

(For students admitted in 2012-13 under the 3-year degree)

Curriculum for BSc in Computer Science

This BSc program in Computer Science is designed for students who wish to graduate with a BSc degree with dual program designation. It is not intended to lead to a standalone BSc degree in Computer Science. When enrolling in this BSc program in Computer Science, students are required to declare study in another BSc program. They are then required to complete the requirements of both BSc degrees, and will receive a BSc degree with two program designations upon graduation.

Students who have already registered in the BEng in Computer Science (or other undergraduate programs) and wish to study the BSc in Computer Science as their first major must apply for transfer into this program. They are required to declare study in another BSc program (second major) at the same time. Transfer applications should normally be submitted no earlier than the second regular term of their first year of study and at the latest before the end of the add/drop period of their final regular term of study.

Students who wish to study the BSc in Computer Science as their second major should follow the declaration procedures set by their (first) major department. Enrollment in this program (whether as first major or second major) requires a CGA of 3.15 or above, and is subject to the availability of a feasible study plan for the two BSc programs concerned. Applicants with lower qualifications may be considered on individual case basis.

Students who wish to discontinue study in the BSc in Computer Science as their first major may apply for transfer to the BEng program in Computer Science or other program. Application for transfer to the BEng program in Computer Science must be submitted to the Department of Computer Science and Engineering no later than the last day of the add/drop period in the first regular term of their final year of study. Application for transfer to another program should be submitted to the program department concerned.

General Requirements

Students are required to complete the following general requirements for graduation in addition to program specific requirements:

Required Courses in English Communication
Common Core Requirements
Required Course in Physical Education

For details please refer to the section "General Requirements" on this website.

Program Specific Requirements

Credit(s)

Required courses

| | | | |
|-----|---------------|---|-----|
| | COMP 1004** | Programming Fundamentals and Methodology | 4 |
| | COMP 2012 | Object-Oriented Programming and Data Structures | 4 |
| or | COMP 2012H | OOP and Data Structures (Honors Study Track)** | 4** |
| | COMP 2611 | Computer Organization | 4 |
| (1) | COMP 2711 | Discrete Mathematical Tools for Computer Science | 4 |
| (1) | or COMP 2711H | Honors Discrete Mathematical Tools for Computer Science | 4 |

| | | |
|---------------|---|---|
| COMP 3031 | Principles of Programming Languages | 3 |
| COMP 3111 | Software Engineering | 4 |
| or COMP 3111H | Honors Software Engineering | 4 |
| COMP 3511 | Operating Systems | 3 |
| COMP 3711 | Design and Analysis of Algorithms | 3 |
| or COMP 3711H | Honors Design and Analysis of Algorithms | 4 |
| ELEC 2600 | Probability and Random Processes in Engineering | 4 |
| or IELM 2510 | Engineering Probability and Statistics | 4 |
| or MATH 2411 | Applied Statistics | 4 |
| or MATH 2421 | Probability | 4 |
| MATH 2121 | Linear Algebra | 4 |

Elective courses

| | Elective types | Minimum no. of courses | Minimum total credits |
|-------|--------------------------------|---------------------------|--------------------------|
| (2) | COMP Computer Science Elective | 5 | 15 |
| (3,4) | FREE Free Elective | - | 27 |

Other Requirements

| | | | |
|-----|-----------|---|---|
| (5) | COMP 1900 | Academic and Professional Development I | 0 |
| (5) | COMP 2900 | Academic and Professional Development II | 0 |
| (5) | COMP 3900 | Academic and Professional Development III | 0 |

****Remarks on course(s):**

- COMP 1004: The course was last offered in 2012-13 and was deleted subsequently.
- COMP 2012H: The course title will be changed to "Honors Object-Oriented Programming and Data Structures" starting from Fall, 2014-15.
- COMP 2012H: The credit value will be changed to 5 starting from Fall, 2014-15.

Notes:

- (1) With prior approval from the COMP UG Coordinator, students may take MATH 2343 to fulfill the requirement of COMP 2711.
- (2) COMP 1001, COMP 1002 and COMP 1003 cannot be used to count toward the COMP elective requirement. At least twelve credits must be at 3000-level or higher, among which at least six credits must be at 4000-level or higher. With prior approval of the COMP UG Coordinator, up to two COMP electives can be satisfied by taking computer science related courses in a non-COMP department. Students on the COMP honors study track may earn one extra credit through taking COMP 3711H in replacement of COMP 3711. Students who have earned a total of 3 extra credits through taking COMP 2971 (prior to 2012-13), COMP 3711H, COMP 3971 (prior to 2012-13) or COMP 4971 may reduce the COMP elective requirements by one course (three credits).
- (3) Certain courses cannot be used to count toward the FREE elective requirements. Students must check the departmental website at <http://www.cse.ust.hk/ug/faq-registration/> for the list of such courses.
- (4) Students in this program are expected to also complete another BSc program and graduate with a dual program designation. Most of the Free electives are expected to be used for satisfying the requirements of the other BSc program.

- (5) COMP 1900 is meant for Fall and Spring term year one students; COMP 2900 for Fall and Spring term year two students; COMP 3900 for Fall and Spring term year three students. Students are required to register for the appropriate section during terms they are in residence at UST in the program. As an example, students who enter the program in the Spring term of year one and go on exchange in Spring term of year two will be expected to register for COMP 1900 (Spring), COMP 2900 (Fall) and COMP 3900 (Fall and Spring). As another example, students who enter the program in the Fall term of year two and go on exchange in Spring term of year two will only be expected to register for COMP 2900 (Fall) and COMP 3900 (Fall and Spring). As a third example, students who enter the program in the Fall term of year three will only be expected to register for COMP 3900 (Fall and Spring).

A minimum of 103 credits is required for the BSc program in Computer Science.