

## Course Assessment Table

BEng in Information Engineering  
2016/17 Entering Major

The offering schedule specified below is under normal circumstances, and might be subject to change due to different timetabling and teaching assignment constraints in different years. Students may take it as reference and please pay attention to the master class schedule announced by the Academic Regulations and Records Office (ARRO) prior to each semester for course registration and add/drop arrangement. Also, courses will be arranged in day or evening sessions catering for the different timetable patterns of students.

## A/ Core Courses

Pre-cursor	Pre-requisite	Offered in Sem	Course Code & Title	CU	Contact Hours				C %	X %	Exam Dur	W	Equivalent Course	Remarks	
					Lec	Tut	Lab	Ttl							
MA1201 or MA1301 (Note a)	(Note a)	A & B	EE1003 Foundations of Information Technology	3	26	13	0	39	40	60	2	1		Note 1	
		A & B	EE2000 Logic Circuit Design	3	39	13	15	67	40	60	2	1		Note 2	
		A & B	EE2108 Engineering Analysis	3	39	13	0	52	50	50	2	1		Note 1	
	EE2000 & CS2311	MA1200 or MA1300 (Note a)	A & B	CS2311 <sup>A</sup> Computer Programming	3	26	0	26	52	40	60	2	1		Note 3
			A & B	MA2001 Multi-variable Calculus and Linear Algebra	3	39	13	0	52	30	70	2	1		Note 3
			A & B	EE2004 Microcomputer Systems	3	39	8/13	15	62/67	40	60	2	1		Note 7
			A & B	EE2301 Basic Electronic Circuit	3	39	13	15	67	50	50	2	1		Note 2
MA2001	CS2311	A & B	EE2311 Object-Oriented Programming and Design	3	26	26	0	52	50	50	2	1		Note 1	
		B & S	MA3001 Differential Equations	3	39	13	0	52	30	70	2	1		Note 3	
MA2001	CS2311	A & B	EE2331 Data Structures and Algorithms	3	39	26	0	65	40	60	2	1		Note 1	
		A & B	EE3009 Data Communications and Networking	3	39	13	12	64	40	60	2	1		Note 2	
	(MA1201 or MA1301) or (Note b)	A & B	EE3210 Signals and Systems	3	26	13	0	39	40	60	2	1		Note 1	
		A & B	EE3313 Applied Queueing Systems	3	26	13	0	39	30	70	2	1		Note 1	
	MA2001 & EE3210 (Note c)	A & B	EE3008 Principles of Communications	3	26	13	0	39	30	70	2	1		Note 1	
		B	EE3315 Internet Technology	3	26	9	12	47	30	70	2	1		Note 2	
	EE3009	EE2004 & EE2311	B	EE3316 Information Product Design	3	0	0	39	39	100	0	-	1		Note 5
			B	CS3402 Database Systems	3	26	13	0	39	40	60	2	1		Note 3
	EE4093	A & B	EE3012 <sup>®</sup> Engineers in Society	3	18	8	0	26	50	50	1.5	1		Note 1	

Pre-cursor	Pre-requisite	Offered in Sem	Course Code & Title	CU	Contact Hours				C %	X %	Exam Dur	W	Equivalent Course	Remarks
					Lec	Tut	Lab	Ttl						
EE2004 & CS2311	(Note e) CS2311	A & B	CS3103 Operating Systems	3	26	13	0	39	40	60	2	1		Note 3
		A & B S	EE4381 Project EE4093 Engineering Training I for Information Engineering	6 0	Other activities: 144		208 70	352 70	100 100	0 0	- -	1 1		Note 8* Note 6
		(Note f) S	EE4095 Engineering Training II for Information Engineering	0	0	0	**		100	0	-	1		Note 6

**Key :** CU = Credit Unit      Lec = Lecture      Tut = Tutorial      Lab = Laboratory      C = Coursework      X = Examination  
Exam Dur = Exam Duration      W = GGPA Weighting (per CU)      S/A/B = Summer Semester/Semester A/Semester B  
D/E = Day Session / Evening Session

### **Remarks for Pre-requisite, 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 69 credit units (Normative 4-year degree) of the Major Requirement, College Requirement and College-specified GE Courses have been completed / 43 credit units (ASI)/ 40 credit units (ASII) of the Major Requirement have been completed. Credits of exempted courses for ASI & II are counted regardless of the completion time of replacement courses. Students completed full requirement in College-specified courses (MA1200/MA1201/MA1300/MA1301) can have one course counted towards the credit unit requirement specified above.

