# Course Assessment Table BEng in Electronic and Communication Engineering 2018/19 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 change 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/ Technical Core Courses

						Contac	t Hour	S	С	X	Exam	
Pre-cursor	Pre-requisite	Course Co	ode & Title	CU	Lec	Tut	Lab	Ttl	%	%	Dur	Remarks
	Note a	GE1354	Introduction to Electronic Design	3	26	0	14	40	50	50	2	
	EE1001	EE2000	Logic Circuit Design	3	39	13	15	67	40	60	2	
		EE2301	Basic Electronic Circuits	3	39	13	15	67	50	50	2	
	CS1102 or CS1302 (Note a)	CS2311 <sup>∆</sup>	Computer Programming	3	26	0	26	52	40	60	2	
	(MA1200 or MA1300) & (MA1201 or MA1301) or (Note b)	MA2001	Multi-variable Calculus and Linear Algebra	3	39	13	0	52	30	70	2	
	EE2000 & CS2311	EE2004	Microcomputer Systems	3	39	8/26	15/0	62/65	40	60	2	
MA1201 or MA1301 Note a	(MA1200 or MA1300) Note a	EE2108	Engineering Analysis	3	39	13	0	52	50	50	2	
Note a	MA2001	EE3210	Signals and Systems	3	26	13	0	39	40	60	2	
	MA2001	MA3001	Differential Equations	3	39	13	0	52	30	70	2	
	EE2301 and (MA1201 or MA1301)	EE2104	Introduction to Electromagnetics	3	39	13	0	52	50	50	2	
	EE2301	EE2109	Electronic Circuits	3	39	13	21	73	50	50	2	
	EE2004	EE3070	Design Project	3	3	0	36	39	100	0	-	
	MA2001 and EE3210 (Note c)	EE3008	Principles of Communications	3	26	13	0	39	50	50	2	
	MA1201	EE3114	Systems & Control	3	26	13	12	51	50	50	2	
	EE3008	EE3101	Communication Engineering	3	26	13	9	48	60	40	2	
	EE2104 & MA3001	EE3109	Applied Electromagnetics	3	26	13	6	45	50	50	2	
EE2109	EE2301	EE3110	Analogue Electronic Circuits	3	26	13	9	48	60	40	2	
	EE2109	EE3115	Applied Optoelectronic Devices	3	26	13	9	48	50	50	2	
	EE4096	EE3012	Engineers in Society	3	18	8	0	26	50	50	2	Φ
	Note d	EE4080	Project	6		ctivities: 44	208	352	100	0	-	**

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

#### **Technical Core Courses: Continued**

				Contact Hours			C	X	Exam		
Pre-cursor	Pre-requisite	Course Code & Title	CU	Lec	Tut	Lab	Ttl	%	%	Dur	Remarks
	EE2000 or EE2301 or CS2311	EE4096 Engineering Training I	0	0	0	70	70	100	0	-	
	EE4096	EE4097 Engineering Training II	0	0	0	:	* I	100	0	-	Φ

#### 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 courses namely MA1200 Calculus & Basic Linear Algebra I/ MA1300 Enhanced Calculus & Linear Algebra I AND 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: Co-requisite: To be taken before or together with the course.

Note d: At least 63 credit units (Normative 4-year degree) of the Major Requirement, College Requirement and College-specified GE Courses have been completed / 39 credit units (ASI) / 36 credit units (ASII) of the Major Requirement have been completed.

#### For Advanced Standing students

- Note 1: Credits of exempted courses for ASI & II 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/MA1301/MA1300/MA1301) can have one course counted towards the credit unit requirement specified above.

#### Other remarks:

- \* Part A (Industrial Attachment Scheme): 9-13 weeks; Part B (In-house Training): 5 weeks (150 contact hours).
- \*\* Students undertaking Co-operative Education Scheme (CES) Placement Project should register on EE4080 Project to fulfil the Final Year Project requirement.
- $\Delta$   $\;\;$  Waived for Advanced Standing II students.
- Φ Students having completed EE4081 Professional Internship Program (6CU) are not required to take EE3012 Engineers in Society (3CU) and one other elective (3CU). For those who have completed 12-month internship in EE4081 are not required to take EE4097 Engineering Training II.

