The Hong Kong University of Science and Technology

School of Engineering

Illustration of Student's Pathway

							<< De	claratio	on of m	ajor				
School: Department: Program:		School of Engineering					Stude	ent's Path	ways (i.e	. Study P	attern)			
		Computer Engineering Program Office			Pathway 1									
		BEng in Computer Engineering				Background: HKDSE 4 Core + 2 Elec (incl. 1/2x PHYS)								
						Profile: Normative								
Course Offering	Course Code	Course Title / Courses List		0										
Dept				redit		Yea		Yea		Yea		Yea		
(course code prefix)			Cre	tra Eng ts Attai	Year 1	ar 1 Sp	Year 2	ar 2 Sp	Year 3	ar 3 Sp	Year 4	ar 4 Sp	Sub-t	
Engineering	a Fundamer	ntal Courses	dits	lish ned	Fall	ring	Fall	ring	Fall	ring	Fall	ring	otal	
		Note: COMP 1021 OR COMP 1022P OR COMP 1022Q	3		П		ļ							
COMP	1021 1022P	Introduction to Computer Science	3		3		İ						3	
COMP	1022Q	Introduction to Computing with Excel VBA	3											
FLEC	2600	Note: ELEC 2600 OR MATH 2011 Probability and Random Processes in Engineering	3						3				3	
MATH	2011	Introduction to Multivariable Calculus	3				 		0				Ŭ	
LANG	2030	Technical Communication I	3	3			3						3	
MATH	1013	Calculus I	3		3		 						3	
MATH	1014	Calculus II	3			3							3	
MATH	2111	Matrix Algebra and Applications	3		╢────		3						3	
PHYS	1112	Note: PHYS 1112 OR PHYS 1152 General Physics I with Calculus	2-3		3		ļ						3	
PHYS	1152	Intermediate General Physics I with Calculus	2				İ							
PHYS	1114	Note: PHYS 1114 OR PHYS 1154 General Physics II	2-3			3							3	
PHYS	1154	Intermediate General Physics II	2			_								
SENG		Engineering Introduction course	3-4			3	 						3	
	Required	credits for Engineering Fundamental Requirement	S 25-28										27	
Major Requ	irements													
Major Required	d Courses and	Electives		1	п —	-	·	1	1	1		1		
COMP	2011	C++ Programming	4				4						4	
COMP	2012	Object-Oriented Programming and Data Structures	4				<u> </u>		4				4	
COMP	2611	Note: COMP 2611 OR ELEC 2300 Computer Organization	4				i	4					4	
ELEC	2300	Computer Organization	4											
COMP	2711	Discrete Mathematical Tools for Computer Science	4				l 		4				4	
COMP	3511	Operating Systems	3							3			3	
COMP	4501	Note: COMP 4521 OR COMP 4611 OR ELEC 4310	3				Ī							
COMP	4521 4611	Design and Analysis of Computer Architectures	3								3		3	
ELEC	4310	Embedded System Design	3											
		Note: COMP 4981 OR COMP 4981H OR ELEC 4900 OR ELEC 4901 (Students taking the Research Option must take either COMP 4981H or ELEC 4901)	6				 							
COMP	4981	Final Year Project (4Y)	6								3	3	6	
ELEC	4981H 4900	Final Year Thesis (Honors Study Track) (4Y) Final Year Design Project	6				1							
ELEC	4901	Final Year Thesis	6				ļ							
ELEC	1100	Introduction to Electro-robot Design	4				4						4	
ELEC	1200	A System View of Communications: from Signals to Packets	4				•							
ELEC	1907	Industrial Training	0							0			0	
ELEC	2100	Signals and Systems	4					4					4	
ELEC	2200	Digital Circuits and Systems	4				<u> </u> 	4					4	
ELEC	3300	Microprocessor Applications	4							4			4	
LANG	3030	Technical Communication II	3	3							3		3	
COMP/ELEC		Track Courses (4 courses) (Electives are grouped into tracks. Students	15				i			4	4	7	15	
		must take courses from at least 2 tracks.)	10		-		! 			-	-	,	10	
Ontion Dom		Required credits for Major Requirements	5 61										61	
Option Req														
Research Oplic		CPEG Electives (2 courses) (Students should choose courses from a			11	1	i	1			1	1		
COMP/ELEC		designated list of COMP and ELEC courses with approval of CPEG UG	6								3	3	6	
	I	Sub-total for Research Option	1 6		╟───	1	<u> </u>						6	
University (CORE		1	I	11	1		1	I	I	ı	1		
CORE	C3 - C12	U CORE - Others	30		3	3	3	6	6	6		3	30	
CORE	C1 & C2	U CORE - English Language	6	6	3	3			<u> </u>			-	6	
	1	Sub-total for University CORI	36						1	1			36	
Total credits earned for English Language 12							Ter	m load (ex	cl. free cre	dits)				
						15	17	18	17	17	13	13		
						-	125 (w	o option)	131 (w/ o	option)#		•		
Note:					L					alar				

To graduate, students should complete at least 120 credits in approved courses.

<< Declaration of major