Course Assessment Table
BEng in Computer and Data Engineering
2019/20 Entering Major

For offering schedule of the following courses, please refer to the Master Class Schedule which is published on a yearly basis to enable students to plan their studies ahead for the entire academic year. The class schedules are subject to changes prior to the start of the respective semester/term. Students can view the Master Class Schedule by logging onto CityU Portal and selecting "Master Class Schedule" from "Academic Services" under "Student".

A/ Core Courses

Pre-cursor	Pre-requisite	Course Code & Title		CU	Lec	Tut	Lab	Total	C %	X %	Exam Dur (hrs)	Remarks
	EE1001, Note a	EE2000	Logic Circuit Design	3	39	13	15	67	70	30	2	
EE1002, Note a		EE2005	Electronic Devices and Circuits	3	26	13	15/21	54/60	50	50	2	
CS1102 or CS1302, Note a		CS2311	Computer Programming	3	26	0	26	52	40	60	2	Δ
	(MA1200 or MA1300) & (MA1201 or MA1301) or Note b	MA2001	Multi-variable Calculus & Linear Algebra	3	39	13	0	52	30	70	2	
	EE2000 and CS2311	EE2004	Microcomputer Systems	3	39	8/26	15/0	62/65	50	50	2	
	EE3001	EE3211	Modelling Techniques	3	26	26		52	70	30	3	
MA1201 or MA1301	MA1200 or MA1300	EE3001	Foundations of Data Engineering	3	26	13	0	39	50	50	2	
	CS2311	EE2331	Data Structures and Algorithms	3	39	26	0	65	50	50	2.5	
	EE1001, Note a	EE3009	Data Communications and Networking	3	26	13	12	51	50	50	2	
	EE2331	EE3206	Java Programming and Applications	3	26	26	0	52	50	50	2.5	
	EE3211	EE4146	Data Engineering and Learning Systems	3	26	13	0	39	50	50	2	
	MA1201/MA1301	EE3210	Signals and Systems	3	26	13	0	39	60	40	2	
	EE2004	EE3220	Embedded System Design	3	39	13	15	67	50	50	2	
EE3009		EE3315	Internet Technology	3	26	9	12	47	50	50	2	
	EE2004	EE3070	Design Project	3	0	0	39	39	100	0	-	
EE2004 and CS2311		CS3103	Operating Systems	3	26	13	0	39	40	60	2	
	CS2311	CS3402	Database Systems	3	26	13	0	39	40	60	2	
	EE4096	EE3012	Engineers in Society	3	18	8	0	26	50	50	2	Φ
	EE2000 or EE2005 or CS2311	EE4096	Engineering Training I	0	0	0	70	70	100	0	-	
	EE4096	EE4097	Engineering Training II	0	0	0		*	100	0	-	Φ
	Note c	EE4080	Project	6	Other activities: 144	208		352	100	0	-	**

Key : CU = Credit Unit   Lec = Lecture   Tut = Tutorial   Lab = Laboratory   C = Coursework
X = Examination   Exam Dur = Exam Duration

Remarks for Pre-requisite and Co-requisite:

Note a   Applicable to Normative 4-year degree students only

Note b   Advanced Standing I and II (ASI and II) students without relevant mathematical background are required to take 6 credit units of College-specified GE courses namely MA1200 Calculus & Basic Linear Algebra I / MA1300 Enhanced Calculus & Linear Algebra I <u>AND</u> MA1201 Calculus & Basic Linear Algebra II / MA1301 Enhanced Calculus & Linear Algebra II, unless they pass the placement test offered by Mathematics Department. Students granted exemption on either one or both of the course(s) should take any course(s) not within the Major Requirement (including core courses and electives) to make up for the minimum curriculum requirement.

Note c   At least 63 CUs (Normative 4-year degree) of the Major Requirement, College Requirement and College-specified GE courses have been completed /39 CUs (ASI) / 36 CUs (ASII) of the Major Requirement have been completed (Major Requirement excludes Gateway Education and Language requirements.).

     <u>For Advanced Standing students</u>

     Note 1: Credits of exempted courses are counted regardless of the completion time of replacement courses.

     Note 2: Corresponding reduction in credit requirement applies to ASII students granted with waiver arrangement on courses upon admission.

