

A BSc Degree Curriculum

The Faculty of Science offers a number of Science majors leading to the award of a BSc degree.

All students admitted to the first year of the 6901 BSc programme in the academic year of 2021-22 and thereafter are required to complete at least one Science major out of the 14 regular or 7 intensive Science majors as your primary major for the award of the BSc degree. In addition to the primary Science major, students may take a second major or a minor in a Science or non-Science discipline. Students should note that some non-Science majors and minors may require students to have achieved a minimum academic result before they are allowed to enrol in them.

(a) Curriculum structure of the BSc Degree (240 credits)

For 2021-22 intake and thereafter:



(b) A typical BSc curriculum:

To complete the BSc degree curriculum, you have to pass at least 240 credits, equivalent to 40 6-credit courses, normally spread over 4-years of full-time study. A BSc curriculum typically comprises:

(i) UG5:

- 2 English courses and 1 Chinese course for university language requirements (18 credits)
- 6 common core courses in 4 Areas of Inquiry (36 credits)

(ii) For regular Science major:

- 16 courses for the regular Science major including 2 Science Foundation courses,

Disciplinary courses and capstone course (96 credits)

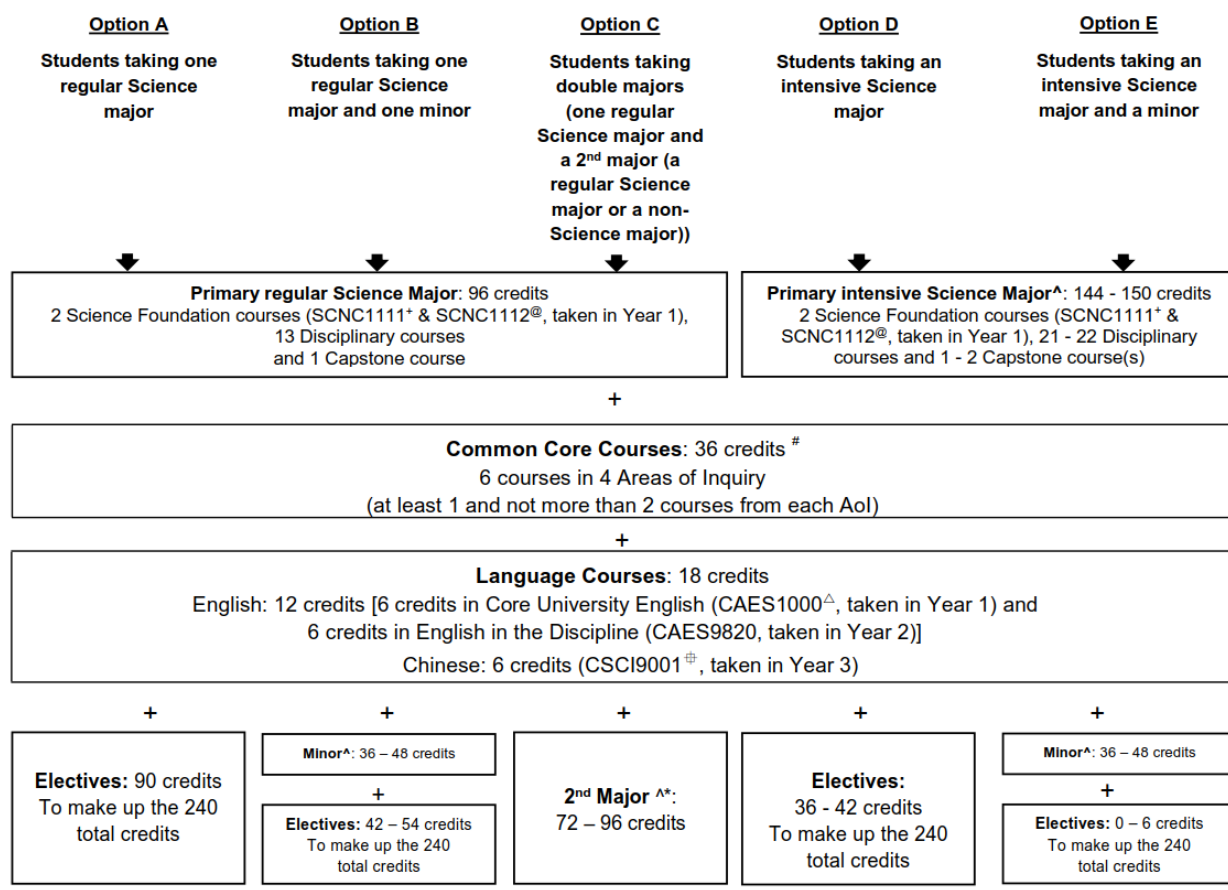
- A choice of 15 courses as elective courses, or to fulfil the requirements of a minor or a second major (90 credits)

