Energy and Environmental Engineering Applicable to students admitted in 2020-21

<u>1st De</u>	egree: Bachelor of Engineering (Energy and Environmental Engineerin	<u>g)</u>
Majo	r Programme Requirement	
Stude	nts are required to complete a minimum of 75 units of courses as follows:	
		Units
1.	Faculty Package:	9
	ENGG1110/ESTR1002, ENGG1120/ESTR1005, ENGG1130/ ESTR1006	
2.	Foundation Courses:	13
	ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020,	
	MATH1510[a], PHYS1110[b]	
3.	Required Courses:	
(a)	EEEN2020, 2030, EEEN2040/ESTR2404, EEEN2602,	33
	EEEN3030/ESTR3402, ELEG2202#, 3207#, ESSC2800#,	
	MAEG2030/ESTR2402, MAEG2601, 3030, MAEG4030/ESTR4412	
(b)	Research Component Courses[c]:	6
	EEEN4998, 4999	
4.	Elective Courses:	14
(a)	Core Electives (at least 6 units):	
	ARCH3424# (or EEEN4070), EEEN3010/ESTR3410,	
	EEEN4020/ESTR4402, EEEN4050/ESTR4422,	
	EEEN4060/ESTR4424, ESSC4240#, MAEG3050/ESTR3406,	
	MAEG4080/ESTR4420	
(b)	Non-core Electives[d]:	
	ARCH5431#, CHEM1380, 4280#, CSCI1020, 2040#, CSCI2100#/	
	ESTR2102, EEEN3020/ESTR3400, EEEN4010/ESTR4400,	
	EEEN4030/ESTR4404, ELEG3601#, ENGG1820,	
	ENGG2760/ESTR2018, ENGG2780/ESTR2020, ENSC2515 (or	
	EESC2515), ENSC3230#, 4240#, 4535# (or EESC4335#),	
	ESSC2020, 3200#, 3220#, 3320#, 3600#, 3800#, 4540#,	
	GRMD2404, 3202#, 3203#, 3403#, 4202#, 4204#, 4401#,	
	MAEG3920, 5120, 5140, 5150, PHYS4420#	
Strea		

Sustainable Energy Technology

(a) Required Courses: EEEN4020/ESTR4402

(b)	Elective Courses:	
	CHEM4280, EEEN4010/ESTR4400, EEEN4030/ESTR4404,	
	EEEN4050/ESTR4422, EEEN4060/ESTR4424, ELEG3601,	
	MAEG5120, 5150	
Green	1 Building Technology	
(a)	Required Courses:	
	ARCH3424 (or EEEN4070), EEEN3010/ESTR3410	
(b)	Elective Courses:	
	ARCH5431, EEEN3020/ESTR3400, MAEG3050/ESTR3406,	
	MAEG3920, 5150	
Enviro	onmental Engineering	
(a)	Required Courses:	
	ESSC4240, GRMD3203	
(b)	Elective Courses:	
	ARCH3424 (or EEEN4070), ARCH5431, ENSC3230, 4240,	
	ESSC2020, GRMD4202, 4204, MAEG4080/ESTR4420,	
	MAEG5140	
	Total: 75	

In addition to fulfilling the above Major Programme Requirement, students may also challenge themselves by taking the following stream offered by the Faculty:

Engineering Leadership, Innovation, Technology and Entrepreneurship (ELITE) Stream[e]

Elective Courses:

15 units of courses[f]:

- i) 12 units of ESTR courses of which at most 6 units of courses at 1000 or 2000 level and at least 6 units of courses at 3000 or 4000 level[g]
- ii) 3 units of BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level[h]

Explanatory Notes:

1. Students who have fulfilled the Major Programme Requirements of their respective Engineering programmes (or equivalent courses as approved by the Sub-Committee on Education Technologies) will be eligible to apply for exemption of 1 unit of University Core IT Requirement.

Students are required to apply for the exemption. When exemption from a particular course is recognized, students can only be exempted from the course but not the units. Please follow the application procedures as announced by the IT Foundation Course Office at https://engg1000.cse.cuhk.edu.hk.

- 2. EEEN, ENGG and MAEG courses at 2000 and above level as well as those labeled as #, and their reciprocal ESTR courses will be included in the calculation of Major GPA for honours classification, excluding courses in Faculty Package and Foundation courses.
- 3. Students satisfying all the requirements of a stream (except the ELITE Stream, which will be officially recorded on the academic transcript) will be given a certifying letter upon request. Further information is available from the Department.
- 4. Students are advised to take some courses in summer sessions to reduce their course load in regular terms.
- [a] i) Non-JUPAS admittees and JUPAS admittees with HKDSE Mathematics Extended Modules I or II are required to attend a Mathematics Placement Test. Students who fail or are absent from the Placement Test will be required to take MATH1020 in the same term when they take MATH1510.

- ii) JUPAS admittees without HKDSE Mathematics Extended Modules I or II are required to take MATH1020 concurrently with MATH1510.
- iii) Students who fail MATH1510 in Term 1 will have to retake the course in Term 2. The pre-assigned course, ENGG1130, will also be dropped.
- [b] i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) <u>AND</u> Level 4 or above in Physics <u>or</u> Level 5 or above in Combined Science with Physics Component shall take PHYS1110.
 - ii) Students with HKDSE results but did not attain the academic levels as stated in (i) shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
 - iii) Students without HKDSE results shall sit for the placement test arranged by the Department of Physics. Students who pass the placement test shall take PHYS1110. Students who fail or are absent from the placement test shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
- [c] Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for EEEN4998 and 4999.
- [d] Students are allowed to take a maximum of 3 units from the following elective list: CSCI1020, 2040, CSCI2100/ESTR2102.
- [e] Details of the entrance and coursework requirements, and declaration procedures for the ELITE Stream can be found at the ELITE website (www.erg.cuhk.edu.hk/erg/elite).
 Non-ELITE Engineering students may be allowed to take ESTR courses Students

Non-ELITE Engineering students may be allowed to take ESTR courses. Students are required to seek approval from their respective Major Programmes for using ESTR courses taken to fulfill the Major Programme Requirement. Details are available at the ELITE website.

- [f] Students can use up to 9 units of courses which have been taken to fulfill the requirements of items 1 to 4 above to fulfill the elective requirements of the ELITE Stream. Item 3(b) Research Component Courses will not be included in these 9 units. A full list of ESTR courses is available at the ELITE website.
- [g] Students can use BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level to substitute for ESTR courses at 3000 or 4000 level, subject to the approval of the Stream Director and the Associate Dean (Education).
- [h] The requirement of at least 3 units of Engineering courses at 5000 level is a requirement for the ELITE Stream only. It should not be interpreted as a requirement of the Major Programme.

Requirements for admission to the 2nd degree programme

- 1. Admission to the second degree programme is guaranteed if students have:
 - i. fulfilled all graduation requirements of the first degree programme;
 - ii. Major GPA of at least 3.0 upon completion of studies of the first degree programme (ERG); and
 - iii. taken at least 30 relevant units, of which includes ELTU2014, ELTU3014 and mutually recognized courses by both the Engineering and Business Administration Faculties. In addition, students should have achieved a GPA of at least 3.0 in these courses while pursuing the first degree programme. For details of the mutually recognized courses, please refer to the explanatory notes on mutual recognition or exclusion.

Students who do not satisfy the above requirements may still apply for admission to the second degree programme which has discretion to judge the suitability of the students for studying for the second degree through assessments like conducting interview, considering the recommendation from the first degree programme etc.

Upon fulfillment of the requirements of the first degree programme, students can still choose to or not to pursue the second degree programme. If a student decides not to pursue the second degree programme but has fulfilled the requirements of a relevant BBA minor programme, a minor of that BBA programme would be awarded.

Units

2nd Degree: Bachelor of Business Administration (Integrated BBA Programme)

Major Programme Requirement

Students are required to complete a minimum of 56 units of courses as follows:

- 1. Faculty Package: 9 DOTE[DSME]1030, 1040, MGNT1020 2. **Required Courses:** 32-33 ACCT2111, 2121, 2151 or 3151[a], DOTE[DSME]2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010 3. **Elective Courses (Concentration):** 15-18 Students must choose at least one concentration and take five or six courses among the courses prescribed under respective concentration area as follows: **Business Economics** (a) DOTE[DSME]2021, 4110; (i) two courses selected from: DOTE[DSME]3000, 3011, 3030, (ii) 3050, 3080, 3090, 4040, 4080; and one DOTE[DSME] course at 3000 or above level, excluding the (iii) courses taken for fulfillment of requirement (i) or (ii) **Business Analytics** (b) (i) DOTE[DSME]2021, 2040, 4020; one course selected from: DOTE[DSME]4070, 4240, 4260; and (ii) one course selected from: DOTE[DSME]3030, 4030, 4110, (iii) 4220, 4280, MKTG4120 (c) Finance DOTE[DSME]2021 or FINA2020; and (i) 15 units of FINA courses at 3000 or above level, with no more (ii) than three 1-unit FINA courses Entrepreneurship (d) MGNT1070, 2070, 3070, 4170; and (i) (ii) two courses selected from: MGNT3080, 4070, 4090, 4130, 4160, 4270, 4570, 4711, 4712, 4713 Management of International Business (e) MGNT3080, 3580, 4150; and (i) three courses selected from: MGNT3010, 3100, 4080, 4090, (ii) 4130, 4140, 4510, 4530, 4540, 4550, 4570, 4600, 4620 Human Resource Management (f) MGNT2040, 3010, 3090; and (i) (ii) three courses selected from: MGNT3040, 3060, 3100, 4050, 4060, 4080, 4110, 4130, 4140, 4620
- (g) Marketing

	(i)	MKTG3010, 3020, 3030, 4040; and	
	(ii)	two courses selected from: MKTG3040, 3050, 4010, 4020, 4030,	
	. ,	4050, 4070, 4080, 4090, 4110, 4160, 4200	
(h)	Big D	ata and Quantitative Marketing	
	(i)	MKTG3010, 3060, 4080, 4120; and	
	(ii)	two courses selected from: MKTG3020, 4030, 4050, 4070, 4090,	
		4150, 4160, 4170, 4180, 4190, 4200	
(i)	Gener	al Business	
	(i)	3 units of DOTE[DSME]/FINA/MGNT/MKTG courses at 2000	
		or above level; and	
	(ii)	12 units of DOTE[DSME]/FINA/MGNT/MKTG courses at 3000	
		or above level, excluding the courses taken for fulfillment of	
		requirement (i), with no more than three 1-unit FINA courses	
		Total:	56-60

Explanatory Notes:

- 1. ACCT/DOTE[DSME]/FINA/IBBA/MGNT/MKTG courses at 2000 and above level (excluding ACCT2111, 2121, IBBA3040, MGNT2511 and 2512) will be included in the calculation of Major GPA for honours classification.
- 2. Double concentrations in Marketing and Big Data and Quantitative Marketing are not allowed.
- 3. DOTE[DSME]2021 and the associated units can be used to satisfy concentration requirements of double concentrations within (a) to (c). MGNT3010 and the associated units can be used to satisfy concentration requirements of double concentrations within (e) and (f).
- 4. Courses taken for the concentration requirements of (i) General Business Concentration cannot be counted towards the requirements of concentrations (a) to (h).
- 5. Students claiming (d) Entrepreneurship Concentration are not allowed to declare Minor in Entrepreneurship and Innovation.
- [a] ACCT2151 and 3151 are mutually exclusive. Students who would like to pursue a career in accounting profession are advised to take ACCT3151 instead of ACCT2151.
- [] Subject area code "DSME" changed to "DOTE" with effect from 2024-25.

