(For students admitted in 2012-13 under the 4-year degree)

BSc in Computer Science

This BSc program in Computer Science is designed for students who wish to graduate with a BSc degree with two majors. 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 expected to declare study in another BSc major at the same time. By completing the requirements of both BSc degrees, they will receive a BSc degree with two majors upon graduation.

Enrollment in this program (whether as first major or additional major) requires a CGA of 3.3 or above, and is subject to the availability of a feasible study plan for the two BSc majors concerned. Applicants with lower qualifications may be considered on individual case basis.

In addition to the requirements of their major programs, students are required to complete the University requirements for graduation. For details please refer to the respective section on this website.

Some courses can be used to fulfill both Major and University Common Core Requirements. Students may reuse a maximum of 6 credits of these courses to count towards both Requirements.

Major Requirements

			Credit(s)
Engineering Fundamental Course(s)			
COMP		Note: COMP 1021 OR COMP 1022P OR COMP 1022Q	3
COMP	1021	Introduction to Computer Science	3
COMP	1022P	Introduction to Computing with Java	3
COMP	1022Q	Introduction to Computing with Excel VBA	3
ENGG	1010	Academic Orientation	0
LANG	2030	Technical Communication I	3
MATH		Note: [(MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-6
MATH	1013	Calculus I	3
MATH	1014	Calculus II	3
MATH	1020	Accelerated Calculus	4
MATH	1023	Honors Calculus I	3
MATH	1024	Honors Calculus II	3
MATH	2111	Matrix Algebra and Applications	3
Required Course(s)			
COMP	2011	Introduction to Object-oriented Programming	4
COMP		Note: COMP 2012 OR COMP 2012H	4
COMP	2012	Object-Oriented Programming and Data Structures	4
COMP	2012H	OOP and Data Structures (Honors Study Track)**	4**

COMP	2611	Computer Organization	4
COMP		Note: COMP 2711 OR COMP 2711H	4
COMP	2711	Discrete Mathematical Tools for Computer Science	4
COMP	2711H	Honors Discrete Mathematical Tools for Computer Science	4
COMP		Note: COMP 3111 OR COMP 3111H	4
COMP	3111	Software Engineering	4
COMP	3111H	Honors Software Engineering	4
COMP	3511	Operating Systems	3
COMP		Note: COMP 3711 OR COMP 3711H	3-4
COMP	3711	Design and Analysis of Algorithms	3
COMP	3711H	Honors Design and Analysis of Algorithms	4
COMP	4900	Academic and Professional Development	0
ELEC/ IELM/ MATH		Note: ELEC 2600 OR IELM 2510 OR MATH 2411 OR MATH 2421	4
ELEC	2600	Probability and Random Processes in Engineering	4
IELM	2510	Engineering Probability and Statistics	4
MATH	2411	Applied Statistics	4
MATH	2421	Probability	4
LANG	3030**	Technical Communication II	3

Elective(s)

COMP		COMP 2000-level or above Electives (6 courses) [With approval by the Dean or the Dean's designate, students may use up to 3 computer science related courses (9 credits) offered by non-CSE department(s) to count towards this requirement.]	18

***Remarks on course(s):*

- 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.
- LANG 3030: This is a new course subject to approval.