OR

For intensive Science major (applicable to 2015-16 intake and thereafter):

- 24 - 25 courses for the intensive Science major including 2 Science Foundation courses, Disciplinary courses and capstone course(s) (144 - 150 credits)
- A choice of 6 - 7 courses as elective courses, or to fulfil the requirements of a minor (36 - 42 credits)

Curriculum requirements (240 credits)



Notes:

⁺ Candidates who have been admitted to Year 1 in 2020-21 (and thereafter) and have achieved any one of the following qualifications are exempted from taking SCNC1111:

- Level 4 or above in Mathematics Extended Part Module 1 or 2 in the Hong Kong Diploma of Secondary Education (HKDSE)
- Level 5 or above in Mathematics Higher Level in International Baccalaureate (IB)
- Grade B or above in Mathematics and Further Mathematics in General Certificate of Education Advanced Level (GCEAL)
- Mathematics qualification in Gao Kao will be considered on a case-by-case basis

It is optional for them to take the course SCNC1111. Those who do not take this course should take a 6-credit disciplinary elective course of the science major in lieu.

[@] Candidates who have been admitted to Year 1 in 2021-22 (and thereafter) and have achieved any one of the following qualifications are exempted from taking SCNC1112:

- Level 4 or above in Biology, Chemistry, and Physics in the Hong Kong Diploma of Secondary Education (HKDSE)
- Level 5 or above in Biology, Chemistry, and Physics Higher Level in International Baccalaureate (IB)
- Grade B or above in Biology, Chemistry, and Physics in General Certificate of Education Advanced Level (GCEAL)
- Biology, Chemistry, and Physics qualification in Gao Kao will be considered on a case-by-case basis

It is optional for them to take the course SCNC1112. Those who do not take this course should take a 6-credit disciplinary elective course of the science major in lieu.

Student must select at least one and not more than two courses from each Area of Inquiry with not more than 24 credits of courses being selected within one academic year except where candidates are required to make up for failed credits. Common Core courses should be completed normally within the first three years of study.

△ Students who have been admitted to Year 1 in 2018-19 (and thereafter) and have achieved any one of the following qualifications are exempted from this requirement, and Core University English is optional. Those who do not take this course should take a 6-credit elective course in lieu:

- Level 5 or above in English Language in the HKDSE
- holder of a Bachelor's degree from an English-medium university
- achieved Grade A or above in English Language **GCE Advanced Level (AL) / Advanced Subsidiary Level (ASL)**
- achieved an overall **IELTS** score of no less than 7 **AND** with all sub-scores no less than 6.5 on the Reading, Speaking, Listening and Writing Tests
- achieved an overall **TOEFL Internet-based test** score of no less than 94 **AND** no less than a 24 on the writing, a 20 on the speaking, a 20 on the listening, AND a 19 on the reading sections
- achieved in **International Baccalaureate (IB)** Grade 4 or above in English A1/ English Language A/ English A: Literature/ English A: Language and Literature (HL); or Grade 5 or above in English B/ English Language B (HL); or Grade 5 or above in English A1/ English Language A/ English A: Literature/ English A: Language and Literature (SL)
- achieved Grade 4 or above on the **Advanced Placement (AP) English Language/ English Language and Composition/ English Literature and Composition Test**
- achieved a **NEW Scholastic Aptitude Test (SAT)** score of 35 or above on both the Writing & Language Test and Reading Test (from 2016)
- achieved Grade B or above in H1 General Paper at the **Singapore GCE A-level**
- achieved Grade A or better in English language at **Malaysia SPM examination**
- achieved Grade A2 or better in **Malaysia UEC-Senior English Language**
- attained merit (3 points) or above in each set of credits in **New Zealand NCEA Literacy** (10 credits made up of 5 credits in reading and 5 credits in writing)
- achieved a score of 95% or better in English at **All India Senior School Certificate Examination / Higher School Certificate**
- achieved a final score of 90% or better in English at **Grade 12 Canadian high school curriculum**
- achieved Grade B or better in English Language at **Sri Lanka Ordinary examination**
- achieved a score of 90 or better in English in the **Russian Unified State Exam** (Единый государственный экзамен, ЕГЭ, Yediny gosudarstvennyy ekzamen, EGE)
- **Academic Speaking and Writing test conducted by CAES** for students who have not taken any of the above tests
 - *When applying to take the Academic Speaking and Writing Test, students should provide evidence to the home Faculty and the CAES1000 Course Coordinator that they were admitted to HKU using qualifications **other than** those included in the above list.*
 - *Applicants are required to show **the evidence of those other qualifications** to the assessor on the day of the Academic Speaking and Writing Test.*
 - *If any applicants failed to provide any evidence that they were admitted to HKU using qualifications other than those included in the above list provided by CAES, the CAES assessor has the rights not to allow the applicant to take the test.*