Explanatory Notes on Mutual Recognition or Exclusion:

1. DOTE[DSME]2011 and the associated units can be exempted from the requirement of the second degree by successfully completing ENGG2430/ESTR2002 <u>OR</u> ENGG2760/ESTR2018 <u>and</u> ENGG2780/ESTR2020.

Recommended C	ourse Pattern			
	1 st degree: Bachelor of	Units	2 nd degree: Bachelor of	Units
	Engineering (Energy and		Business Administration	
	Environmental Engineering)		(Integrated BBA Programme)	
First Year of	1 st term		1 st term	
Attendance	Faculty Package: ENGG1110/ ESTR1002	3	Faculty Package: Major Required:	
	Major Required: MATH1510, PHYS1110 Major Elective(s):	3-6	Major Elective(s):	
	2^{nd} term		2 nd term	

	Faculty Package: ENGG1120/ ESTR1005, ENGG1130/ ESTR1006	6	Faculty Package: Major Required: Major Elective(s):	
	Major Required: MAEG1020, PHYS1110 Major Elective(s):	3-6		
Second Year of	1 st term		1 st term	
Attendance	Major Required: EEEN2020, ELEG2202, ENGG2720/ ESTR2014 Major Elective(s): 2 nd term	8	Faculty Package: DOTE[DSME]1030 Major Required: Major Elective(s): 2 nd term	3
	Major Required: EEEN2040/ ESTR2404, ENGG2740/ ESTR2016, MAEG2030/ ESTR2402, MAEG2601 Major Elective(s)	10	Faculty Package: DOTE[DSME]1040 Major Required: Major Elective(s):	3
	Summer session			
	Major Required: EEEN2602	1		
Third Year of	1 st term		1 st term	
Attendance	Major Required: ELEG3207, ESSC2800 Major Elective(s): 1 course	6 3	Faculty Package: MGNT1020 Major Required: ACCT2111, MGNT2511	3 4
	Major Elective(s). I course	5	Major Elective(s):	
	2 nd term		2 nd term	
	Major Required: EEEN2030, EEEN3030/ESTR3402, MAEG3030	9	Major Required: ACCT2121, MKTG2010 Major Elective(s):	6
	Major Elective(s): 0 or 1 course	0-3		
Fourth Year of	1 st term		1 st term	
Attendance	Major Required: EEEN4998,	6	Major Required:	9
	MAEG4030/ESTR4412	•	DOTE[DSME]2011, 2030,	
	Major Elective(s): 1 course	3	MGNT2611	
	2 nd term		Major Elective(s): 2 nd term	
	Major Required: EEEN4999	3	Major Required:	7
	Major Elective(s): 2 to 3 courses		DOTE[DSME]2051,	/
		00	FINA2010, IBBA3040	
			Major Elective(s):	
Fifth Year of			1 st term	
Attendance			Major Required: ACCT2151	3-4
			(or 3151), MGNT2512	
			Major Elective(s): 2-3 courses	6-9
			2 nd term	
			Major Required: MGNT4010	3
	Total (including Equalty	75	Major Elective(s): 2-3 courses	6-9
	Total (including Faculty Package):	75	Total (including Faculty Package):	56-60

Energy and Environmental Engineering Applicable to students admitted in 2021-22

1st D	egree: Bachelor of Engineering (Energy and Environmental Engineerin	<u>g)</u>
Majo	r Programme Requirement	
Stude	nts are required to complete a minimum of 75 units of courses as follows:	Units
1.	Faculty Package: ENGG1110/ESTR1002, ENGG1120/ESTR1005, ENGG1130/ ESTR1006	9
2.	Foundation Courses:	13
	ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, MATH1510[a], PHYS1110[b]	
3.	Required Courses:	
(a)	EEEN2020, 2030, EEEN2040/ESTR2404, EEEN2602, EEEN3030/ESTR3402, ELEG2202#, 3207#, ESSC2800#, MAEG2030/ESTR2402, MAEG2601, 3030, MAEG4030/ESTR4412	33
(b)	Research Component Courses[c]: EEEN4998, 4999	6
4.	Elective Courses:	14
(a)	Core Electives (at least 6 units): ARCH3424# (or EEEN4070), EEEN3010/ESTR3410, EEEN4020/ESTR4402, EEEN4050/ESTR4422, EEEN4060/ESTR4424, EEEN4060/ESTR4424, ESSC4240#, MAEG3050/ESTR3406, MAEG4080/ESTR4420 AEG3050/ESTR3406, AEG3050/ESTR3406,	
(b)	Non-core Electives[d]: ARCH5431#, CHEM1380, 4280#, CSCI1020, 2040#, CSCI2100#/ ESTR2102, EEEN3020/ESTR3400, EEEN4010/ESTR4400, EEEN4030/ESTR4404, ELEG3601#, ENGG1820, ENGG2760/ESTR2018, ENGG2780/ESTR2020, ENSC2515 (or EESC2515), ENSC3230#, 4240#, 4535# (or EESC4335#), ESSC2020, 3200#, 3220#, 3320#, 3600#, 3800#, 4540#, GRMD2404, 3202#, 3203#, 3403#, 4202#, 4204#, 4401#, MAEG3920, 5120, 5140, 5150, PHYS4420#	

specialize in any stream or to specialize in at most two streams.

Sustainable Energy Technology

(a) Required Courses: EEEN4020/ESTR4402

(b)	Elective Courses:	
	CHEM4280, EEEN4010/ESTR4400, EEEN4030/ESTR4404,	
	EEEN4050/ESTR4422, EEEN4060/ESTR4424, ELEG3601,	
	MAEG5120, 5150	
Green	1 Building Technology	
(a)	Required Courses:	
	ARCH3424 (or EEEN4070), EEEN3010/ESTR3410	
(b)	Elective Courses:	
	ARCH5431, EEEN3020/ESTR3400, MAEG3050/ESTR3406,	
	MAEG3920, 5150	
Enviro	onmental Engineering	
(a)	Required Courses:	
	ESSC4240, GRMD3203	
(b)	Elective Courses:	
	ARCH3424 (or EEEN4070), ARCH5431, ENSC3230, 4240,	
	ESSC2020, GRMD4202, 4204, MAEG4080/ESTR4420,	
	MAEG5140	
	Total: 75	

In addition to fulfilling the above Major Programme Requirement, students may also challenge themselves by taking the following stream offered by the Faculty:

Engineering Leadership, Innovation, Technology and Entrepreneurship (ELITE) Stream[e]

Elective Courses:

15 units of courses[f]:

- i) 12 units of ESTR courses of which at most 6 units of courses at 1000 or 2000 level and at least 6 units of courses at 3000 or 4000 level[g]
- ii) 3 units of BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level[h]

Explanatory Notes:

1. Students who have fulfilled the Major Programme Requirements of their respective Engineering programmes (or equivalent courses as approved by the Sub-Committee on Education Technologies) will be eligible to apply for exemption of 1 unit of University Core IT Requirement.

Students are required to apply for the exemption. When exemption from a particular course is recognized, students can only be exempted from the course but not the units. Please follow the application procedures as announced by the IT Foundation Course Office at https://engg1000.cse.cuhk.edu.hk.

- 2. EEEN, ENGG and MAEG courses at 2000 and above level as well as those labeled as #, and their reciprocal ESTR courses will be included in the calculation of Major GPA for honours classification, excluding courses in Faculty Package and Foundation courses.
- 3. Students satisfying all the requirements of a stream (except the ELITE Stream, which will be officially recorded on the academic transcript) will be given a certifying letter upon request. Further information is available from the Department.
- 4. Students are advised to take some courses in summer sessions to reduce their course load in regular terms.
- [a] i) Non-JUPAS admittees and JUPAS admittees with HKDSE Mathematics Extended Modules I or II are required to attend a Mathematics Placement Test. Students who fail or are absent from the Placement Test will be required to take MATH1020 in the same term when they take MATH1510.

- ii) JUPAS admittees without HKDSE Mathematics Extended Modules I or II are required to take MATH1020 concurrently with MATH1510.
- iii) Students who fail MATH1510 in Term 1 will have to retake the course in Term 2. The pre-assigned course, ENGG1130, will also be dropped.
- [b] i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) <u>AND</u> Level 4 or above in Physics <u>or</u> Level 5 or above in Combined Science with Physics Component shall take PHYS1110.
 - ii) Students with HKDSE results but did not attain the academic levels as stated in (i) shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
 - iii) Students without HKDSE results shall sit for the placement test arranged by the Department of Physics. Students who pass the placement test shall take PHYS1110. Students who fail or are absent from the placement test shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
- [c] Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for EEEN4998 and 4999.
- [d] Students are allowed to take a maximum of 3 units from the following elective list: CSCI1020, 2040, CSCI2100/ESTR2102.
- [e] Details of the entrance and coursework requirements, and declaration procedures for the ELITE Stream can be found at the ELITE website (www.erg.cuhk.edu.hk/erg/elite).
 Non-ELITE Engineering students may be allowed to take ESTR courses Students

Non-ELITE Engineering students may be allowed to take ESTR courses. Students are required to seek approval from their respective Major Programmes for using ESTR courses taken to fulfill the Major Programme Requirement. Details are available at the ELITE website.

- [f] Students can use up to 9 units of courses which have been taken to fulfill the requirements of items 1 to 4 above to fulfill the elective requirements of the ELITE Stream. Item 3(b) Research Component Courses will not be included in these 9 units. A full list of ESTR courses is available at the ELITE website.
- [g] Students can use BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level to substitute for ESTR courses at 3000 or 4000 level, subject to the approval of the Stream Director and the Associate Dean (Education).
- [h] The requirement of at least 3 units of Engineering courses at 5000 level is a requirement for the ELITE Stream only. It should not be interpreted as a requirement of the Major Programme.