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 (ASII) of the Major Requirement have been completed. (Major requirement excludes Gateway Education and Language requirements). Credits of exempted courses for ASI & II are counted regardless of the completion time of replacement courses. Students completed full requirement in College-specified courses (MA1200/MA1201/MA1300/MA1301) can have one course counted towards the credit unit requirement specified above.

Note f: EE4095 (Part A Industrial Attachment Scheme) : EE4093; EE2311 and Pre-attachment Training  
EE4095 (Part B In-house Training): EE4093 and EE2311  
EE4095 (Part C Summer Placement Scheme): EE4093 and EE2311

### **Remarks for course assessment:**

Note 1 : To pass the course, students are required to achieve at least ~~35%~~ 30% in coursework and ~~35%~~ 30% in the examination.

Note 2 : To pass the course, students are required to achieve at least ~~35%~~ 30% in coursework and ~~35%~~ 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 50% in quizzes, 50% in presentation and 50% in reports and other assignments.

Note 5 : 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 6 : Pass/Fail Basis. To pass the course, students are required to have a laboratory attendance of 100% recorded.

Note 7 : To pass the course, students are required to achieve at least ~~35%~~ 30% in coursework and ~~35%~~ 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 8: To pass the course, students are required to (i) conduct an oral presentation, (ii) achieve an overall pass (D) grade or above, and (iii) both supervisor and assessor have not assigned a final Fail Grade.

### **Other remarks:**

\* Students undertaking Co-operative Education Scheme (CES) Placement Project should register on EE4381 Project to fulfil the Final Year Project requirement.

\*\* Part A (Industrial Attachment Scheme): 9-13 weeks; Part B (In-house Training): 5 weeks (150 contact hours); Part C (Summer Placement Scheme): 9-13 weeks

Δ Waived for Advanced Standing II students

Ⓢ 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 EE4095 Engineering Training II for Information Engineering.**

## Course Assessment Table

### B/ Technical Electives

Students are required to take at least FIVE technical electives of which no more than ONE Level-3 elective should be taken.

#### Communications and Networking

Pre-cursor	Pre-requisite	Offered in Sem	Course Code & Title	CU	Contact Hours			C %	X %	Exam Dur	W	Equivalent Course	Remarks
					Lec	Tut/Lab	Ttl						
	EE3008	A	EE4036 Wireless Communications	3	39	0	39	30	70	2	1		Note 1
	EE3313	A	EE4011 Performance Evaluation of Communication Networks	3	26	13/0	39	30	70	2	1		Note 1
	EE3009	A	EE4017 Internet Finance	3	26	13#/0	39	40	60	2	1		Note 1
	EE3009	A	EE4316 Mobile Data Networks	3	26	13/0	39	30	70	2	1		Note 1
	EE3009	B	EE4014 Business Data Communication Networks	3	26	13#/0	39	50	50	2	1		Note 2
EE3009	MA2001 & EE3313 or MA3160	B	EE4212 Information and Coding-Cryptography and Information Theory (subject to approval)	3	26	13/0	39	30	70	2	1		Note 1

#### Computer Systems and Information Processing

Pre-cursor	Pre-requisite	Offered in Sem	Course Code & Title	CU	Contact Hours			C %	X %	Exam Dur	W	Equivalent Course	Remarks
					Lec	Tut/Lab	Ttl						
	CS2311	A	EE3209 Data Management Techniques	3	26	13/0	39	40	60	2	1		Note 1
	MA2001 & MA2001	A	EE4206 Digital Image Processing	3	26	13/0	39	30	70	2	1		Note 1
	EE3206 & EE3210	A	EE4215 Security Cybersecurity Technology	3	31	5/3	39	40	60	2	1		Note 2
	MA2001	A	EE4221 Cloud Computing Systems	3	26	0/13	39	50	50	2	1		Note 2
	MA2001	B	EE4015 Digital Signal Processing	3	39	0	39	40	60	2	1		Note 1
	MA3160	B	EE4016 Engineering Applications of Artificial Intelligence	3	26	13/0	39	50	50	2	1		Note 1
	MA2001 & EE2004 & EE2331	B	EE4146 Data Informatics Engineering and Learning Systems	3	26	13/0	39	40	60	2	1		Note 1
	EE2004 & EE2331	B	EE4211 Computer Vision	3	26	13/0	39	60	40	2	1		Note 1
	CS2311 & CS3402	B	EE4217 Digital Storage Technology	3	31	5/0	36	30	70	2	1		Note 1
EE3009	CS2311 & CS3402	A or B	EE4222 Digital Forensics	3	26	13/15	54	40	60	2	1		Note 2
		A or B	CS4482 Advanced Database Systems	3	26	13/0	39	30	70	2	1		Note 3

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Exam Dur = Exam Duration    W = GGPA Weighting (per CU)    S/A/B = Summer Semester/Semester A/Semester B

Note 1 : To pass the course, students are required to achieve at least 35% 30% in coursework and 35% 30% in the examination.

