Course Assessment Table BEng in Electronic and Communication Engineering 2017/18 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

Pre-	Pre-	Offered				(Contact	Hour		С	Х	Exam		Equivalent	
cursor	requisite	in Sem	Course C	Code & Title	CU	Lec	Tut	Lab	Ttl	%	%	Dur	W	Course	Remarks
	Note a	A & B A & B A & B	EE1003 EE2000 EE2301	Introduction to Electronic Design and Workshop Logic Circuit Design Basic Electronic Circuits	3 3 3	26 39 39	0 13 13	18 15 15	44 67 67	50 40 50	50 60 50	2 2 2	1 1 1	GE1354	Note 2 Note 2 Note 2
	CS1102 or CS1302 (Note a)	A & B	CS2311∆	Computer Programming	3	26	0	26	52	40	60	2	1		Note 3
	(MA1200 or MA1300) & (MA1201 or MA1301) or (Note b)	A & B	MA2001	Multi-variable Calculus and Linear Algebra	3	39	13	0	52	30	70	2	1		Note 3
EE2000 & CS2311		A & B	EE2004	Microcomputer Systems	3	39	8/26	15/0	62/65	40	60	2	1		Note 6
MA1201 or MA1301 Note a	(MA1200 or MA1300) Note a	A & B	EE2108	Engineering Analysis	3	39	13	0	52	50	50	2	1		Note 1
	MA2001 MA2001	A & B B & S	EE3210 MA3001	Signals and Systems Differential Equations	3 3	26 39	13 13	0 0	39 52	40 30	60 70	2 2	1 1		Note 1 Note 3
	EE2301 and (MA1201 or MA1301)	А	EE2104	Introduction to Electromagnetics	3	39	13	0	52	30	70	2	1		Note 1
	EE2301 <u>Part I</u> : EE2000 & EE2301	A A	EE2109 EE3004	Electronic Circuits Electronic Product Design	3 1.5	39 0	13 0	21 39	73 39	40 100	60 0	2	1 1		Note 2 Note 4
EE2109	<u>Part II</u> : EE3004 – Part I & EE2004	В	EE3004	Electronic Product Design	1.5	0	0	39	39	100	0	-	1		Note 4
	MA2001 and EE3210 (Note c)	A & B	EE3008	Principles of Communications	3	26	13	0	39	30	70	2	1		Note 1
	EE3210 EE3008 (Note c)	A B	EE3114 EE3101	Systems & Control Communication Engineering	33	26 26	13 13	12 9	51 48	40 40	60 60	2 2	1 1		Note 2 Note 2
EE2104 EE2109	MA3001 EE2301 EE2109	A & B A & B A & B	EE3109 EE3110 EE3115	Applied Electromagnetics Analogue Electronic Circuits Applied Optoelectronic Devices	3 3 3	26 26 26	13 13 13	6 9 9	45 48 48	30 40 40	70 60 60	2 2 2	1 1 1		Note 2 Note 2 Note 2
	EE4091 EE2301	A & B S	ЕЕ3012 ^Ф ЕЕ4091	Engineers in Society Engineering Training I for Electronic and Communication Engineering	3 0	18 0	8 0	0 70	26 70	50 100	50 0	2	1 1		Note 1 Note 5
		Day sess m Dur =	ion Exam Dura	$E = Evening session \qquad Lec = Lecture$ ation $W = GGPA Weighting (per CU)$	Tı	ut = Tu S/A/B		nmer S		= Lat r/Seme		ry /Semes		C = Coursew	ork

Technical Core Courses: Continued

Pre-	Pre-	Offered				Contact	t Hours		С	Х	Exam		Equivalent	
cursor	requisite	in Sem	Course Code & Title	CU	Lec	Tut	Lab	Ttl	%	%	Dur	W	Course	Remarks
	Note d	S	EE4092 Engineering Training II for Electronic and Communication Engineering	0	0	0	:	*	100	0	-	1		Note 5
	Note e	A & B	EE4181 Project	6		ctivities: 44	208	352	100	0	-	1		Note 7 **

<u>Remarks for Pre-requisite and Co-requisite</u>:

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: EE4092 (Part A Industrial Attachment Scheme): EE2109, EE4091 and Pre-attachment training.