Requirements for admission to the 2nd degree programme

- 1. Admission to the second degree programme is guaranteed if students have:
 - i. fulfilled all graduation requirements of the first degree programme;
 - ii. Major GPA of at least 3.0 upon completion of studies of the first degree programme (ERG); and
 - iii. taken at least 30 relevant units, of which includes ELTU2014, ELTU3014 and mutually recognized courses by both the Engineering and Business Administration Faculties. In addition, students should have achieved a GPA of at least 3.0 in these courses while pursuing the first degree programme. For details of the mutually recognized courses, please refer to the explanatory notes on mutual recognition or exclusion.

Students who do not satisfy the above requirements may still apply for admission to the second degree programme which has discretion to judge the suitability of the students for studying for the second degree through assessments like conducting interview, considering the recommendation from the first degree programme etc.

Upon fulfillment of the requirements of the first degree programme, students can still choose to or not to pursue the second degree programme. If a student decides not to pursue the second degree programme but has fulfilled the requirements of a relevant BBA minor programme, a minor of that BBA programme would be awarded.

Units

2nd Degree: Bachelor of Business Administration (Integrated BBA Programme)

Major Programme Requirement

Students are required to complete a minimum of 56 units of courses as follows:

- 1. Faculty Package: 9 DOTE[DSME]1030, 1040, MGNT1020 2. **Required Courses:** 32-33 ACCT2111, 2121, 2151 or 3151[a], DOTE[DSME]2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010 3. **Elective Courses (Concentration):** 15-18 Students must choose at least one concentration and take five or six courses among the courses prescribed under respective concentration area as follows: **Business Economics** (a) DOTE[DSME]2021, 4110; (i) two courses selected from: DOTE[DSME]3000, 3011, 3030, (ii) 3050, 3080, 3090, 4040, 4080; and one DOTE[DSME] course at 3000 or above level, excluding the (iii) courses taken for fulfillment of requirement (i) or (ii) **Business Analytics** (b) (i) DOTE[DSME]2021, 2040, 4020; one course selected from: DOTE[DSME]4070, 4240, 4260; and (ii) one course selected from: DOTE[DSME]3030, 4030, 4110, (iii) 4220, 4280, MKTG4120 (c) Finance DOTE[DSME]2021 or FINA2020; and (i) 15 units of FINA courses at 3000 or above level, with no more (ii) than three 1-unit FINA courses Entrepreneurship (d) MGNT1070, 2070, 3070, 4170; and (i) (ii) two courses selected from: MGNT3080, 4070, 4090, 4130, 4160, 4270, 4570, 4711, 4712, 4713 Management of International Business (e) MGNT3080, 3580, 4150; and (i) three courses selected from: MGNT3010, 3100, 4080, 4090, (ii) 4130, 4140, 4510, 4530, 4540, 4550, 4570, 4600, 4620 Human Resource Management (f) MGNT2040, 3010, 3090; and (i) (ii) three courses selected from: MGNT3040, 3060, 3100, 4050, 4060, 4080, 4110, 4130, 4140, 4620
- (g) Marketing

	(i)	MKTG3010, 3020, 3030, 4040; and	
	(ii)	two courses selected from: MKTG3040, 3050, 4010, 4020, 4030,	
		4050, 4070, 4080, 4090, 4110, 4160, 4200	
(h)	Big I	Data and Quantitative Marketing	
	(i)	MKTG3010, 3060, 4080, 4090; and	
	(ii)	two courses selected from: MKTG3020, 4030, 4050, 4120, 4150,	
		4160, 4170, 4180, 4190, 4200	
(i)	Gene	eral Business	
	(i)	3 units of DOTE[DSME]/FINA/MGNT/MKTG courses at 2000	
		or above level; and	
	(ii)	12 units of DOTE[DSME]/FINA/MGNT/MKTG courses at 3000	
		or above level, excluding the courses taken for fulfillment of	
		requirement (i), with no more than three 1-unit FINA courses	
		Total:	56-60

Explanatory Notes:

- 1. ACCT/DOTE[DSME]/FINA/IBBA/MGNT/MKTG courses at 2000 and above level (excluding ACCT2111, 2121, IBBA3040, MGNT2511 and 2512) will be included in the calculation of Major GPA for honours classification.
- 2. Double concentrations in Marketing and Big Data and Quantitative Marketing are not allowed.
- 3. DOTE[DSME]2021 and the associated units can be used to satisfy concentration requirements of double concentrations within (a) to (c). MGNT3010 and the associated units can be used to satisfy concentration requirements of double concentrations within (e) and (f).
- 4. Courses taken for the concentration requirements of (i) General Business Concentration cannot be counted towards the requirements of concentrations (a) to (h).
- 5. Students claiming (d) Entrepreneurship Concentration are not allowed to declare Minor in Entrepreneurship and Innovation.
- [a] ACCT2151 and 3151 are mutually exclusive. Students who would like to pursue a career in accounting profession are advised to take ACCT3151 instead of ACCT2151.
- [] Subject area code "DSME" changed to "DOTE" with effect from 2024-25.

Explanatory Notes on Mutual Recognition or Exclusion:

1. DOTE[DSME]2011 and the associated units can be exempted from the requirement of the second degree by successfully completing ENGG2430/ESTR2002 <u>OR</u> ENGG2760/ESTR2018 <u>and</u> ENGG2780/ESTR2020.

	1 st degree: Bachelor of	Units	2 nd degree: Bachelor of	Units
	Engineering (Energy and		Business Administration	
	Environmental Engineering)		(Integrated BBA Programme)	
First Year of	1 st term		1 st term	
Attendance	Faculty Package: ENGG1110/	3	Faculty Package:	
	ESTR1002		Major Required:	
	Major Required: MATH1510,	3-6	Major Elective(s):	
	PHYS1110			
	Major Elective(s):			
	2 nd term		2 nd term	

	Faculty Package: ENGG1120/ ESTR1005, ENGG1130/ ESTR1006	6	Faculty Package: Major Required: Major Elective(s):	
	Major Required: MAEG1020, PHYS1110 Major Elective(s):	3-6		
Second Year of	1 st term		1 st term	
Attendance	Major Required: EEEN2020, ELEG2202, ENGG2720/ ESTR2014 Major Elective(s): 2 nd term	8	Faculty Package: DOTE[DSME]1030 Major Required: Major Elective(s): 2 nd term	3
	Major Required: EEEN2040/ ESTR2404, ENGG2740/ ESTR2016, MAEG2030/ ESTR2402, MAEG2601 Major Elective(s)	10	Faculty Package: DOTE[DSME]1040 Major Required: Major Elective(s):	3
	Summer session			
	Major Required: EEEN2602	1		
Third Year of	1 st term		1 st term	
Attendance	Major Required: ELEG3207, ESSC2800, Major Elective(s): 1 course	6 3	Faculty Package: MGNT1020 Major Required: ACCT2111, MGNT2511	3 4
		5	Major Elective(s):	
	2 nd term		2 nd term	
	Major Required: EEEN2030, EEEN3030/ESTR3402, MAEG3030	9	Major Required: ACCT2121, MKTG2010 Major Elective(s):	6
	Major Elective(s): 0 or 1 course	0-3		
Fourth Year of	1 st term		1 st term	
Attendance	Major Required: EEEN4998,	6	Major Required:	9
	MAEG4030/ESTR4412	2	DOTE[DSME]2011, 2030,	
	Major Elective(s): 1 course	3	MGNT2611	
	2 nd term		Major Elective(s): 2 nd term	
	2 term Major Required: EEEN4999	3	Major Required:	7
	Major Elective(s): 2 to 3 courses		DOTE[DSME]2051,	/
		5.0	FINA2010, IBBA3040	
			Major Elective(s):	
Fifth Year of			1 st term	
Attendance			Major Required: ACCT2151	3-4
			(or 3151), MGNT2512	
			Major Elective(s): 2-3 courses	6-9
			2 nd term	
			Major Required: MGNT4010	3
			Major Elective(s): 2-3 courses	6-9
	Total (including Faculty Package):	75	Total (including Faculty Package):	56-60

Energy and Environmental Engineering Applicable to students admitted in 2022-23

1st D	egree: Bachelor of Engineering (Energy and Environmental Engineering	<u>g)</u>
Majo	r Programme Requirement	
Stude	nts are required to complete a minimum of 75 units of courses as follows:	Units
1.	Faculty Package:ENGG1110/ESTR1002,ENGG1120/ESTR1005,ENGG1130/ESTR1006	9
2.	Foundation Courses: ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, MATH1510[a], PHYS1110[b]	13
3. (a)	Required Courses: EEEN2020, 2030, EEEN2040/ESTR2404, EEEN2602, EEEN3030/ESTR3402, ELEG2202#, 3207#, ESSC2800# (or EESC2800#), MAEG2030/ESTR2402, MAEG2601, 3030, MAEG4030/ESTR4412	33
(b)	Research Component Courses[c]: EEEN4998, 4999	6
4.	Elective Courses:	14
(a)	Core Electives (at least 6 units): EEEN3010/ESTR3410, EEEN4020/ESTR4402, EEEN4050/ESTR4422, EEEN4060/ESTR4424, EEEN4070, ESSC4240# (or EESC4240#), MAEG3050/ESTR3406, MAEG4080/ESTR4420	
(b)	Non-core Electives[d]:CHEM1380, 4280#, CSCI1020, 2040#, CSCI2100#/ESTR2102,EEEN3020/ESTR3400,EEEN4010/ESTR4400,EEEN4030/ESTR4404,ELEG3601#,ENGG2760/ESTR2018,ENGG2780/ESTR2020,ENSC2515),ENSC3230# (or EESC3230#),ENSC4240# (orEESC4340#),ENSC4535# (or EESC4335#),ESSC3200# (or EESC3200#),ESSC3200# (orEESC3220#),ESSC3320# (or EESC3320#),ESSC320#),ESSC3200# (or EESC3320#),ESSC3600#),ESSC3800# (or EESC3800#),ESSC4540#),GRMD2404,3202#,3203#,3403# (or 4403#),4204#,4401# (or 3401#),MAEG3920,5120,5140,5150,PHYS4420#	

specia	lize in any stream or to specialize in at most two streams.
Susta	inable Energy Technology
(a)	Required Courses:
	EEEN4020/ESTR4402
(b)	Elective Courses:
	CHEM4280, EEEN4010/ESTR4400, EEEN4030/ESTR4404,
	EEEN4050/ESTR4422, EEEN4060/ESTR4424, ELEG3601,
	MAEG5120, 5150
Greer	n Building Technology
(a)	Required Courses:
	EEEN3010/ESTR3410, EEEN4070
(b)	Elective Courses:
	EEEN3020/ESTR3400, MAEG3050/ESTR3406, MAEG3920, 5150
Envir	onmental Engineering
(a)	Required Courses:
	ESSC4240 (or EESC4240), GRMD3203
(b)	Elective Courses:
	EEEN4070, ENSC3230 (or EESC3230), ENSC4240 (or EESC4340),
	ESSC2020 (or EESC2020), GRMD4202, 4204,
	MAEG4080/ESTR4420, MAEG5140
	Total: 75