     Note 3: Students completed full requirement in College-specified GE courses (MA1200/MA1201/MA1300/MA1301) can have one course counted towards the credit unit requirement specified above.

Other remarks

Δ   Waived for Advanced Standing II students.

*   Part A Industrial Attachment Scheme: 9- 13 weeks; Part B In-house Training: 5 weeks (175 contact hours)

**   Students undertaking Co-operative Education Scheme (CES) Placement Project should register on EE4080 Project to fulfil the Final Year Project requirement.

Φ   Students having completed EE4081 Professional Internship Program (6 CUs) are not required to take EE3012 Engineers in Society (3CUs) and one other elective. For those who have completed 12-month internship in EE4081 are not required to take EE4097 Engineering Training II.

B/ Electives (15 CUs)

Students are required to take at least FIVE electives with at least TWO electives from each group.

Group A

Pre-cursor	Pre-requisite	Course Code & Title		CU	Contact Hours				C %	X %	Exam Dur (hrs)	Remarks
					Lec	Tut	Lab	Total				
	CS2311	EE3209	Data Management Techniques	3	26	26	0	52	50	50	2	
	EE3009	EE4014	Business Data Communication Networks	3	26	13	0	39	70	30	2	
	MA2001	EE4016	Engineering Applications of Artificial Intelligence	3	26	13	0	39	50	50	2	
	EE3009	EE4017	Internet Finance	3	26	13	0	39	60	40	2	
EE3009	MA2001 and EE3001	EE4212	Cryptography and Information Theory	3	26	13	0	39	50	50	2	
	MA2001	EE4215	Cybersecurity Technology	3	31	5	3	39	50	50	2	
CS3103	EE3206 and CS3402	EE4216	Modern Web Applications	3	26	13	0	39	70	30	2	
	EE3206 and EE3009	EE4221	Cloud Computing Systems	3	26	0	13	39	70	30	2	
EE3009	CS2311 and EE2004	EE4222	Digital Forensics	3	39		15	54	60	40	2	
EE3009		EE4316	Mobile Data Networks	3	26	13	0	39	50	50	2	

Group B

Pre-cursor	Pre-requisite	Course Code & Title		CU	Contact Hours				C %	X %	Exam Dur (hrs)	Remarks
					Lec	Tut	Lab	Total				
	CS2311	CS3391	Advanced Programming	3	39*			39	60	40	3	Δ
EE2331	or	or CS4335	Design and Analysis of Algorithms	3	26	13	0	39	30	70	2	
	EE3210	EE4015	Digital Signal Processing	3	39		0	39	50	50	2	
	EE2000 and EE2004	EE4204	Digital System Design with VHDL	3	26	8	12	50	50	50	2	
EE2331	MA2001 & CS2311	EE4208	Computer Graphics for Engineers	3	26	13	0	50	50	50	2	
	EE3210	EE4209	Digital Audio Technology	3	26	13	0	39	50	50	2	
	MA2001 and EE3210	EE4211	Computer Vision	3	26	13	0	39	50	50	2	
	CS2311	EE4213	Human-Computer Interaction	3	26	13	0	39	50	50	2	
	EE2004	EE4218	Computer Architecture	3	26	13	0	39	50	50	2	
	EE3206	EE4304	iOS Mobile App Development and Networking	3	20	0	19#	39	70	30	2	

C/ Optional One-year Internship

Pre-cursor	Pre- requisite	Course Code & Title	CU	Contact Hours				C %	X %	Exam Dur (hrs)	Remarks
				Lec	Tut	Lab	Total				
		EE4081 Professional Internship Program	6	8-12 months				100	0	-	Φ

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* 3 hours workshop
Δ Students can only take either one to fulfill the curriculum requirements.
\# Including 9 hours in group project with discussion, presentation and written reports
Φ Students having completed EE4081 Professional Internship Program (6 CUs) will take one less technical elective (3CUs) and are not required to take EE3012 Engineers in Society (3CUs).
For those who have completed 12-month internship in EE4081 are not required to take EE4097 Engineering Training II.

