Electronic Engineering
Applicable to students admitted in 2021-22

Major Programme Requirement

Students 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:	18
(a)	ELEG2700	
(b)	6 units of Physics Courses: ENGG1310/ESTR1003, PHYS1110 (or 1003)[a]	
(c)	9 units of Mathematics Courses: ENGG2720/ESTR2014, ENGG2740/ESTR2016, ENGG2760/ESTR2018, MATH1510[b]	
3.	Required Courses:	
(a)	CSCI1120, ELEG2201, 2202, ELEG2310/ESTR2300, ELEG2601, 2602, ELEG3201/ESTR3200, ELEG3213/ESTR3214, ENGG2030/ESTR2206#	24
(b)	Research Component Courses[c]: ELEG4998, 4999	6
4.	Elective Courses (at least 6 units at 4000 level) [d]: CENG4120#, CSCI2100/ESTR2102, CSCI2120, 3320#, EEEN4020#/ESTR4402#, ELEG3103/ESTR3216, ELEG3202, 3207, 3214, ELEG3301/ESTR3204, ELEG3302, ELEG3303/ESTR3206, ELEG3503, 3601, 3701, 3710, 3810, 3910, 4211, ELEG4214/ESTR4222, ELEG4215, 4216, ELEG4311/ESTR4216, ELEG4312, ELEG4511/ESTR4218, ELEG4512, 4701, ENGG3802, 3803, IERG3310#/ESTR3310#, SEEM2440/ESTR2500 (or DSME1030)[e]	18
	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[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 BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level[i]

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. ELEG and ENGG 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. Results of the graduation project as prescribed by ELEG4999/ESTR4999 will be included in the calculation for honours classification.
4. Guidance in course selection:
   Students who wish to pursue their career goals as a professional engineer, research scientist, or engineering entrepreneur may take the elective courses as recommended below:

   Professional Engineering
   a) Elective course: ELEG3710
   b) ELEG4998 and 4999[c] in a topic of professional engineering nature

   Research
   a) Elective courses: ELEG3910
   b) ELEG4998 and 4999[c] in a topic of research nature

   Entrepreneurship
   a) Elective course: ENGG3802 and 3803
   b) ELEG4998 and 4999[c] in a topic of entrepreneurship nature (related to the project chosen for ENGG3803)

[a] Students are required to take either PHYS1003 or 1110 to fulfill the Foundation course (Physics) requirements in accordance with students' HKDSE results or placement test results as follows:
   i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) AND Level 4 or above in Physics or 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.
   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.

[b] 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.

[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 ELEG4998 and 4999.

[d] Students can use BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level to substitute for elective courses listed in the Major Programme Requirement at 3000 or 4000 level, subject to the approval of the Chairman of Departmental Curriculum Committee and the Department Chairman.

[e] Students can take either one of the courses but not both.

[f] 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/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 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).

[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.

	Recommended Course Pattern	Units
First Year of Attendance	1st term Faculty Package: ENGG1110/ESTR1002 Major Required: ELEG2201, MATH1510, PHYS1110 (or 1003)	 3 9
	2nd term Faculty Package: ENGG1120/ESTR1005, ENGG1130/ESTR1006 Major Required: ENGG1310/ESTR1003 Major Elective(s):	 6 3
	Summer session Major Required: ELEG2602	 1
Second Year of Attendance	1st term Major Required: CSCI1120, ELEG2202, 2700, ENGG2720/ ESTR2014, ENGG2760/ESTR2018 Major Elective(s):	13
	2nd term Major Required: ELEG3201/ESTR3200, ENGG2030/ESTR2206, ENGG2740/ESTR2016 Major Elective(s):	8
Third Year of Attendance	1st term Major Required: ELEG2310/ESTR2300, ELEG2601, ELEG3213/ESTR3214 Major Elective(s): 1 course	8 3
	2nd term Major Required: Major Elective(s): 3 courses	 9
Fourth Year of Attendance	1st term Major Required: ELEG4998 Major Elective(s): 2 courses	 3 6
	2nd term Major Required: ELEG4999 Major Elective(s):	 3
	Total (including Faculty Package):	**75**

Major Programme Requirement (for Associate Degree holders admitted to senior-year

places)

Students are required to complete a minimum of 55 units of courses as follows:

