

The Hong Kong University of Science and Technology

School of Engineering

An Example on Student's Pathway (as of Fall 2020-21)

<< Declaration of major

School:		School of Engineering		Student's Pathways (i.e. Study Pattern)										Remarks
Department:		Computer Engineering Program Office		Pathway 1										
Program:		BEng in Computer Engineering		Background: HKDSE 4 Core + 2 Elec (incl. 1/2x PHYS) <input type="checkbox"/> Profile: Normative. Students to graduate in BEng CPEG with Research Option										
Course <input type="checkbox"/> Offering <input type="checkbox"/> Dept <input type="checkbox"/> (course code prefix)	Course Code	Course Title / Courses List		Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Sub-total	
Major Requirements														
Engineering Fundamental Courses														
COMP <input type="checkbox"/>	<input type="checkbox"/>	Note: COMP 1021 OR COMP 1022P OR COMP 1022Q <input type="checkbox"/>		3									3	
COMP <input type="checkbox"/>	1021 <input type="checkbox"/>	Introduction to Computer Science <input type="checkbox"/>		3	3								3	
COMP <input type="checkbox"/>	1022P <input type="checkbox"/>	Introduction to Computing with Java <input type="checkbox"/>		3										
COMP <input type="checkbox"/>	1022Q**	Introduction to Computing with Excel VBA		3										
ENGG	1010	Academic Orientation		0	0								0	
LANG	2030	Technical Communication I		3				3					3	
MATH <input type="checkbox"/>	<input type="checkbox"/>	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020] <input type="checkbox"/>		4-7										
MATH <input type="checkbox"/>	1012 <input type="checkbox"/>	Calculus IA <input type="checkbox"/>		4										
MATH <input type="checkbox"/>	1013 <input type="checkbox"/>	Calculus IB <input type="checkbox"/>		3	3	3							6	
MATH <input type="checkbox"/>	1014 <input type="checkbox"/>	Calculus II <input type="checkbox"/>		3										
MATH <input type="checkbox"/>	1020 <input type="checkbox"/>	Accelerated Calculus <input type="checkbox"/>		4										
MATH <input type="checkbox"/>	1023 <input type="checkbox"/>	Honors Calculus I <input type="checkbox"/>		3										
MATH	1024	Honors Calculus II		3										
MATH	2011	Introduction to Multivariable Calculus		3					3				3	
MATH	2111	Matrix Algebra and Applications		3			3						3	
PHYS <input type="checkbox"/>	<input type="checkbox"/>	Note: PHYS 1112 OR PHYS 1312 <input type="checkbox"/>		3										
PHYS <input type="checkbox"/>	1112 <input type="checkbox"/>	General Physics I with Calculus <input type="checkbox"/>		3	3								3	
PHYS	1312	Honors General Physics I		3										
PHYS <input type="checkbox"/>	<input type="checkbox"/>	Note: PHYS 1114 OR PHYS 1314 <input type="checkbox"/>		3										
PHYS <input type="checkbox"/>	1114 <input type="checkbox"/>	General Physics II <input type="checkbox"/>		3		3							3	
PHYS	1314	Honors General Physics II		3										
SENG		Engineering Introduction course (If the students take an introduction course included in their major, this course can be counted towards their major requirement.)		3-4		3							3	
Required credits for Engineering Fundamental Courses				25-29									27	
Major Required Courses and Electives														
CPEG <input type="checkbox"/>	<input type="checkbox"/>	Note: [CPEG 1971 AND (CPEG 4901 OR CPEG 4902 OR CPEG 4911 OR CPEG 4912)] OR [CPEG 4910] (Students taking the Research Option must take either CPEG 4902 or CPEG 4912) <input type="checkbox"/>		6										
CPEG <input type="checkbox"/>	1971 <input type="checkbox"/>	Industrial Experience <input type="checkbox"/>		0							3	3	6	
CPEG <input type="checkbox"/>	4901 <input type="checkbox"/>	Computer Engineering Final Year Project in COMP <input type="checkbox"/>		6										
CPEG <input type="checkbox"/>	4902 <input type="checkbox"/>	Computer Engineering Final Year Thesis in COMP <input type="checkbox"/>		6										
CPEG <input type="checkbox"/>	4910 <input type="checkbox"/>	Co-op Program <input type="checkbox"/>		6										
CPEG <input type="checkbox"/>	4911 <input type="checkbox"/>	Computer Engineering Final Year Project in ELEC <input type="checkbox"/>		6										
CPEG	4912	Computer Engineering Final Year Thesis in ELEC		6										