In addition to fulfilling the above Major Programme Requirement, students may also challenge themselves by taking the following stream offered by the Faculty:

Engineering Leadership, Innovation, Technology and Entrepreneurship (ELITE) Stream[e]

Elective Courses:

15 units of courses[f]:

- i) 12 units of ESTR courses of which at most 6 units of courses at 1000 or 2000 level and at least 6 units of courses at 3000 or 4000 level[g]
- ii) 3 units of AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/SEEM research postgraduate courses at 5000 level[h]

Explanatory Notes:

- 1. EEEN, ENGG and MAEG courses at 2000 and above level as included in the Major Programme Requirement as well as those labeled as #, and their reciprocal ESTR courses will be included in the calculation of Major GPA for honours classification, excluding courses in Faculty Package and Foundation courses.
- 2. Students satisfying all the requirements of a stream (except the ELITE Stream, which will be officially recorded on the academic transcript) will be given a certifying letter upon request. Further information is available from the Department.
- 3. Students are advised to take some courses in summer sessions to reduce their course load in regular terms.
- [a] i) Non-JUPAS admittees and JUPAS admittees with HKDSE Mathematics Extended Modules I or II are required to attend a Mathematics Placement Test. Students who fail or are absent from the Placement Test will be required to take MATH1020 in the same term when they take MATH1510.
 - ii) JUPAS admittees without HKDSE Mathematics Extended Modules I or II are required to take MATH1020 concurrently with MATH1510.
 - iii) Students who fail MATH1510 in Term 1 will have to retake the course in Term 2. The pre-assigned course, ENGG1130, will also be dropped.

- [b] i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) <u>AND</u> Level 4 or above in Physics <u>or</u> Level 5 or above in Combined Science with Physics Component shall take PHYS1110.
 - ii) Students with HKDSE results but did not attain the academic levels as stated in (i) shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
 - iii) Students without HKDSE results shall sit for the placement test arranged by the Department of Physics. Students who pass the placement test shall take PHYS1110. Students who fail or are absent from the placement test shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
- [c] Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for EEEN4998 and 4999.
- [d] Students are allowed to take a maximum of 3 units from the following elective list: CSCI1020, 2040, CSCI2100/ESTR2102.
- [e] Details of the entrance and coursework requirements, and declaration procedures for the ELITE Stream can be found at the ELITE website (www.erg.cuhk.edu.hk/erg/elite).
 Non-ELITE Engineering students may be allowed to take ESTR courses. Students are required to seek approval from their respective Major Programmes for using

are required to seek approval from their respective Major Programmes for using ESTR courses taken to fulfill the Major Programme Requirement. Details are available at the ELITE website.

- [f] Students can use up to 9 units of courses which have been taken to fulfill the requirements of items 1 to 4 above to fulfill the elective requirements of the ELITE Stream. Item 3(b) Research Component Courses will not be included in these 9 units. A full list of ESTR courses is available at the ELITE website.
- [g] Students can use AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/ SEEM research postgraduate courses at 5000 level to substitute for ESTR courses at 3000 or 4000 level, subject to the approval of the Stream Director and the Associate Dean (Education).
- [h] The requirement of at least 3 units of Engineering courses at 5000 level is a requirement for the ELITE Stream only. It should not be interpreted as a requirement of the Major Programme.

Requirements for admission to the 2nd degree programme

- 1. Admission to the second degree programme is guaranteed if students have:
 - i. fulfilled all graduation requirements of the first degree programme;
 - ii. Major GPA of at least 3.0 upon completion of studies of the first degree programme (ERG); and
 - iii. taken at least 30 relevant units, of which includes ELTU2014, ELTU3014 and mutually recognized courses by both the Engineering and Business Administration Faculties. In addition, students should have achieved a GPA of at least 3.0 in these courses while pursuing the first degree programme. For details of the mutually recognized courses, please refer to the explanatory notes on mutual recognition or exclusion.

Students who do not satisfy the above requirements may still apply for admission to the second degree programme which has discretion to judge the suitability of the students for studying for the second degree through assessments like conducting interview, considering the recommendation from the first degree programme etc.

Upon fulfillment of the requirements of the first degree programme, students can

still choose to or not to pursue the second degree programme. If a student decides not to pursue the second degree programme but has fulfilled the requirements of a relevant BBA minor programme, a minor of that BBA programme would be awarded. 2nd Degree: Bachelor of Business Administration (Integrated BBA Programme) **Major Programme Requirement** Students are required to complete a minimum of 56 units of courses as follows: Units 1. Faculty Package: 9 DOTE[DSME]1030, 1040, MGNT1020 2. **Required Courses:** 32-33 ACCT2111, 2121, 2151 or 3151[a], DOTE[DSME]2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010 3. **Elective Courses (Concentration):** 15-18 Students must choose at least one concentration and take five or six courses among the courses prescribed under respective concentration area as follows: **Business Economics** (a) DOTE[DSME]2021, 4110; (i) two courses selected from: DOTE[DSME]3000, 3011, 3030, (ii) 3050, 3080, 3090, 4040, 4080; and one DOTE[DSME] course at 3000 or above level, excluding the (iii) courses taken for fulfillment of requirement (i) or (ii) (b) **Business Analytics** DOTE[DSME]2021, 2040, 4020; (i) one course selected from: DOTE[DSME]4070, 4240, 4260; and (ii) one course selected from: DOTE[DSME]3030, 4030, 4110, (iii) 4220, 4280, MKTG4120 Finance (c) DOTE[DSME]2021 or FINA2020; and (i) (ii) 15 units of FINA courses at 3000 or above level, with no more than three 1-unit FINA courses Entrepreneurship (d) MGNT1070, 2070, 3070, 4170; and (i) (ii) two courses selected from: MGNT3080, 4070, 4090, 4130, 4160, 4270, 4570, 4711, 4712, 4713 Management of International Business (e) MGNT3580, 4150; and (i) (ii) four courses selected from: MGNT3010, 3080, 3100, 4080, 4090, 4110, 4130, 4140, 4510, 4530, 4540, 4550, 4570 Human Resource Management (f) MGNT2040, 3010; and (i) (ii) four courses selected from: MGNT3040, 3060, 3090, 3100, 4050, 4060, 4080, 4110, 4130, 4140 (g) Marketing MKTG3010, 3020, 3030, 4040; and (i) two courses selected from: MKTG3040, 3050, 4010, 4020, 4030, (ii) 4050, 4070, 4080, 4090, 4110, 4160, 4200

- Big Data and Quantitative Marketing (h)
 - MKTG3010, 3060, 4080, 4090; and (i)
 - (ii) two courses selected from: MKTG3020, 4030, 4050, 4120, 4150, 4160, 4170, 4180, 4190, 4200
- (i) **General Business**
 - 3 units of DOTE[DSME]/FINA/MGNT/MKTG courses at 2000 (i) or above level; and
 - 12 units of DOTE[DSME]/FINA/MGNT/MKTG courses at 3000 (ii) or above level, excluding the courses taken for fulfillment of requirement (i), with no more than three 1-unit FINA courses

Total: 56-60

Explanatory Notes:

- ACCT/DOTE[DSME]/FINA/IBBA/MGNT/MKTG courses at 2000 and above level 1. (excluding ACCT2111, 2121, IBBA3040, MGNT2511 and 2512) will be included in the calculation of Major GPA for honours classification.
- 2. Double concentrations in Marketing and Big Data and Quantitative Marketing are not allowed.
- 3. DOTE[DSME]2021 and the associated units can be used to satisfy concentration requirements of double concentrations within (a) to (c). MGNT3010 and the associated units can be used to satisfy concentration requirements of double concentrations within (e) and (f).
- 4. Courses taken for the concentration requirements of (i) General Business Concentration cannot be counted towards the requirements of concentrations (a) to (h).
- 5. Students claiming (d) Entrepreneurship Concentration are not allowed to declare Minor in Entrepreneurship and Innovation.
- ACCT2151 and 3151 are mutually exclusive. Students who would like to pursue a [a] career in accounting profession are advised to take ACCT3151 instead of ACCT2151.
- Subject area code "DSME" changed to "DOTE" with effect from 2024-25. []

Explanatory Notes on Mutual Recognition or Exclusion:

1. DOTE[DSME]2011 and the associated units can be exempted from the requirement of the second degree by successfully completing ENGG2430/ESTR2002 OR ENGG2760/ESTR2018 and ENGG2780/ESTR2020.

Recommended	Course Pattern			
	1 st degree: Bachelor of Engineering (Energy and Environmental Engineering)	Units	2 nd degree: Bachelor of Business Administration (Integrated BBA Programme)	Units
First Year of Attendance	1 st term Faculty Package: ENGG1110/ESTR1002 Major Required: MATH1510, PHYS1110 Major Elective(s):	3 3-6	1 st term Faculty Package: Major Required: Major Elective(s):	
	2 nd term Faculty Package: ENGG1120/ESTR1005, ENGG1130/ESTR1006	6	2 nd term Faculty Package: Major Required: Major Elective(s):	

	Package):	13	Package):	30-00
	Total (including Faculty	75	Major Elective(s): 2-3 courses Total (including Faculty	6-9 56-60
			Major Required: MGNT4010	3
			2 nd term	
			Major Elective(s): 2-3 courses	6-9
			(or 3151), MGNT2512	
Attendance			Major Required: ACCT2151	3-4
Fifth Year of			1 st term	1
			Major Elective(s):	
	Major Elective(s): 2 to 3 courses	5-8	DOTE[DSME]2051, FINA2010, IBBA3040	
	Major Required: EEEN4999	3	Major Required:	7
	2 nd term	•	2 nd term	_
	2nd torres		Major Elective(s):	
	Major Elective(s): 1 course	3	MGNT2611	
	MAEG4030/ESTR4412		DOTE[DSME]2011, 2030,	
Attendance	Major Required: EEEN4998,	6	Major Required:	9
Fourth Year of	1 st term		1 st term	
	Major Elective(s): 0 or 1 course	0-3	<u> </u>	
	MAEG3030		Major Elective(s):	
	EEEN3030/ESTR3402,	7	MAJor Required. ACC12121, MKTG2010	0
	Major Required: EEEN2030,	9	Major Required: ACCT2121,	6
	2 nd term		2^{nd} term	
	wajor Elective(s): 1 course	3	Major Elective(s):	
	ESSC2800 (or EESC2800) Major Elective(s): 1 course	3	Major Required: ACCT2111, MGNT2511	4
Attenuance	Major Required: ELEG3207,	6	Faculty Package: MGNT1020	3
Third Year of Attendance	1 st term	-	1 st term	
TL:	Major Required: EEEN2602	1	1 St 4	
	Summer session	1		
	Major Elective(s)			<u> </u>
	MAEG2601			
	MAEG2030/ESTR2402,		Major Elective(s):	
	ENGG2740/ESTR2016,		Major Required:	
	EEEN2040/ESTR2404,	10	DOTE[DSME]1040	5
	Major Required:	10	Faculty Package:	3
	2^{nd} term		2 nd term	
	Major Elective(s):		Major Elective(s):	
	ELEG2202, ENGG2720/ESTR2014		Major Required:	
1 suchuance	Major Required: EEEN2020, ELEG2202,	8	Faculty Package: DOTE[DSME]1030	3
Attendance		0		2
Second Year of	Major Elective(s):		1 st term	
	PHYS1110			
	Major Required: MAEG1020,	3-6		