## **Course Assessment Table**

## **B/ Technical Electives**

## Choose FIVE electives from Group A and Group B. TWO should be taken from Group A while THREE should be from Group B.

**Group A (6 credit units)** 

Pre-cursor	Pre-requisite	Course Code & Title	CU			t Hou Lab		C %	X %	Exam Dur	Remarks
	EE1001 (Note a) EE2104 & EE3008	EE3009 Data Communications and Networking EE4035 Optical Fibre Communications	3	26 26	13 13	12 6	51 45	50 50	50 50	2 2	
	EE3008 EE3009	EE4036 Wireless Communications EE4316 Mobile Data Networks	3	39 26	13	0	39 39	65 50	35 50	2 2	

**Group B (9 credit units)** 

	Pre-requisite C			Contact Hours				С	X	Exam	
Pre-cursor		Course Code & Title	CU	Lec	Tut	Lab	Ttl	%	%	Dur	Remarks
	CS2311	EE2331 Data Structures & Algorithms	3	39	26	0	65	50	50	2.5	
	EE2331	EE3206 Java Programming and Applications	3	26	26	0	52	50	50	2.5	
	EE3210	EE4015 Digital Signal Processing	3	39	)	0	39	50	50	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	
	EE3114 or EE3210	EE4045 Computer Controlled Systems	3	26	13	0	39	50	50	2	
	EE3110	EE4101 Sustainable Energy Systems	3	39	)	0	39	50	50	2	
EE3109	EE2104	EE4105 Principles of Lasers	3	26	11	6	43	50	50	2	
	EE3109	EE4107 Microwave Circuits for 5G Wireless Product Design	3	26	13	6	45	50	50	3	
	EE3109	EE4108 Fundamentals of Antenna Design	3	26	13	6	45	60	40	2	
	EE3110	EE4115 Audio-Visual Engineering	3	26	13	0	39	50	50	2	
EE3109	EE2104	EE4142 Introduction to Integrated Photonics	3	26	11	6	43	50	50	2	
	MA3001	EE4146 Data Engineering and Learning Systems	3	26	13	0	39	50	50	2	
	EE3210	EE4209 Digital Audio Technology	3	26	13	0	39	50	50	2	
	MA2001	EE4215 Cybersecurity Technology	3	39	)	0	39	50	50	2	
	EE3009 & EE3206	EE4221 Cloud Computing Systems	3	26	0	13	39	70	30	2	

C/ Optional One-year Internship

Pre-cursor					Contact Hour	'S	C	X	Exam	
	Pre-requisite	Course Code & Title	CU	Lec	Tut/Lab	Ttl	%	%	Dur	Remarks
		EE4081 Professional Internship Program	6	8 – 12 months			100	0	-	Φ

Key: CU = Credit Unit

Lec = Lecture

Tut = Tutorial

Lab = Laboratory

C = Coursework

X = Examination

Exam Dur = Exam Duration

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

#### **Course Assessment Table**

D/ Gateway Education (GE)

Pre-				CU			Contact Hours		$C \mid X$	Exam	
cursor	Pre-requisite	Course Code & Title	Normative	ASI	ASII	Lec/Tut/Lab		%	%	Dur (hrs)	Remarks
			4-year degree			Lec/Tut/Lab	1 11	70	70	(III3)	
		GE English									*
	For GE1401 / GE2410	- GE1401 University English	3	3	**	39	39	100	0	-	
	Level 4 in HKDSE English	- GE2410 English for Engineering (Discipline-Specific English)	3	3	3	39	39	100	0	-	
	Language OR Grade D in HKALE AS Use										
	of English OR EL0200B OR										
	Grade B or above in										
	EL0200A										
		Chinese Civilization									
		- GE1501 Chinese Civilisation – History and Philosophy	3	3	**	26/26	52	100	0	-	
		Gateway Education (Area Requirements)	$12^{\Omega}$	$6^{\Omega}$	3	Please refer to	the co	n ourse in	ı ıforma	tion for	
		- Area 1: Arts and Humanities					det	ails.			
		- 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 Advanced Standing I students entering without Level 4 in HKDSE English Language are required to take EL0200A English for Academic Purposes 1 & 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 (<a href="http://www.cityu.edu.hk/elc/courses">http://www.cityu.edu.hk/elc/courses</a> exemption.html).
- \*\* Not necessary for Advanced Standing II students
- Ω Normative 4-year degree students are required to take a minimum of 3 CUs from each of the three areas. ASI students are required to take their 6 CUs from two different 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.

## **Course Assessment Table**

E/ Language Requirements

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

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

## English Language Requirement

\* Normative 4-year degree and Advanced Standing I students entering without Level 4 in HKDSE English Language are required to take EL0200A English for Academic Purposes 1 & 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 <a href="http://www.cityu.edu.hk/elc/courses">http://www.cityu.edu.hk/elc/courses</a> failure.html

#### Chinese Language Requirement

- @ Normative 4-year degree and Advanced Standing I students entering without Level 4 in HKDSE Chinese Language 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