CPEG	2930	Academic and Professional Development I		0			0	0					0	
CPEG	3930	Academic and Professional Development II		0					0	0			0	
COMP <input type="checkbox"/>	<input type="checkbox"/>	Note: (COMP 2011 AND COMP 2012) OR COMP 2012H <input type="checkbox"/>		5-8										
COMP <input type="checkbox"/>	2011 <input type="checkbox"/>	Programming with C++ <input type="checkbox"/>		4			4			4			8	
COMP <input type="checkbox"/>	2012 <input type="checkbox"/>	Object-Oriented Programming and Data Structures <input type="checkbox"/>		4										
COMP	2012H	Honors Object-Oriented Programming and Data Structures		5										
COMP/ELEC <input type="checkbox"/>	<input type="checkbox"/>	Note: COMP 2611 OR ELEC 2350 <input type="checkbox"/>		4										
COMP <input type="checkbox"/>	2611 <input type="checkbox"/>	Computer Organization <input type="checkbox"/>		4				4					4	
ELEC	2350	Introduction to Computer Organization and Design		4										
COMP/ELEC <input type="checkbox"/>	<input type="checkbox"/>	Note: COMP 2711 OR COMP 2711H OR ELEC 2600 <input type="checkbox"/>		4										
COMP <input type="checkbox"/>	2711 <input type="checkbox"/>	Discrete Mathematical Tools for Computer Science <input type="checkbox"/>		4						4			4	
COMP <input type="checkbox"/>	2711H <input type="checkbox"/>	Honors Discrete Mathematical Tools for Computer Science <input type="checkbox"/>		4										
ELEC	2600	Probability and Random Processes in Engineering		4										
COMP	3511	Operating Systems		3						3			3	
ELEC	1100	Introduction to Electro-Robot Design		4			4						4	
ELEC <input type="checkbox"/>	<input type="checkbox"/>	Note: ELEC 1200 OR ELEC 2100 OR ELEC 2400 (2 out of 3 courses) <input type="checkbox"/>		8										
ELEC <input type="checkbox"/>	1200 <input type="checkbox"/>	A System View of Communications: from Signals to Packets <input type="checkbox"/>		4				8					8	
ELEC <input type="checkbox"/>	2100 <input type="checkbox"/>	Signals and Systems <input type="checkbox"/>		4										
ELEC	2400	Electronic Circuits		4										
ELEC	3300	Introduction to Embedded Systems		4						4			4	
ENGG	2010	Engineering Seminar Series		0			0	0	0	0			0	
LANG <input type="checkbox"/>	<input type="checkbox"/>	Note: LANG 4030 OR LANG 4031 <input type="checkbox"/>		3										
LANG <input type="checkbox"/>	4030 <input type="checkbox"/>	Technical Communication II for CSE & CPEG <input type="checkbox"/>		3							3		3	
LANG	4031	Technical Communication II for ECE & CPEG		3										
COMP/ELEC		CPEG Restricted Elective (1 course from the specified elective list)		3							3		3	
COMP/ELEC		Area Courses (At least 4 courses from the specified elective list, of which at least 2 courses should be taken from one single area and at least 2 courses outside that area. Courses taken as Major Required Courses may not be counted towards the elective requirement.)		15						4	4	7	15	
Required credits for Major Required Courses and Electives				59-62									54	
Option Requirements														
Research Option														
COMP/ELEC		CPEG Electives (1 PG-level course as approved by advisor)		3								3	3	
COMP/ELEC/UROP		Research Electives [Students should take either (ELEC 5900 AND UROP 1100) or a 3-credit COMP 5000-level course to fulfill this requirement.]		2-3			[1]	[1]	1	1	[3]		2	
Required credits for Research Option				5-6									5	
University CORE														
CORE	C3 - C12	U CORE - Others		30	3	3	6	3	6	6		3	30	
CORE	C1 & C2	U CORE - English Language		6	3	3							6	
Sub-total for University CORE				36									36	
Term load (excl. free credits)														
					15	15	17	18	18	18	16	13		
125 (w/o option) 130 (w/ option)#														

Notes:

[] denotes the course is also offered in other terms as indicated and students may take the course in one of these terms subject to advice by the program office.

To graduate, students should complete at least 120 credits in approved courses. They may need to take courses additional to the required and elective courses as specified above to meet this minimum credit requirement.

**Remarks on course(s):

- COMP 1022Q: The course was last offered in 2019-20 and was deleted subsequently.

>> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.