D/ Gateway Education (GE)

Pre- requisite	Course Code & Title	CU			Contact Hours		C %	X %	Exam Dur (hrs)	Remarks
		Normative 4-year degree	ASI	ASII	Lec/Tut/Lab	Ttl				
For GE1401/ GE2410	**GE English**									*
Level 4 in HKDSE English Language	- GE1401 University English	3	3	**	39	39	100	0	-	
OR D in HKALE AS Use of English OR EL0200B OR Grade B or above in EL0200A	- GE2410 English for Engineering *(Discipline-Specific English)*	3	3	3	39	39	100	0	-	
	Chinese Civilization									
	- GE1501 Chinese Civilisation – History and Philosophy	3	3	**	26/26	52	100	0	-	
	Gateway Education (Area Requirements)	12#	6	3	Please refer to the course information for details.					
	- Area 1: Arts and Humanities									
	- Area 2: Study of Societies, Social and Business Organisations									
	- Area 3: Science and Technology									
	College -specified Courses	9	6^	6^						
	- MA1200 Calculus and Basic Linear Algebra I / MA1300 Enhanced Calculus and Linear Algebra I (3CUs)									
	- MA1201 Calculus and Basic Linear Algebra II / MA1301 Enhanced Calculus and Linear Algebra II (3CUs)									
	- CS1102 Introduction to Computer Studies/ CS1302 Introduction to Computer Programming (3CUs)									

English Language Requirement

* Normative 4-year degree and ASI students entering without Level 4 in HKDSE English Language or Grade D in HKALE AS Use of English are required to take EL0200A English for Academic Purposes 1 and EL0200B English for Academic Purposes 2 (EAP) of 6 credit units before progressing to GE1401 University English and GE2410 English for Engineering. Early exit arrangement is available that students achieving a grade B or above in their overall course results for EL0200A will be permitted to exit at this point and progress to the GE English courses.

The credits earned from the EAP course(s) will not be counted towards the minimum credit units required for graduation nor be calculated in students' CGPA. Students who are not admitted through JUPAS are invited upon enrolment to take the English Placement Test or to provide proof of alternative qualifications to be exempted from ELC course (http://www.cityu.edu.hk/elc/courses_exemption.html).

** Not necessary for Advanced Standing II Students

\# A minimum of 3 credit units must be obtained from each of the three areas

^ ASI and ASII students are required to take 6 credit units of MA courses from the above pairs. Students exempted from either one or both of the above MA courses should take any course(s) not within the Major Requirement (including core courses and electives) to make up for the minimum curriculum requirement.

E/ Language Requirements

Pre-cursor	Pre-requisite	Course Code & Title	CU	Contact Hours Lec/Tut/Lab	Ttl	C %	X %	Remarks
		English Language Requirement						*
	Level 3 in HKDSE English Language OR Grade E in HKAL AS Use of English or as determine by English Language Center	- EL0200A English for Academic Purposes 1 **	3	39	39	35	65	*
	EL0200A	- EL0200B English for Academic Purposes 2 **	3	39	39	60	40	@
	Level 3 in HKDSE Chinese Language OR Grade E in HKALE AS Chinese Language and Culture	**Chinese Language Requirement** CHIN1001 University Chinese I **	3	39	39	100	0	

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English Language Requirement

* Normative 4-year degree and ASI students entering without Level 4 in HKDSE English Language or Grade D in HKALE AS Use of English are required to take EL0200A English for Academic Purposes 1 and EL0200B English for Academic Purposes 2 (EAP) of 6 credit units before progressing to GE1401 University English and GE2410 English for Engineering. Early exit arrangement is available that students achieving a grade B or above in their overall course results for EL0200A will be permitted to exit at this point and progress to the GE English courses.
The credits earned from the EAP course(s) will not be counted towards the minimum credit units required for graduation nor be calculated in students' CGPA. Students who are not admitted through JUPAS are invited upon enrolment to take the English Placement Test or to provide proof of alternative qualifications to be exempted from ELC course (http://www.cityu.edu.hk/elc/courses_exemption.html).

For failure details, please visit http://www.cityu.edu.hk/elc/courses_failure.html

Chinese Language Requirement

@ Normative 4-year degree and Advanced Standing I students entering without Level 4 in HKDSE Chinese Language or Grade D in HKALE AS-level Chinese Language and Culture are required to take a 3-credit-unit course CHIN1001 University Chinese I. The credits earned will not be counted towards the minimum credit units required for graduation nor be calculated in students' CGPA.

** Not necessary for Advanced Standing II students