⊕ To satisfy the Chinese language enhancement requirement, students are required to successfully complete the 6-credit Faculty-specific Chinese language enhancement course, except for:

- (a) Putonghua-speaking students who should take CUND9002 (Practical Chinese and Hong Kong Society) or CUND9003 (Cantonese for Non-Cantonese Speaking Students). They may take the course in Year 1 or 2 if they so wish; and
- (b) students who have not studied Chinese language during their secondary education or who have not attained the requisite level of competence in the Chinese language to take the Chinese language enhancement course should write to the Board of the Faculty to apply to be exempted from the Chinese language requirement, and
 - (i) take a 6-credit Cantonese or Putonghua language course offered by the School of Chinese especially for international and exchange students; OR
 - (ii) take an elective course in lieu.

^ Credit requirement for different majors or minors may vary.

* Students having a second major in Science are allowed to double-count the two Science Foundation Courses. The 12 credits can be made up by selecting any courses.

(c) Example of BSc programme structure by year of study:

| | | | | | | | | | | |
|------|-----------|-------|-------|-------|-------|-------|-----------------|-----------------|-------------------|--|
| Yr 4 | Cap-stone | Major | Major | Major | Major | Major | Intensive Major | Intensive Major | (Intensive Major) | |
| Yr 3 | CC | CC | Chi | Major | Major | Major | Intensive Major | Intensive Major | Intensive Major | |
| Yr 2 | CC | CC | Eng 2 | Major | Major | Major | Intensive Major | Intensive Major | | |
| Yr 1 | CC | CC | Eng 1 | SF1 | SF2 | Major | Major | Intensive Major | | |

CC – Common Core Courses
SF – Science Foundation Courses

Eng 1 – Core University English
Eng 2 – English in the Discipline

Chi – Chinese

Note: Different distributions of courses over the years are possible. Blank boxes can be used for elective courses, or courses leading to a minor or a second major.

(d) Common Core Curriculum

The Common Core Curriculum is designed to provide key common learning experience for all HKU students and to broaden their horizons beyond their chosen disciplinary fields of study. It focuses on issues that have been, and continue to be, of deeply profound significance to mankind, the core intellectual skills that all HKU undergraduates should acquire and the core values that they should uphold. The Common Core Curriculum is divided into four Areas of Inquiry (Aols): (1) Science, Technology and Big Data; (2) Arts and Humanities; (3) Global Issues; (4) China: Culture, State and Society. Students have to pass 36 credits of courses in the Common Core Curriculum, comprising at least one and not more than two courses from each Area of Inquiry with not more than 24 credits of courses being selected within one academic year except where candidates are required to make up for failed credits. Common Core courses should be completed normally within the first three years of the BSc study and cannot be extra taken as free electives.

(e) Capstone Requirement

Capstone experience is an integral part of the major programme which focuses on integration and application of knowledge and skills gained in the early years of study. Students must complete this for fulfilment of the graduation requirements. The capstone course carries a minimum of 6 credits and is normally taken in the senior years (year 3 or 4) of study. The capstone courses in each Science major may be different but a range of courses (e.g. research project, field work, internship) is offered to suit individual student's needs and interests. Details of capstone courses and the credit requirement for each major can be found in the syllabuses.