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

Curriculum for BEng in Computer Engineering and BBA in General Business Management

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
		COMP 2611	Computer Organization	4
	or	ELEC 2300	Computer Organization	4
(1)		COMP 2711	Discrete Mathematical Tools for Computer Science	4
		COMP 3111	Software Engineering	4
		COMP 3511	Operating Systems	3
		COMP 3711	Design and Analysis of Algorithms	3
	or	ELEC 3100	Signal Processing and Communications	4
		COMP 4611	Design and Analysis of Computer Architectures	3
		COMP 4621	Computer Communication Networks I	3
	or	ELEC 4120	Computer Communication Networks	3
(2)		COMP 4991	Computer Engineering Final Year Project	8
	or	ELEC 4903	Computer Engineering Final Year Project	8
		ELEC 1100	Introduction to Electro-Robot Design	4
	or	ELEC 1200	A System View of Communications: from Signals to Packets	4
(3)		ELEC 1970	Industrial Training	0
		ELEC 2100	Signals and Systems	4
		ELEC 2200	Digital Circuits and Systems	4
		ELEC 2600	Probability and Random Processes in Engineering	4
		ELEC 3300	Introduction to Embedded Systems	4
		ELEC 4410	CMOS VLSI Design	3

		IELM 2200	Engineering Management	3
		IELM 4110	Engineers in Society	1
		ACCT 2010	Principles of Accounting I	3
(4)		ECON 2103	Principles of Microeconomics	3
(4)	or	ECON 2113	Microeconomics	3
(4)	or	ECON 2913	Honors Microeconomics	3
		FINA 2303	Financial Management	3
		ISOM 2500	Business Statistics	3
		ISOM 2700	Operations Management	3
		MARK 2120	Marketing Management	3
		MGMT 2110	Organizational Behavior	3
		MGMT 2120	Business, Society and the Individual	1
(5)		LANG 1112	Chinese Business Communication I	3
(6)		MATH 1018	Concise Calculus	4
		MATH 2011	Introduction to Multivariable Calculus	3
		MATH 2111	Matrix Algebra and Applications	3

Elective courses

	Elective types		Minimum no. of courses	Minimum total credits
(7)	COMP/ ELEC	Computer Science Elective/ Electrical and Electronic Engineering Elective	2	6
(8,9)	ENGG/ SCIE	Engineering Elective/ Science Elective	2	5-7
(10)	SB&M	Business and Management Elective	9	29

Other Requirements

ELEC 2930	Academic and Professional Development I	0
ELEC 3930	Academic and Professional Development II	0
ELEC 4930	Academic and Professional Development III	0
TEMG 1010	Technology and Management Professional Activities	0

***Remarks on course(s):*

- COMP 1004: The course was last offered in 2012-13 and was deleted subsequently.

Notes:

(1) With prior approval from CPEG UG coordinator, students may take MATH 2343 to fulfill the requirement of COMP 2711.

(2) Work normally commences in Summer following the third year.

(3) Students are required to complete and pass a prescribed training program within the normal length of study. Details of the program, its requirements and schedule will be announced on the website of the Industrial Training Center (http://www.ust.hk/itc) or website of the department in the first year Fall term. Training normally takes place in the Winter and Summer terms starting from the first year of study. For recording the overall training results, students are normally registered for the course in their last term of study.

(4) Students entering with AL Economics take ECON 2113; however, those with grade B or above in HKAL Economics will take ECON 2913. All other students without AL Economics background, including those entering with AL Business and Economics, take ECON 2103.

(5) Students cannot replace this course by LANG 1110 (prior to 2012-13)/1111 (prior to 2011-12) for graduation purposes. Students recruited from Mainland China will replace this course by a free elective. For international students who are assessed as having inadequate Chinese background to take LANG 1112, they will replace this course by LANG 1120.

(6) Students who have grade E or better in AL Pure Mathematics or in AL Applied Mathematics are not required to take MATH 1018.

(7) Normally only ELEC or COMP courses at 3000-level or above will be accepted. COMP 3311 and COMP 4622 are recommended electives. Students with particular interest in the following areas are encouraged to take their respective courses:

Intelligent Robotic Systems: COMP 3211, COMP 4211, COMP 4421, COMP 5421, ELEC 3200, ELEC 4210, ENGG 4950

Networks and Communications: COMP 4021, COMP 4622, COMP 4631, ELEC 4110, ELEC 4150, ELEC 4180

Multimedia Computing and Processing: COMP 4411, COMP 4421, COMP 4431, COMP 4441, ELEC 4130, ELEC 4170, ELEC 4820

VLSI and Computer Systems: COMP 3711, COMP 5712, COMP 5713, ELEC 3400, ELEC 3500, ELEC 4420, ELEC 4440, ELEC 4510, ELEC 4520

Speech Processing and Language Engineering: COMP 4211, COMP 5221, ELEC 3110, ELEC 4140, ELEC 4160

ENGG 4950, IELM 3010, IELM 3250 and IELM 4130 may count toward the COMP/ELEC elective requirement. 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).

(8) Students opting for ELEC 3100 are required to take a minimum total of 5 credits of ENGG/SCIE electives (6 credits for those who are not required to take MATH 1018). Students opting for COMP 3711 are required to take a minimum total of 6 credits of ENGG/SCIE electives (7 credits for those who are not required to take MATH 1018).

(9) Only ENGG or SCIE courses at 2000-level or above can be used to satisfy the ENGG/SCIE elective requirement.

(10) ISOM 2010 cannot be used to count toward the SB&M elective requirement. Of these 29 credits, at least 9 credits must be at 4000-level or above; at least 9 credits must be at 3000-level or above; and at least 12 credits (3 courses) of business elective courses must be offered by HKUST School of Business and Management.

A minimum of 153 credits is required for the BEng program in Computer Engineering and BBA program in General Business Management. For students who are required to take MATH 1018, the minimum total required is 156 credits.