Energy and Environmental Engineering Applicable to students admitted in 2023-24

<u>1st De</u>	egree: Bachelor of Engineering (Energy and Environmental Engineering	<u>g)</u>
Majo	r Programme Requirement	
Stude	nts are required to complete a minimum of 75 units of courses as follows:	Units
1.	Faculty Package:ENGG1110/ESTR1002,ENGG1120/ESTR1005,ENGG1130/ESTR1006	9
2.	Foundation Courses: ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, MATH1510[a], PHYS1110[b]	13
3. (a)	Required Courses: EEEN2020, 2030, EEEN2040/ESTR2404, EEEN2602, EEEN3030/ESTR3402, EESC2800#, ELEG2202#, 3207#, MAEG2030/ESTR2402, MAEG2601, 3030, MAEG4030/ESTR4412	33
(b)	Research Component Courses[c]: EEEN4998, 4999	6
4.	Elective Courses:	14
(a)	Core Electives (at least 6 units): EEEN3010/ESTR3410, EEEN4020/ESTR4402, EEEN4050/ESTR4422, EEEN4060/ESTR4424, EEEN4070, EESC4240#, MAEG3050/ESTR3406, MAEG4080/ESTR4420	
(b)	Non-core Electives[d]: CHEM1380, 4280#, CSCI1020, 2040#, CSCI2100#/ESTR2102, EEEN3020/ESTR3400, EEEN4010/ESTR4400, EEEN4030/ESTR4404, EESC2020, 2515, 3200#, 3220#, 3230#, 3320#, 3600#, 3800#, 4335#, 4340#, 4540#, ELEG3601#, ENGG1820, ENGG2760/ESTR2018, ENGG2780/ESTR2020, GRMD2404, 3202#, 3203#, 3403# (or 4403#), 4202#, 4204#, 4401# (or 3401#), MAEG3920, 5120, 5140, 5150, PHYS4420#	
of 12	ms nts may specialize in any of the three streams by completing a minimum units of courses prescribed by that stream. Students may choose not to lize in any stream or to specialize in at most two streams.	
Studer of 12 specia Susta CHEN	nts may specialize in any of the three streams by completing a minimum units of courses prescribed by that stream. Students may choose not to	

EEEN3010/ESTR3410, EEEN3020/ESTR3400, EEEN4070, MAEG3050/ESTR3406, MAEG3920, 5150 Environmental Engineering EEEN4070, EESC2020, 3230, 4240, 4340, GRMD3203, 4202, 4204, MAEG4080/ESTR4420, MAEG5140

Total: 75

In addition to fulfilling the above Major Programme Requirement, students may also challenge themselves by taking the following stream offered by the Faculty:

Engineering Leadership, Innovation, Technology and Entrepreneurship (ELITE) Stream[e]

Elective Courses:

15 units of courses[f]:

- i) 12 units of ESTR courses of which at most 6 units of courses at 1000 or 2000 level and at least 6 units of courses at 3000 or 4000 level[g]
- ii) 3 units of AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/SEEM research postgraduate courses at 5000 level[h]

Explanatory Notes:

- 1. EEEN, ENGG and MAEG courses at 2000 and above level as included in the Major Programme Requirement as well as those labeled as #, and their reciprocal ESTR courses will be included in the calculation of Major GPA for honours classification, excluding courses in Faculty Package and Foundation courses.
- 2. Students satisfying all the requirements of a stream (except the ELITE Stream, which will be officially recorded on the academic transcript) will be given a certifying letter upon request. Further information is available from the Department.
- 3. Students are advised to take some courses in summer sessions to reduce their course load in regular terms.
- [a] i) Non-JUPAS admittees and JUPAS admittees with HKDSE Mathematics Extended Modules I or II are required to attend a Mathematics Placement Test. Students who fail or are absent from the Placement Test will be required to take MATH1020 in the same term when they take MATH1510.
 - ii) JUPAS admittees without HKDSE Mathematics Extended Modules I or II are required to take MATH1020 concurrently with MATH1510.
 - iii) Students who fail MATH1510 in Term 1 will have to retake the course in Term 2. The pre-assigned course, ENGG1130, will also be dropped.
- [b] i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) <u>AND</u> Level 4 or above in Physics <u>or</u> Level 5 or above in Combined Science with Physics Component shall take PHYS1110.
 - ii) Students with HKDSE results but did not attain the academic levels as stated in (i) shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
 - iii) Students without HKDSE results shall sit for the placement test arranged by the Department of Physics. Students who pass the placement test shall take PHYS1110. Students who fail or are absent from the placement test shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
- [c] Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for EEEN4998 and 4999.
- [d] Students are allowed to take a maximum of 3 units from the following elective list: CSCI1020, 2040, CSCI2100/ESTR2102.
- [e] Details of the entrance and coursework requirements, and declaration procedures for

the ELITE Stream can be found at the ELITE website (www.erg.cuhk.edu.hk/erg/elite).

Non-ELITE Engineering students may be allowed to take ESTR courses. Students are required to seek approval from their respective Major Programmes for using ESTR courses taken to fulfill the Major Programme Requirement. Details are available at the ELITE website.

- [f] Students can use up to 9 units of courses which have been taken to fulfill the requirements of items 1 to 4 above to fulfill the elective requirements of the ELITE Stream. Item 3(b) Research Component Courses will not be included in these 9 units. A full list of ESTR courses is available at the ELITE website.
- [g] Students can use AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/ SEEM research postgraduate courses at 5000 level to substitute for ESTR courses at 3000 or 4000 level, subject to the approval of the Stream Director and the Associate Dean (Education).
- [h] The requirement of at least 3 units of Engineering courses at 5000 level is a requirement for the ELITE Stream only. It should not be interpreted as a requirement of the Major Programme.

Requirements for admission to the 2nd degree programme

- 1. Admission to the second degree programme is guaranteed if students have:
 - i. fulfilled all graduation requirements of the first degree programme;
 - ii. Major GPA of at least 3.0 upon completion of studies of the first degree programme (ERG); and
 - iii. taken at least 30 relevant units, of which includes ELTU2014, ELTU3014 and mutually recognized courses by both the Engineering and Business Administration Faculties. In addition, students should have achieved a GPA of at least 3.0 in these courses while pursuing the first degree programme. For details of the mutually recognized courses, please refer to the explanatory notes on mutual recognition or exclusion.

Students who do not satisfy the above requirements may still apply for admission to the second degree programme which has discretion to judge the suitability of the students for studying for the second degree through assessments like conducting interview, considering the recommendation from the first degree programme etc.

Upon fulfillment of the requirements of the first degree programme, students can still choose to or not to pursue the second degree programme. If a student decides not to pursue the second degree programme but has fulfilled the requirements of a relevant BBA minor programme, a minor of that BBA programme would be awarded.

2nd Degree: Bachelor of Business Administration (Integrated BBA Programme)

Major Programme Requirement

Students are required to complete a minimum of 56 units of courses as follows:

1.	Faculty Package: DOTE[DSME]1030, 1040, MGNT1020	Units 9
2.	Required Courses: ACCT2111, 2121, 2151 or 3151[a], DOTE[DSME]2011, 2030, 2051,	32-33

FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010

3. Elective Courses (Concentration):

Students must choose at least one concentration and take five or six courses among the courses prescribed under respective concentration area as follows:

- (a) Business Economics
 - (i) DOTE[DSME]2021, 4110;
 - (ii) two courses selected from: DOTE[DSME]3000, 3011, 3030, 3050, 3080, 3090, 4040, 4080; and
 - (iii) one DOTE[DSME] course at 3000 or above level, excluding the courses taken for fulfillment of requirement (i) or (ii)
- (b) Business Analytics
 - (i) DOTE[DSME]2021, 2040, 4020;
 - (ii) one course selected from: DOTE[DSME]4070, 4240, 4260; and
 - (iii) one course selected from: DOTE[DSME]3030, 4030, 4110, 4220, 4280, MKTG4120
- (c) Finance
 - (i) DOTE[DSME]2021 or FINA2020; and
 - (ii) 15 units of FINA courses at 3000 or above level, with no more than three 1-unit FINA courses
- (d) Entrepreneurship
 - (i) MGNT1070, 2070, 3070, 4170; and
 - (ii) two courses selected from: MGNT3080, 4070, 4090, 4130, 4160, 4270, 4570, 4711, 4712, 4713
- (e) Management of International Business
 - (i) MGNT3580, 4150; and
 - (ii) four courses selected from: MGNT3010, 3080, 3100, 4080, 4090, 4110, 4130, 4140, 4510, 4530, 4540, 4550, 4570
- (f) Human Resource Management
 - (i) MGNT2040, 3010; and
 - (ii) four courses selected from: MGNT3040, 3060, 3090, 3100, 4050, 4060, 4080, 4110, 4130, 4140
- (g) Marketing
 - (i) MKTG3010, 3020, 3030, 4040; and
 - (ii) two courses selected from: MKTG3040, 3050, 4010, 4020, 4030, 4050, 4070, 4080, 4090, 4110, 4160, 4200
- (h) Big Data and Quantitative Marketing
 - (i) MKTG3010, 3060, 4080, 4090; and
 - (ii) two courses selected from: MKTG3020, 4030, 4050, 4120, 4150, 4160, 4170, 4180, 4190, 4200
- (i) General Business
 - (i) 3 units of DOTE[DSME]/FINA/MGNT/MKTG courses at 2000 or above level; and
 - (ii) 12 units of DOTE[DSME]/FINA/MGNT/MKTG courses at 3000 or above level, excluding the courses taken for fulfillment of requirement (i), with no more than three 1-unit FINA courses

Total: 56-60

15-18

Explanatory Notes:

1. ACCT/DOTE[DSME]/FINA/IBBA/MGNT/MKTG courses at 2000 and above level (excluding ACCT2111, 2121, IBBA3040, MGNT2511 and 2512) will be included in the calculation of Major GPA for honours classification.