EE4092 (Part B In-house Training): EE2109, EE4091 and EE3004.

Note e: 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 (ASI) of the Major Requirement have been completed. Credits of exempted courses for ASI & II are counted regardless of the completion time of replacement courses. Corresponding reduction in credit requirement applies to ASII students granted with waiver arrangement on courses upon admission. Students completed full requirement in College-specified GE courses (MA1200/MA1300/MA1301) can have one course counted towards the credit unit requirement specified above.

Remarks for course assessment:

Note 1: To pass the course, students are required to achieve at least 30% in coursework and 30% in the examination.

- Note 2: To pass the course, students are required to achieve at least 30% in coursework and 30% in the examination. Also 75% laboratory attendance rate must be obtained.
- Note 3: For a student to pass the course, at least 30% of the maximum mark for the examination must be obtained.
- Note 4: To pass the course, students are required to achieve at least 40% of the coursework mark and a laboratory attendance of at least 75% recorded.
- Note 5: Pass/Fail Basis. To pass the course, students are required to have a laboratory attendance of 100% recorded.
- Note 6: To pass the course, students are required to achieve at least 30% in course work and 30% in the examination. When the laboratory experiments are involved in Teaching and Learning Activities (TLA), 75% laboratory attendance rate must be obtained. When the mini-project is involved in TLA, 75% tutorial attendance rate must be obtained.
- Note 7: For a student to pass the course, (i) they must conduct an oral presentation, (ii) they must obtain an overall pass (D) grade or above, and (iii) they did not obtain a final fail (F) grade from the supervisor and assessor.

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 EE4181 Project to fulfil the Final Year Project requirement.
- Δ 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 EE4092 Engineering Training II for Electronic and Communication Engineering.

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-		Offered				Contact Hours			С	Х	Exam		Equivalent		
cursor	Pre-requisite	in Sem	Course C	ode & Title		Lec	Tut	Lab	Ttl				W	_	Remarks
	EE1001 (Note a)	A & B	EE3009	Data Communications and Networking	3	26	13	12	51	50	50	2	1		Note 2
	EE2104 & EE3008	Α	EE4035	Optical Fibre Communications	3	26	13	6	45	50	50	2	1		Note 2
	EE3008	Α	EE4036	Wireless Communications	3	3	9	0	39	65	35	2	1		Note 1
	EE3009	В	EE4316	Mobile Data Networks	3	26	13	0	39	50	50	2	1		Note 1

Group B (9 credit units)

Pre-	D () creat ants)	Offered	$\mathbf{C}_{\mathbf{r}}$, $\mathbf{C}_{\mathbf{r}}$, $\mathbf{I}_{\mathbf{r}}$, \mathbf{R} , $\mathbf{T}'_{\mathbf{r}}$		rs	С	Х	Exam		Equivalent					
cursor	Pre-requisite	in Sem			CU	Lec	Tut	Lab	Ttl	%	%	Dur	W	Course	Remarks
	CS2311	A & B	EE2331	Data Structures & Algorithms	3	39	26	0	65	50	50	2.5	1		Note 1
	EE2331	А	EE3206	Java Programming and Applications	3	26	26	0	52	50	50	2.5	1		Note 1
	EE3009	А	EE4017	Internet Finance	3	26	13	0	39	60	40	2	1		Note 1
	MA3001	А	EE4146	Data Engineering and Learning Systems	3	26	13	0	39	50	50	2	1		Note 1
	EE3210	А	EE4209	Digital Audio Technology	3	26	13	0	39	50	50	2	1		Note 1
	MA2001	А	EE4215	Cybersecurity Technology	3	39)	0	39	50	50	2	1		Note 2
	EE3009 & EE3206	А	EE4221	Cloud Computing Systems	3	26	0	13	39	70	30	2	1		Note 2
	EE3210	В	EE4015	Digital Signal Processing	3	39)	0	39	50	50	2	1		Note 1
	MA2001	В	EE4016	Engineering Applications of Artificial Intelligence	3	26	13	0	39	50	50	2	1		Note 1
	EE3110	В	EE4101	Sustainable Energy Systems	3	39)	0	39	50	50	2	1		Note 1
EE3109	EE2104	В	EE4105	Principles of Lasers	3	26	11	6	43	50	50	2	1		Note 2
	EE3109	В	EE4107	Microwave Circuits for 5G Wireless Product Design	3	26	13	6	45	50	50	3	1		Note 2
	EE3109	В	EE4108	Fundamentals of Antenna Design	3	26	13	6	45	60	40	2	1		Note 1
EE3109	EE2104	В	EE4142	Introduction to Integrated Photonics	3	26	11	6	43	50	50	2	1		Note 2
	EE3114 or EE3210	A or B	EE4045	Computer Controlled Systems	3	26	13	0	39	50	50	2	1		Note 1
	EE3110	A or B	EE4115	Audio-Visual Engineering	3	26	13	0	39	50	50	2	1		Note 1

