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

Curriculum for BEng in Electronic Engineering - Honors Research Option

Only students with AL Pure Mathematics background will be considered for enrollment in the Honors Research Option. Students must declare their intention to enroll in the option no later than the last day of the add/drop period in the second regular term of their second year of study.

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

		ELEC 1100	Introduction to Electro-Robot Design	4
	or	ELEC 1200	A System View of Communications: from Signals to Packets	4
(2)		ELEC 1990	Industrial Training	0
		ELEC 2100	Signals and Systems	4
		ELEC 2200	Digital Circuits and Systems	4
		ELEC 2300	Computer Organization	4
		ELEC 2410	Basic Electronics	4
		ELEC 2600	Probability and Random Processes in Engineering	4
(3)		ELEC 4908	Final Year Thesis	9
(1)		ELEC 4950	Research Work Experience	0
		COMP 1022P	Introduction to Computing with Java	3
		IELM 2200	Engineering Management	3
		IELM 4110	Engineers in Society	1
(4)		MATH 2121	Linear Algebra	4
(5)		MATH 2352	Differential Equations	4

Elective courses

	Elective types		Minimum no. of courses	Minimum total credits
(6,7)	ELEC Core	Fundamental Electrical and Electronic Engineering Elective	-	38
(6,8,9)	ELEC Advanced	Advanced Electrical and Electronic Engineering Elective		
(6,11)	MATH	Mathematics Elective		
(6,12)	SB&M	Business and Management Elective		
(6,9, 10)	FREE	Free Elective		

Other Requirements

(13)	ELEC 2910	Academic and Professional Development I	0
	ELEC 3910	Academic and Professional Development II	0

Notes:

(1) Work normally commences in summer following the second year.

(2) 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.

(3) Work normally commences in summer following the second year.

(4) Upon approval by the department, students can replace MATH 2121 with MATH 2111. The credit shortfall can be made up with MATH elective credits.

(5) Upon approval by the department, students can replace MATH 2352 with MATH 2351. The credit shortfall can be made up with MATH elective credits.

(6) Among the 38 credits, at least 21 credits are from the ELEC electives, 2 from MATH electives and 4 from SB&M electives.

(7) The electives must include at least one course from three of the six groups shown below:
ELEC 3100 or ELEC 3110; ELEC 3200 or ELEC 3210; ELEC 3300; ELEC 3400 or ELEC 4410; ELEC 3500 or ELEC 4510; ELEC 3600.

(8) Students are required to select a minimum of three courses from one of the following streams:

Information and Communication: ELEC 4110, ELEC 4120, ELEC 4150, ELEC 4180, ELEC 4630, ELEC 5180, ELEC 5280, ELEC 5350, ELEC 5360, ELEC 5370, ELEC 538 (prior to 2008-09), ELEC 5460, ELEC 5470, ELEC 5480

Signal Processing and Multimedia: ELEC 4130, ELEC 4140, ELEC 4160, ELEC 4170, ELEC 5300, ELEC 5320, ELEC 5330, ELEC 5350, ELEC 5470

Microelectronics and VLSI: ELEC 4310, ELEC 4410, ELEC 4420, ELEC 4430, ELEC 4440, ELEC 4510, ELEC 4520, ELEC 5010, ELEC 5040, ELEC 5050, ELEC 5070, ELEC 5080, ELEC 5160, ELEC 5190

Control and System: ELEC 4210, ELEC 4310, ELEC 5470, ELEC 5600, ELEC 5620, ELEC 5640

Biomedical Engineering: ELEC 4130, ELEC 4610, ELEC 4810, ELEC 4820

Optics and Optical Communication: ELEC 4440, ELEC 4610, ELEC 4620, ELEC 5090, ELEC 5200, ELEC 5220, ELEC 5250

Certain courses cannot be used to count toward the Advanced ELEC elective requirement. Students should check departmental notice for the list of courses in concern. Subject to departmental approval, students may replace a maximum of two courses with courses from the School of Science or the School of Engineering. Normally, only courses of 3000-level or above will be considered.

(9) ENGG 4950 can be used to count toward the Advanced ELEC or FREE elective requirement.

(10) Certain courses cannot be used to count toward the FREE elective requirement. Students should check departmental notice for the list of courses in concern.

(11) MATH 2011, MATH 2721 or MATH 3311 is a recommended elective.

(12) ACCT 3650 or ECON 2152 is a recommended elective. ISOM 2010 and ISOM 2500 cannot be used to satisfy the SB&M elective requirement.

(13) Students admitted through the School-based Admission Scheme do not need to enroll in ELEC 2910 for the Fall term of the first year.

A minimum of 104 credits is required for the BEng program in Electronic Engineering - Honors Research Option.

To graduate with the Honors Research Option, the students must not have more than one regular term's CGA below 3.5 after enrollment in this option.