- Double concentrations in Marketing and Big Data and Quantitative Marketing are not 2. allowed.
- 3. DOTE[DSME]2021 and the associated units can be used to satisfy concentration requirements of double concentrations within (a) to (c). MGNT3010 and the associated units can be used to satisfy concentration requirements of double concentrations within (e) and (f).
- Courses taken for the concentration requirements of (i) General Business 4. Concentration cannot be counted towards the requirements of concentrations (a) to (h).
- 5. Students claiming (d) Entrepreneurship Concentration are not allowed to declare Minor in Entrepreneurship and Innovation.
- ACCT2151 and 3151 are mutually exclusive. Students who would like to pursue a [a] career in accounting profession are advised to take ACCT3151 instead of ACCT2151.
- Subject area code "DSME" changed to "DOTE" with effect from 2024-25. []

Explanatory Notes on Mutual Recognition or Exclusion:

DOTE[DSME]2011 and the associated units can be exempted from the requirement 1. of the second degree by successfully completing ENGG2430/ESTR2002 OR ENGG2760/ESTR2018 and ENGG2780/ESTR2020.

Recommended (Course Pattern			
	1 st degree: Bachelor of Engineering (Energy and Environmental Engineering)	Units	2 nd degree: Bachelor of Business Administration (Integrated BBA Programme)	Units
First Year of	1 st term		1 st term	
Attendance	Faculty Package: ENGG1110/ESTR1002	3	Faculty Package: Major Required:	
	Major Required: MATH1510, PHYS1110	3-6	Major Elective(s):	
	Major Elective(s): 2 nd term		2 nd term	
	Faculty Package: ENGG1120/ESTR1005, ENGG1130/ESTR1006	6	Faculty Package: Major Required: Major Elective(s):	
	Major Required: MAEG1020, PHYS1110 Major Elective(s):	3-6		
Second Year of	1 st term		1 st term	
Attendance	Major Required: EEEN2020, ELEG2202, ENGG2720/ESTR2014 Major Elective(s): 2 nd term	8	Faculty Package: DOTE[DSME]1030 Major Required: Major Elective(s): 2 nd term	3
	Major Required: EEEN2040/ESTR2404, ENGG2740/ESTR2016, MAEG2030/ESTR2402, MAEG2601 Major Elective(s)	10	Faculty Package: DOTE[DSME]1040 Major Required: Major Elective(s):	3

	Package):	15	Package):	30-00
	Total (including Faculty	75	Major Elective(s): 2-3 courses Total (including Faculty	6-9 56-60
			Major Required: MGNT4010	3
			2^{nd} term	
			(or 3151), MGNT2512 Major Elective(s): 2-3 courses	6-9
Attendance			Major Required: ACCT2151	3-4
Fifth Year of			1 st term	
			Major Elective(s):	
	Major Elective(s): 2 to 3 courses	5-8	DOTE[DSME]2051, FINA2010, IBBA3040	
	Major Required: EEEN4999	3	Major Required:	7
	2 nd term		2 nd term	
	wajor Elective(s). I course	5	Major Elective(s):	
	MAEG4030/ESTR4412 Major Elective(s): 1 course	3	DOTE[DSME]2011, 2030, MGNT2611	
Attendance	Major Required: EEEN4998,	6	Major Required:	9
Fourth Year of	1 st term		1 st term	
	Major Elective(s): 0 or 1 course	0-3		
	EEEN3030/ESTR3402, MAEG3030	2	Major Required. ACC12121, MKTG2010 Major Elective(s):	0
	^{2nd} term Major Required: EEEN2030,	9	^{2nd} term Major Required: ACCT2121,	6
	2 nd term		Major Elective(s): 2 nd term	
	Major Elective(s): 1 course	3	MGNT2511	-
Attendance	Major Required: ELEG3207, EESC2800	6	Faculty Package: MGNT1020 Major Required: ACCT2111,	3
Third Year of	1 st term		1 st term	
	Major Required: EEEN2602	1		
	Summer session			

Energy and Environmental Engineering Applicable to students admitted in 2024-25

tudents are n . Facu ENC . Fou . Fou . ENC MA . Req a) EEE EEE MA	required to complete a minimum of 75 units of courses as follows: lty Package: GG1110/ESTR1002, ENGG1120/ESTR1005, GG1130/ESTR1006 indation Courses: GG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, TH1510[a], PHYS1110[b] uired Courses: EN2020, 2030, EEEN2040/ESTR2404, EEEN2602,	Units 9 13
. Fact ENC ENC . Fou ENC MA' . Req a) EEE EEE MA	Ilty Package: GG1110/ESTR1002, ENGG1120/ESTR1005, GG1130/ESTR1006 Indation Courses: GG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, TH1510[a], PHYS1110[b] uired Courses:	9
ENC ENC ENC MA' . Req a) EEE EEE MA	GG1110/ESTR1002, ENGG1120/ESTR1005, GG1130/ESTR1006 Endation Courses: GG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, FH1510[a], PHYS1110[b] uired Courses: Endation Courses:	9
ENG MA' . Req a) EEE EEE MA	GG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, FH1510[a], PHYS1110[b] uired Courses:	13
a) EEÉ EEE MA		
	N3030/ESTR3402, EESC2800#, ELEG2202#, 3207#, EG2030/ESTR2402, MAEG2601, 3030, MAEG4030/ESTR4412	33
·	earch Component Courses[c]: N4998, 4999	6
. Elec	tive Courses:	14
É EEE EEE	e Electives (at least 6 units): N3010/ESTR3410, EEEN4020/ESTR4402, N4050/ESTR4422, EEEN4060/ESTR4424, EEEN4070, C4240#, MAEG3050/ESTR3406, MAEG4080/ESTR4420	
CHI EEE 3320 ENC GRI	-core Electives[d]: EM1380, 4280#, CSCI1020, 2040#, CSCI2100#/ESTR2102, EN3020/ESTR3400, EEEN4010/ESTR4400, EN4030/ESTR4404, EESC2020, 2515, 3200#, 3220#, 3230#, 0#, 3600#, 3800#, 4335#, 4340#, 4540#, ELEG3601#, GG1820, ENGG2760/ESTR2018, ENGG2780/ESTR2020, MD2404, 3202#, 3203#, 3403# (or 4403#), 4202#, 4204#, 4401# G401#), MAEG3920, 5120, 5140, 5150, PHYS4420#	
f 12 units o	specialize in any of the three streams by completing a minimum f courses prescribed by that stream. Students may choose not to any stream or to specialize in at most two streams.	

Green Building Technology

EEEN3010/ESTR3410, EEEN3020/ESTR3400, EEEN4070, MAEG3050/ESTR3406, MAEG3920, 5150 Environmental Engineering EEEN4070, EESC2020, 3230, 4240, 4340, GRMD3203, 4202, 4204, MAEG4080/ESTR4420, MAEG5140

Total: 75

In addition to fulfilling the above Major Programme Requirement, students may also challenge themselves by taking the following stream offered by the Faculty:

Engineering Leadership, Innovation, Technology and Entrepreneurship (ELITE) Stream[e]

Elective Courses:

15 units of courses[f]:

- i) 12 units of ESTR courses of which at most 6 units of courses at 1000 or 2000 level and at least 6 units of courses at 3000 or 4000 level[g]
- ii) 3 units of AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/SEEM research postgraduate courses at 5000 level[h]

Explanatory Notes:

- 1. EEEN, ENGG and MAEG courses at 2000 and above level as included in the Major Programme Requirement as well as those labeled as #, and their reciprocal ESTR courses will be included in the calculation of Major GPA for honours classification, excluding courses in Faculty Package and Foundation courses.
- 2. Students satisfying all the requirements of a stream (except the ELITE Stream, which will be officially recorded on the academic transcript) will be given a certifying letter upon request. Further information is available from the Department.
- 3. Students are advised to take some courses in summer sessions to reduce their course load in regular terms.
- [a] i) Non-JUPAS admittees and JUPAS admittees with HKDSE Mathematics Extended Modules I or II are required to attend a Mathematics Placement Test. Students who fail or are absent from the Placement Test will be required to take MATH1020 in the same term when they take MATH1510.
 - ii) JUPAS admittees without HKDSE Mathematics Extended Modules I or II are required to take MATH1020 concurrently with MATH1510.
 - iii) Students who fail MATH1510 in Term 1 will have to retake the course in Term 2. The pre-assigned course, ENGG1130, will also be dropped.
- [b] i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) <u>AND</u> Level 4 or above in Physics <u>or</u> Level 5 or above in Combined Science with Physics Component shall take PHYS1110.
 - ii) Students with HKDSE results but did not attain the academic levels as stated in (i) shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
 - iii) Students without HKDSE results shall sit for the placement test arranged by the Department of Physics. Students who pass the placement test shall take PHYS1110. Students who fail or are absent from the placement test shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
- [c] Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for EEEN4998 and 4999.
- [d] Students are allowed to take a maximum of 3 units from the following elective list: CSCI1020, 2040, CSCI2100/ESTR2102.
- [e] Details of the entrance and coursework requirements, and declaration procedures for

the ELITE Stream can be found at the ELITE website (www.erg.cuhk.edu.hk/erg/elite).

Non-ELITE Engineering students may be allowed to take ESTR courses. Students are required to seek approval from their respective Major Programmes for using ESTR courses taken to fulfill the Major Programme Requirement. Details are available at the ELITE website.

- [f] Students can use up to 9 units of courses which have been taken to fulfill the requirements of items 1 to 4 above to fulfill the elective requirements of the ELITE Stream. Item 3(b) Research Component Courses will not be included in these 9 units. A full list of ESTR courses is available at the ELITE website.
- [g] Students can use AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/SEEM research postgraduate courses at 5000 level to substitute for ESTR courses at 3000 or 4000 level, subject to the approval of the Stream Director and the Associate Dean (Education).
- [h] The requirement of at least 3 units of Engineering courses at 5000 level is a requirement for the ELITE Stream only. It should not be interpreted as a requirement of the Major Programme.