C/ Optional One-year Internship

Pre-		Offered				Contact Hours		С	Х	Exam		Equivalent				
cursor	Pre-requisite	in Sem	Course (Course Code & Title		CU L	Lec	Tut/Lab	Ttl	%	%	Dur	W	Course	Remarks	
		A/B/S	EE4081	Professional Inter	nship Program		6	8 -	-12 mon	ths	100	0	-	1		Φ
<u>Key</u> :	CU = Credit Unit Exam Dur = Exam D	Le uration	ec =	Lecture Tut W = GGPA	= Tutorial Weighting (per CU)	Lab	= S/A/	Labora B = 1	tory Summer S	•		oursew ester A		X er B	= Exami	nation

Note 1: To pass the course, students are required to achieve at least 30% in coursework and 30% in the examination.

Note 2: To pass the course, students are required to achieve at least 30% in coursework and 30% in the examination. Also, 75% laboratory attendance rate must be obtained.

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 EE4092 Engineering Training II for Electronic and Communication Engineering.

Course Assessment Table

D/ Gateway Education (GE)

Pre-	Pre-	Offered		CU	J		Contact Hours		С	X	Exam		
	requisite		Course Code & Title	Normative 4-year degree	ASI	ASII	Lec/Tut/Lab			%	Dur (hrs)	w	Remarks
			GE English										*
	For GE1401 / GE2410 Level 4 in HKDSE English Language OR Grade D in HKALE AS Use of English OR EL0200B OR Grade B or above in EL0200A	B A	 GE1401 University English GE2410 English for Engineering (<i>Discipline-Specific English</i>) 	3 3	33	** 3	39 39	39 39	100 100		-	1	
		A/B/S A/B/S	 <u>Chinese Civilization</u> GE1501 Chinese Civilisation – History and Philosophy <u>Gateway Education (Area Requirements)</u> Area 1: Arts and Humanities Area 2: Study of Societies, Social and Business Organisations Area 3: Science and Technology 	3 12 ^Ω	3 6 ^Ω	** 3	26/26 Please refer to				- nation	1	
			 Area S. Science and Technology <u>College-specified Courses</u> 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) 	9	6^	6^							

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).

** 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

		Offered			Contact Ho		С	Х	Exam		Remarks
rsor	requisite	in Sem	Course Code & Title	CU	Lec/Tut/Lab	Ttl	%	%	Dur (hrs)	W	Kennai K5
			English Language Requirement								
	Level 3 in HKDSE English Language OR Grade E in HKALE AS Use of English or as determine by English Language Centre	A/B	- EL0200A English for Academic Purposes 1**	3	39	39	35	65	-	0	*
	EL0200A	B/S	- EL0200B English for Academic Purposes 2**	3	39	39	60	40	-	0	*
			Chinese Language Requirement								
	Level 3 in HKDSE Chinese Language OR Grade E in HKALE AS Chinese Language and Culture	A/B/S	- CHIN1001 University Chinese I**	3	39	39	100	0	-	0	@

 $\frac{\text{Key}}{\text{Exam Dur}}: \quad \begin{array}{c} \text{CU} = \text{Credit Unit} & \text{Lec} = \text{Lecture} & \text{Tut} = \text{Tutorial} & \text{Lab} = \text{Laboratory} & \text{C} = \text{Coursework} & \text{X} = \text{Examination} \\ \text{S/A/B} = \text{Summer Semester/Semester A/Semester B} \end{array}$

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 (<u>http://www.cityu.edu.hk/elc/courses exemption.html</u>).

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 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