

THE UNIVERSITY OF HONG KONG

Bachelor of Engineering Degree in Computer Science **(Applicable to students admitted in the 2018-19 academic year and thereafter)**

Credit Unit Statement

The Computer Science curriculum offers four types of courses, namely introductory courses, advanced courses, projects and internship. The majority of the courses are 6-credit professional courses which are taught through lectures, tutorials and laboratory sessions aimed at equipping students with professional skills and knowledge in mathematics and computer science. The programme also has one 12-credit course Final Year Project / Extended Final Year Project as Capstone Experience. 120 hours of student learning activities (including both contact hours and all other form of student learning activities) will be the norm for a 6-credit course, whereas 240 hours of student learning activity will be the norm for a 12-credit course, and the contact hours and expected learning outcomes for different groups of courses vary according to the learning modes adopted. The programme also has a non-credit bearing Internship. Most courses are assessed through continuous assessment (combining for 10% to 100%) and written examination (0% – 90%), with a few courses to be assessed through 100% continuous assessment. The four categories of computer science courses are summarized as follows:

Introductory course (6 credits)

These courses aim at providing students with a solid foundation in computer science, mathematics, general engineering, communication skills and complementary studies.

The total contact hours ranging from 39 to 52 hours consists of a combination of lectures (totaling 26 to 39 hours) and tutorials/workshops/laboratory sessions (totaling 13 to 26 hours). The assessment is generally based on problem-solving type assignments, programming exercises, course projects, programming projects, mid-term/written quizzes and written examination. The written examination is normally 3 hours. The weighting of continuous assessment and examinations are 10% to 100% and 0% to 90% respectively.

The number of and level of assignments, programming tasks, mathematical calculations, course projects and quizzes shall be appropriate for assessing the learning outcome of the students but in all cases written output shall not exceed 3,000 words (laboratory reports not included).

Advanced course (6 credits)

These courses aim at providing students with in-depth knowledge in a broad range of topics in Computer Science.

The total contact hours ranging from 39 to 52 hours consists of a combination of lectures (totaling 26 to 39 hours) and tutorials/workshops/laboratory sessions (totaling 13 to 26 hours). The assessment is generally based on problem-solving type assignments, programming tasks, course projects, mid-term/written quizzes and written examination. The written examination is normally 3 hours. The weighting of continuous assessment and examinations are both from 30% to 70%.

The number of and level of assignments, programming tasks, mathematical calculations, course projects and quizzes shall be appropriate for assessing the learning outcome of the students but in all cases written output shall not exceed 3,000 words.

Projects (12 credits)

Project courses (Final Year Project / Extended Final Year Project) are under the category of Capstone Experience and aim at training students to integrate and consolidate the knowledge learnt in previous courses with topics range from applied software development to assignments on basic research. The total contact hours range from 26 to 39 hours.

Final Year Project: Students are generally expected to spend 240 hours on their final-year project over a period of two semesters in their final year of study. Students will go through a complete project cycle including planning and implementation. The assessment is 100% in-course and is conducted in 3 stages: project planning; progress presentation and interim report (totaling 500-1,500 words); final presentation with written report (totaling 1,500-3,000 words) and poster exhibition.

Extended Final Year Project: Students are generally expected to spend 280 hours on their capstone project over a period of three semesters, starting from the second semester of their third year of study (40 hours) and spanning through their final year of study (240 hours). Apart from planning and implementation, the Extended Final Year Project features an initiation phase in which students focus on bringing an initial idea into a practical project formulation. Learning activities include idea incubation and entrepreneurship workshops. The assessment is 100% in-course and is conducted in 3 stages: project formulation and planning; progress presentation and interim report (totaling 500-1,500 words); final presentation with written report (totaling 1,500-3,000 words) and poster exhibition.

Internship (non-credit bearing)

The internship aims at immersing students into a work environment where their technical knowledge can be reinforced in applied situations. It consists of a minimum of 4 weeks of information technology-related placement on a full time basis in an industrial organization. Students are required to submit a training report after the internship. The assessment is based on the employer's feedback and the training report totaling not more than 1,000 words.

Alternatively, students are given the option of joining the one-year Integrated Study-Work Programme on a full-time basis to work in the industry between their third and final years of studies.