Requirements for admission to the 2nd degree programme

- 1. Admission to the second degree programme is guaranteed if students have:
 - i. fulfilled all graduation requirements of the first degree programme;
 - ii. Major GPA of at least 3.0 upon completion of studies of the first degree programme (ERG); and
 - iii. taken at least 30 relevant units, of which includes ELTU2014, ELTU3014 and mutually recognized courses by both the Engineering and Business Administration Faculties. In addition, students should have achieved a GPA of at least 3.0 in these courses while pursuing the first degree programme. For details of the mutually recognized courses, please refer to the explanatory notes on mutual recognition or exclusion.

Students who do not satisfy the above requirements may still apply for admission to the second degree programme which has discretion to judge the suitability of the students for studying for the second degree through assessments like conducting interview, considering the recommendation from the first degree programme etc.

Upon fulfillment of the requirements of the first degree programme, students can still choose to or not to pursue the second degree programme. If a student decides not to pursue the second degree programme but has fulfilled the requirements of a relevant BBA minor programme, a minor of that BBA programme would be awarded.

2nd Degree: Bachelor of Business Administration (Integrated BBA Programme)

Major Programme Requirement

Students are required to complete a minimum of 56 units of courses as follows:

- 1.
 Faculty Package:
 9

 DOTE1030, 1040, MGNT1020
 9
- 2. Required Courses:

Units

ACCT2111, 2121, 2151 or 3151[a], DOTE2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010

3. Elective Courses (Concentration):

Students must choose at least one concentration and take five or six courses among the courses prescribed under respective concentration area as follows:

- (a) Business Economics
 - (i) DOTE2021, 4110;
 - (ii) two courses selected from: DOTE3000, 3011, 3030, 3050, 3080, 3090, 4040, 4080; and
 - (iii) one DOTEcourse at 3000 or above level, excluding the courses taken for fulfillment of requirement (i) or (ii)
- (b) Business Analytics
 - (i) DOTE2021, 2040, 4020;
 - (ii) one course selected from: DOTE4070, 4240, 4260; and
 - (iii) one course selected from: DOTE3030, 4030, 4110, 4220, 4280, MKTG4120
- (c) Finance
 - (i) DOTE2021 or FINA2020; and
 - (ii) 15 units of FINA courses at 3000 or above level, with no more than three 1-unit FINA courses
- (d) Entrepreneurship
 - (i) MGNT1070, 2070; and
 - (ii) four courses selected from: MGNT3080, 4070, 4090, 4130, 4160, 4170, 4270, 4570, 4711, 4712, 4713
- (e) Management of International Business
 - (i) MGNT3580, 4150; and
 - (ii) four courses selected from: MGNT3010, 3080, 3100, 4080, 4090, 4110, 4130, 4140, 4510, 4530, 4540, 4550, 4570
- (f) Human Resource Management
 - (i) MGNT2040, 3010; and
 - (ii) four courses selected from: MGNT3040, 3060, 3090, 3100, 4050, 4060, 4080, 4110, 4130, 4140
- (g) Marketing
 - (i) MKTG3010, 3020, 3030, 4040; and
 - (ii) two courses selected from: MKTG3040, 3050, 4010, 4020, 4030, 4050, 4070, 4080, 4090, 4110, 4160, 4200
- (h) Big Data and Quantitative Marketing
 - (i) MKTG3010, 3060, 4080, 4090; and
 - (ii) two courses selected from: MKTG3020, 4030, 4050, 4120, 4150, 4160, 4170, 4180, 4190, 4200
- (i) General Business
 - (i) 3 units of DOTE/FINA/MGNT/MKTG courses at 2000 or above level; and
 - (ii) 12 units of DOTE/FINA/MGNT/MKTG courses at 3000 or above level, excluding the courses taken for fulfillment of requirement (i), with no more than three 1-unit FINA courses

Total: 56-60

Explanatory Notes:

1. ACCT/DOTE/FINA/IBBA/MGNT/MKTG courses at 2000 and above level (excluding ACCT2111, 2121, IBBA3040, MGNT2511 and 2512) will be included in the calculation of Major GPA for honours classification.

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- 2. Double concentrations in Marketing and Big Data and Quantitative Marketing are not allowed.
- DOTE2021 and the associated units can be used to satisfy concentration requirements of double concentrations within (a) to (c).
 MGNT3010 and the associated units can be used to satisfy concentration requirements of double concentrations within (e) and (f).
- 4. Courses taken for the concentration requirements of (i) General Business Concentration cannot be counted towards the requirements of concentrations (a) to (h).
- 5. Students claiming (d) Entrepreneurship Concentration are not allowed to declare Minor in Entrepreneurship and Innovation.
- [a] ACCT2151 and 3151 are mutually exclusive. Students who would like to pursue a career in accounting profession are advised to take ACCT3151 instead of ACCT2151.

Explanatory Notes on Mutual Recognition or Exclusion:

1. DOTE2011 and the associated units can be exempted from the requirement of the second degree by successfully completing ENGG2430/ESTR2002 <u>OR</u> ENGG2760/ESTR2018 and ENGG2780/ESTR2020.

Recommended (Recommended Course Pattern				
	1 st degree: Bachelor of Engineering (Energy and Environmental Engineering)	Units	2 nd degree: Bachelor of Business Administration (Integrated BBA Programme)	Units	
First Year of Attendance	1 st term Faculty Package: ENGG1110/ESTR1002 Major Required: MATH1510, PHYS1110 Major Elective(s):	3 3-6	1 st term Faculty Package: Major Required: Major Elective(s):		
	2 nd term Faculty Package: ENGG1120/ESTR1005, ENGG1130/ESTR1006 Major Required: MAEG1020, PHYS1110 Major Elective(s):	6 3-6	2 nd term Faculty Package: Major Required: Major Elective(s):		
Second Year of Attendance	1 st term Major Required: EEEN2020, ELEG2202, ENGG2720/ESTR2014 Major Elective(s):	8	1 st term Faculty Package: DOTE1030 Major Required: Major Elective(s):	3	
	2 nd term Major Required: EEEN2040/ESTR2404, ENGG2740/ESTR2016, MAEG2030/ESTR2402, MAEG2601 Major Elective(s) Summer session	10	2 nd term Faculty Package: DOTE1040 Major Required: Major Elective(s):	3	

	Major Required: EEEN2602	1		
Third Year of	1 st term		1 st term	
Attendance	Major Required: ELEG3207, EESC2800 Major Elective(s): 1 course	6 3	Faculty Package: MGNT1020 Major Required: ACCT2111, MGNT2511 Major Elective(s):	3 4
	2 nd term Major Required: EEEN2030, EEEN3030/ESTR3402, MAEG3030 Major Elective(s): 0 or 1 course	9 0-3	2 nd term Major Required: ACCT2121, MKTG2010 Major Elective(s):	6
Fourth Year of Attendance	1 st term Major Required: EEEN4998, MAEG4030/ESTR4412	6	1 st term Major Required: DOTE2011, 2030, MGNT2611	9
	Major Elective(s): 1 course 2 nd term	3	Major Elective(s): 2 nd term	
	Major Required: EEEN4999 Major Elective(s): 2 to 3 courses	3 5-8	Major Required: DOTE2051, FINA2010, IBBA3040 Major Elective(s):	7
Fifth Year of Attendance			1 st term Major Required: ACCT2151 (or 3151), MGNT2512	3-4
			Major Elective(s): 2-3 courses 2 nd term	6-9
			Major Required: MGNT4010 Major Elective(s): 2-3 courses	3 6-9
	Total (including Faculty Package):	75	Total (including Faculty Package):	56-60

Energy and Environmental Engineering Applicable to students admitted in 2025-26

<u>1st D</u>	egree: Bachelor of Engineering (Energy and Environmental Engineering	<u>g)</u>
Majo	r Programme Requirement	
Stude	nts are required to complete a minimum of 75 units of courses as follows:	Units
1.	Faculty Package: ENGG1110/ESTR1002, ENGG1111, ENGG1120/ESTR1005, ENGG1125/ESTR1007[a]	9
2.	Foundation Courses: ENGG1130/ESTR1006[b], ENGG2740/ESTR2016, MAEG1020, PHYS1110[c]	11
3. (a)	Required Courses: EEEN2020, 2030, EEEN2040/ESTR2404, EEEN2602, EEEN3030/ESTR3402, EEEN4070, EESC2800#, ELEG2202#, 3207#, MAEG2030/ESTR2402, MAEG2601, 3030, MAEG4030/ESTR4412	36
(b)	Research Component Courses[d]: EEEN4998, 4999	6
4.	Elective Courses:	13
(a)	Core Electives (at least 6 units): EEEN3010/ESTR3410, EEEN4020/ESTR4402, EEEN4050/ESTR4422, EEEN4060/ESTR4424, EESC4240#, 4340#, MAEG3050/ESTR3406, MAEG4080/ESTR4420	
(b)	Non-core Electives[e]:CHEM1380, 4280#, CSCI1020, 2040#, CSCI2100#/ESTR2102,EEEN3020/ESTR3400,EEEN4010/ESTR4404, EESC2020, 2515, 3200#, 3220#, 3230#,3320#, 3600#, 3800#, 4335#, 4540#, ELEG3601#, ENGG1820,ENGG2720/ESTR2014,ENGG2780/ESTR2020, GRMD2404, 3202#, 3203#, 3401#, 4202#,4204#, 4403#, MAEG3920, 5120, 5140, 5150, PHYS4420#	
	nts may specialize in any of the three streams by completing a minimum	
	units of courses prescribed by that stream. Students may choose not to alize in any stream or to specialize in at most two streams.	