Note 2 : To pass the course, students are required to achieve at least 35% 30% in coursework and 35% 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.

# : Some of the tutorials will be conducted in the laboratory

Δ : Co-requisite – to be taken before or together with the course

## Technical Electives: continued

### Software Design and Development

Pre-cursor	Pre-requisite	Offered in Sem	Course Code & Title	CU	Contact Hours			C %	X %	Exam Dur	W	Equivalent Course	Remarks
					Lec	Tut/Lab	Ttl						
EE2331	MA2001 & CS2311	A	EE4208 Computer Graphics for Engineers	3	26	13 <sup>#</sup> /0	39	40	60	2	1		Note 1
	EE3206	A	EE4304 iOS Mobile App Development and Networking	3	20	0/19 <sup>π</sup>	39	70	30	1.5	1		Note 2
EE2331	CS2311	A	CS4335 Design and Analysis of Algorithms	3	26	13/0	39	30	70	2	1		Note 3
	CS3103	B	EE4213 Human-Computer Interaction	3	26	13 <sup>#</sup> /0	39	40	60	2	1		Note 1
	EE3206 & CS3402	B	EE4216 Internet Client-server Computing Modern Web Applications	3	26	13/0	39	60	40	2	1		Note 1
	CS2311	B	CS3391 Advanced Programming	3		39	60	40	3	1		Note 3	Note 1
		S	CS4367 Computer Games Design	3	26	13/0	39	40	60	2	1		Note 3

### C/ Optional One-year Internship

Pre-cursor	Pre-requisite	Offered in Sem	Course Code & Title	CU	Contact Hours			C %	X %	Exam Dur	W	Equivalent Course	Remarks
					Lec	Tut/Lab	Ttl						
		A/B/S	EE4081 Professional Internship Program	6	8 -12 months			100	0	-	1		Φ

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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.

# : Some of the tutorials will be conducted in the laboratory

π : 3 hours workshop

Φ : Students having completed EE4081 Professional Internship Program (6CU) will take one less elective (3CU) and are not required to take EE3012 Engineers in Society (3CU). For those who have completed 12-month internship in EE4081 are not required to take EE4095 Engineering Training II for Information Engineering.

## Course Assessment Table

### D/ Gateway Education (GE)

Pre-requisite	Offered in Sem	Course Code & Title	CU			Contact Hours		C %	X %	Exam Dur (hrs)	W	Remarks
			Normative 4-year degree	ASI	ASII	Lec/Tut/Lab	Ttl					
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><u>GE English</u></b>										*
	B	- GE1401 University English	3	3	**	39	39	100	0	-	1	
	A	- GE2410 English for Engineering ( <i>Discipline-Specific English</i> )	3	3	3	39	39	100	0	-	1	
	A/B/S	<b><u>Chinese Civilization</u></b> - GE1501 Chinese Civilisation – History and Philosophy	3	3	**	26/26	52	100	0	-	1	
	A/B/S	<b><u>Gateway Education (Area Requirements)</u></b> - Area 1: Arts and Humanities - Area 2: Study of Societies, Social and Business Organisations - Area 3: Science and Technology	12#	6#	3	Please refer to the course information for details.						1
A/B/S	<b><u>College-specified Courses</u></b> - 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 (3 CUs)	9	6^	6^								^

#### 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 & 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](http://www.cityu.edu.hk/elc/courses_exemption.html)).

- \*\* Not necessary for Advanced Standing II students
- # Normative 4-year degree students are required to take a minimum of 3 CUs from each of the three areas. ASI students are required take the 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	Offered in Sem	Course Code & Title	CU	Contact Hours		C %	X %	Exam Dur (hrs)	W	Remarks
					Lec/Tut/Lab	Ttl					
			<b><u>English Language Requirement</u></b>								
	Level 3 in HKDSE English Language OR Grade E in HKALE AS Use of English or other acceptable entrance qualification in English	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	*
			<b><u>Chinese Language Requirement</u></b>								
	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	@

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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 & 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](http://www.cityu.edu.hk/elc/courses_exemption.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