | ECON1280 or IIMT1640 or SDST1602 or SDST1603 or SDST2601                                                    |                                                                                                          |
|                                                 | FINA3322 | 3 or 4      | FINA2322                                                                                                    |                                                                                                          |
|                                                 | SDST4607 | 3 or 4      | SDST3618 or SDST3905 or SDST3910 or (FINA2322 and any University level 3 course)                            |                                                                                                          |
|                                                 | FINA3323 | 2 or 3 or 4 | ECON1210 and (FINA2322 or SDST3905) and (FINA2320 or SDST3609)                                              |                                                                                                          |
|                                                 | FINA3325 | 3 or 4      | FINA2322 and (FINA2320 or SDST3609)                                                                         |                                                                                                          |
|                                                 | FINA3353 | 3 or 4      | FINA2320                                                                                                    |                                                                                                          |
|                                                 | FINA4341 | 4           | FINA3350                                                                                                    |                                                                                                          |
|                                                 | FINA4354 | 4           | FINA3350                                                                                                    |                                                                                                          |
|                                                 | FINA4359 | 3 or 4      | ECON1210 and FINA2320 and (IIMT2602 or COMP1117 or ENGG1111 or equivalent)                                  |                                                                                                          |
|                                                 | IIMT3601 | 2 or 3 or 4 | /                                                                                                           |                                                                                                          |
|                                                 | MATH3405 | 3 or 4      | (MATH2101 and MATH2211) or MATH2014 or (MATH1821 and MATH2822)                                              |                                                                                                          |
|                                                 | MATH3603 | 3 or 4      | (MATH2101 and MATH2211) or MATH2014 or (MATH1821 and MATH2822)                                              |                                                                                                          |
|                                                 | SDST3603 | 3 or 4      | SDST2601                                                                                                    |                                                                                                          |
|                                                 | SDST2602 | 2 or 3 or 4 | SDST2601                                                                                                    |                                                                                                          |