Green Building Technol	logy				
EEEN3010/ESTR3410,	EEEN3020/EST	R3400, MAEG	3050/EST	R3406,	
MAEG3920, 5150					
Environmental Enginee	ering				
EESC2020, 3230,	4240, 4340,	GRMD3203,	4202,	4204,	
MAEG4080/ESTR4420,	MAEG5140				
				Total:	75
, , ,	· · · · ·	Sidin <i>D</i> 5203,	1202,		75

In addition to fulfilling the above Major Programme Requirement, students may also challenge themselves by taking the following stream offered by the Faculty:

Engineering Leadership, Innovation, Technology and Entrepreneurship (ELITE) Stream[f]

Elective Courses:

15 units of courses[g]:

- i) 12 units of ESTR courses of which at most 6 units of courses at 1000 or 2000 level and at least 6 units of courses at 3000 or 4000 level[h]
- ii) 3 units of AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/SEEM research postgraduate courses at 5000 level[i]

Explanatory Notes:

- 1. EEEN, ENGG and MAEG courses at 2000 and above level as included in the Major Programme Requirement as well as those labeled as #, and their reciprocal ESTR courses will be included in the calculation of Major GPA for honours classification, excluding courses in Faculty Package and Foundation courses.
- 2. Students satisfying all the requirements of a stream (except the ELITE Stream, which will be officially recorded on the academic transcript) will be given a certifying letter upon request. Further information is available from the Department.
- 3. Students are advised to take some courses in summer sessions to reduce their course load in regular terms.
- [a] i) JUPAS admittees without HKDSE Mathematics Extended Modules I or II are required to take ENGG1040 before they can take ENGG1125.
 - ii) JUPAS admittees with the following HKDSE results do not need to take ENGG1040 and therefore will not be invited for the Mathematics Placement Test:
 - Level 5** in Mathematics Extended Module I; or
 - Level 5* or above in Mathematics Extended Module II.
 - iii) Non-JUPAS admittees with the following public examination results do not need to take ENGG1040 and therefore will not be invited for the Mathematics Placement Test:
 - Grade 6 or above in IB Mathematics Analysis and Approaches (HL); or
 - Grade 7 in IB Mathematics Applications and Interpretation (HL); or
 - Grade A* in GCE-AL Further Mathematics.
 - iv) Other admittees except those specified above, are required to attend a Mathematics Placement Test. Students who fail or are absent from the Placement Test will be required to take ENGG1040 before they can take ENGG1125.
- [b] Students who fail ENGG1125 in Term 1 will have to retake the course in Term 2. The pre-assigned ENGG1130 in Term 2, will therefore be dropped.
- [c] i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) <u>AND</u> Level 4 or above in Physics <u>or</u> Level 5 or above in Combined Science with Physics Component shall take PHYS1110.
 - ii) Students with HKDSE results but did not attain the academic levels as stated

in (i) shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.

- iii) Students without HKDSE results shall sit for the placement test arranged by the Department of Physics. Students who pass the placement test shall take PHYS1110. Students who fail or are absent from the placement test shall take PHYS1003 in advance. PHYS1003 will be counted as a free elective but cannot be used to fulfill the Foundation course requirements.
- [d] Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for EEEN4998 and 4999.
- [e] Students are allowed to take a maximum of 3 units from the following elective list: CSCI1020, 2040, CSCI2100/ESTR2102.
- [f] Details of the entrance and coursework requirements, and declaration procedures for he found the ELITE website the ELITE Stream can at (www.erg.cuhk.edu.hk/erg/elite). Non-ELITE Engineering students may be allowed to take ESTR courses. Students are required to seek approval from their respective Major Programmes for using ESTR courses taken to fulfill the Major Programme Requirement. Details are available at the ELITE website.
- [g] Students can use up to 9 units of courses which have been taken to fulfill the requirements of items 1 to 4 above to fulfill the elective requirements of the ELITE Stream. Item 3(b) Research Component Courses will not be included in these 9 units. A full list of ESTR courses is available at the ELITE website.
- [h] Students can use AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/ SEEM research postgraduate courses at 5000 level to substitute for ESTR courses at 3000 or 4000 level, subject to the approval of the Stream Director and the Associate Dean (Education).
- [i] The requirement of at least 3 units of Engineering courses at 5000 level is a requirement for the ELITE Stream only. It should not be interpreted as a requirement of the Major Programme.

Requirements for admission to the 2nd degree programme

- 1. Admission to the second degree programme is guaranteed if students have:
 - i. fulfilled all graduation requirements of the first degree programme;
 - ii. Major GPA of at least 3.0 upon completion of studies of the first degree programme (ERG); and
 - iii. taken at least 30 relevant units, of which includes ELTU2014, ELTU3014 and mutually recognized courses by both the Engineering and Business Administration Faculties. In addition, students should have achieved a GPA of at least 3.0 in these courses while pursuing the first degree programme. For details of the mutually recognized courses, please refer to the explanatory notes on mutual recognition or exclusion.

Students who do not satisfy the above requirements may still apply for admission to the second degree programme which has discretion to judge the suitability of the students for studying for the second degree through assessments like conducting interview, considering the recommendation from the first degree programme etc.

Upon fulfillment of the requirements of the first degree programme, students can still choose to or not to pursue the second degree programme. If a student decides not to pursue the second degree programme but has fulfilled the requirements of a relevant BBA minor programme, a minor of that BBA programme would be awarded.

2nd Degree: Bachelor of Business Administration (Integrated BBA Programme)

Major Programme Requirement

Students are required to complete a minimum of 56 units of courses as follows:

- 1. Faculty Package: DOTE1030, 1040, MGNT1020
- 2. Required Courses: 32-33 ACCT2111, 2121, 2151 or 3151[a], DOTE2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010

Units

9

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3. Elective Courses (Concentration):

Students must choose at least one concentration and take five or six courses among the courses prescribed under respective concentration area as follows:

- (a) Business Economics
 - (i) DOTE2021, 4110;
 - (ii) two courses selected from: DOTE3000, 3011, 3030, 3050, 3080, 3090, 4040, 4080; and
 - (iii) one DOTEcourse at 3000 or above level, excluding the courses taken for fulfillment of requirement (i) or (ii)
- (b) Business Analytics
 - (i) DOTE2021, 2040, 4020;
 - (ii) one course selected from: DOTE3010, 4070, 4240, 4260; and
 - (iii) one course selected from: DOTE3030, 4030, 4110, 4220, 4280, MKTG4120
- (c) Finance
 - (i) DOTE2021 or FINA2020; and
 - (ii) 15 units of FINA courses at 3000 or above level with no more than three 1-unit FINA courses, or DOTE3010
- (d) Entrepreneurship
 - (i) MGNT1070, 2070; and
 - (ii) four courses selected from: DOTE3010, MGNT3080, 4070, 4090, 4130, 4160, 4170, 4270, 4570, 4711, 4712, 4713
- (e) Management of International Business
 - (i) MGNT3580, 4150; and
 - (ii) four courses selected from: DOTE3010, MGNT3010, 3080, 3100, 4080, 4090, 4110, 4130, 4140, 4510, 4530, 4540, 4550, 4570
- (f) Human Resource Management
 - (i) MGNT2040, 3010; and
 - (ii) four courses selected from: DOTE3010, MGNT3040, 3060, 3090, 3100, 4050, 4060, 4080, 4110, 4130, 4140
- (g) Marketing
 - (i) MKTG3010, 3020, 3030, 4040; and
 - (ii) two courses selected from: MKTG3040, 3050, 4010, 4020, 4030, 4050, 4070, 4080, 4090, 4110, 4160, 4200
- (h) Big Data and Quantitative Marketing
 - (i) MKTG3010, 3060, 4080, 4090; and
 - (ii) two courses selected from: MKTG3020, 4030, 4050, 4120, 4150,

4160, 4170, 4180, 4190, 4200

- (i) General Business
 - (i) 3 units of DOTE/FINA/MGNT/MKTG courses at 2000 or above level; and
 - (ii) 12 units of DOTE/FINA/MGNT/MKTG courses at 3000 or above level, excluding the courses taken for fulfillment of requirement (i), with no more than three 1-unit FINA courses

Total: 56-60

Explanatory Notes:

- 1. ACCT/DOTE/FINA/IBBA/MGNT/MKTG courses at 2000 and above level (excluding ACCT2111, 2121, IBBA3040, MGNT2511 and 2512) will be included in the calculation of Major GPA for honours classification.
- 2. Double concentrations in Marketing and Big Data and Quantitative Marketing are not allowed.
- DOTE2021 and the associated units can be used to satisfy concentration requirements of double concentrations within (a) to (c).
 MGNT3010 and the associated units can be used to satisfy concentration

requirements of double concentrations within (e) and (f).

- 4. Courses taken for the concentration requirements of (i) General Business Concentration cannot be counted towards the requirements of concentrations (a) to (h).
- 5. Students claiming (d) Entrepreneurship Concentration are not allowed to declare Minor in Entrepreneurship and Innovation.
- [a] ACCT2151 and 3151 are mutually exclusive. Students who would like to pursue a career in accounting profession are advised to take ACCT3151 instead of ACCT2151.

Explanatory Notes on Mutual Recognition or Exclusion:

1. DOTE2011 and the associated units can be exempted from the requirement of the second degree by successfully completing ENGG2430/ESTR2002 <u>OR</u> ENGG2760/ESTR2018 and ENGG2780/ESTR2020.

Keeommended				
	1 st degree: Bachelor of Engineering (Energy and Environmental Engineering)	Units	2 nd degree: Bachelor of Business Administration (Integrated BBA Programme)	Units
First Year of Attendance	1 st term Faculty Package: ENGG1110/ESTR1002, ENGG1111, ENGG1125/ESTR1007 Major Required: PHYS1110 Major Elective(s):	6 0-3	1 st term Faculty Package: Major Required: Major Elective(s):	
	2 nd term Faculty Package: ENGG1120/ESTR1005 Major Required: ENGG1130/ESTR1006, MAEG1020, PHYS1110 Major Elective(s):	3 6-9	2 nd term Faculty Package: Major Required: Major Elective(s):	

Recommended Course Pattern

Second Year of	1 st term		1 st term	
Attendance	Major Required: EEEN2020, ELEG2202	6	Faculty Package: DOTE1030 Major Required: Major Elective(s):	3
	Major Elective(s): 1 course	3		
	2 nd term		2 nd term	
	Major Required: EEEN2040/ESTR2404, ENGG2740/ESTR2016, MAEG2030/ESTR2402, MAEG2601 Major Elective(s)	10	Faculty Package: DOTE1040 Major Required: Major Elective(s):	3
	Summer session			
	Major Required: EEEN2602	1		
Third Year of	1 st term		1 st term	
Attendance	Major Required: ELEG3207, EESC2800 Major Elective(s): 1 course	6 3	Faculty Package: MGNT1020 Major Required: ACCT2111, MGNT2511	3 4
	2 nd term		Major Elective(s): 2 nd term	
	Major Required: EEEN2030, EEEN3030/ESTR3402, MAEG3030	9	Major Required: ACCT2121, MKTG2010 Major Elective(s):	6
Fourth Year of	Major Elective(s): 0 or 1 course	0-3	1 st term	
Attendance	Major Required: EEEN4998, MAEG4030/ESTR4412	6	Major Required: DOTE2011, 2030, MGNT2611	9
	Major Elective(s): 1 course	3	Major Elective(s):	
	2 nd term		2 nd term	
	Major Required: EEEN4070, 4999 Major Electiva(a): 1.2 course(a)	6 2-5	Major Required: DOTE2051, FINA2010, IBBA3040	7
Fifth Year of	Major Elective(s): 1-2 course(s)	2-3	Major Elective(s): 1 st term	
Attendance			Major Required: ACCT2151 (or 3151), MGNT2512	3-4
			Major Elective(s): 2-3 courses 2 nd term	6-9
			Major Required: MGNT4010	3
			Major Elective(s): 2-3 courses	6-9
	Total (including Faculty Package):	75	Total (including Faculty Package):	56-60