		Units
1.	Faculty Package: ENGG1130/ESTR1006	3
2.	Foundation Courses: ELEG2700, ENGG2720/ESTR2014, ENGG2740/ESTR2016	7
3.	Required Courses:	
(a)	CSCI1120, ELEG2310/ESTR2300, ELEG2601, 2602, ELEG3201/ESTR3200, ELEG3213/ESTR3214, ENGG2030/ESTR2206#	18
(b)	Research Component Courses[a]: ELEG4998, 4999	6
4.	Elective Courses (at least 6 units at 4000 level) [b]: CENG4120#, CSCI2100/ESTR2102, CSCI2120, 3320#, EEEN4020#/ESTR4402#, ELEG3103/ESTR3216, ELEG3202, 3207, 3214, ELEG3301/ESTR3204, ELEG3302, ELEG3303/ESTR3206, ELEG3503, 3601, 3701, 3710, 3810, 3910, 4211, ELEG4214/ESTR4222, ELEG4215, 4216, ELEG4311/ESTR4216, ELEG4312, ELEG4511/ESTR4218, ELEG4512, 4701, ENGG3802, 3803, IERG3310#/ESTR3310#, SEEM2440/ESTR2500 (or DSME1030)[c]	21
	Total:	**55**

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[d]
Elective Courses:
15 units of courses[e]:

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[f]
ii) 3 units of BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level[g]

Explanatory Notes:

1. ELEG and ENGG 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.
2. Results of the graduation project as prescribed by ELEG4999/ESTR4999 will be included in the calculation for honours classification.
3. Guidance in course selection:
   Students who wish to pursue their career goals as a professional engineer, research scientist, or engineering entrepreneur may take the elective courses as recommended below:
   Professional Engineering
   a) Elective course: ELEG3710
   b) ELEG4998 and 4999[a] in a topic of professional engineering nature
   Research
   a) Elective courses: ELEG3910
   b) ELEG4998 and 4999[a] in a topic of research nature
   Entrepreneurship
   a) Elective course: ENGG3802 and 3803

b) ELEG4998 and 4999[a] in a topic of entrepreneurship nature (related to the project chosen for ENGG3803)

[a] Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for ELEG4998 and 4999.

[b] Students can use BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level to substitute for elective courses listed in the Major Programme Requirement at 3000 or 4000 level, subject to the approval of the Chairman of Departmental Curriculum Committee and the Department Chairman.

[c] Students can take either one of the courses but not both.

[d] 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/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.

[e] 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.

[f] 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).

[g] 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.

	Recommended Course Pattern (for Associate Degree holders admitted to senior-year places)	Units
First Year of Attendance	1st term Faculty Package: Major Required: CSCI1120, ELEG2310/ESTR2300, ELEG2700, ENGG2720/ESTR2014 Major Elective(s): 1 course	 11 3
	2nd term Faculty Package: ENGG1130/ESTR1006 Major Required: ELEG3201/ESTR3200, ENGG2030/ESTR2206, ENGG2740/ESTR2016 Major Elective(s): 1 course	 3 8 3
	Summer session Major Required: ELEG2602	 1
Second Year of Attendance	1st term Major Required: ELEG2601, ELEG3213/ESTR3214, ELEG4998 Major Elective(s): 2 courses	 8 6
	2nd term Major Required: ELEG4999 Major Elective(s): 3 courses	 3 9
	Total (including Faculty Package):	**55**

Major Programme Requirement (for Higher Diploma holders admitted to senior-year places)

Students are required to complete a minimum of 52 units of courses as follows:

		Units
1.	Faculty Package: ENGG1130/ESTR1006	3
2.	Foundation Courses: ELEG2700, ENGG2720/ESTR2014, ENGG2740/ESTR2016	7
3.	Required Courses:	
(a)	CSCI1120, ELEG2310/ESTR2300, ELEG2601, 2602, ELEG3201/ESTR3200, ELEG3213/ESTR3214, ENGG2030/ESTR2206#	18
(b)	Research Component Courses[a]: ELEG4998, 4999	6
4.	Elective Courses (at least 6 units at 4000 level) [b]: CENG4120#, CSCI2100/ESTR2102, CSCI2120, 3320#, EEEN4020#/ESTR4402#, ELEG3103/ESTR3216, 3202, 3207, 3214, ELEG3301/ESTR3204, ELEG3302, ELEG3303/ESTR3206, ELEG3503, 3601, 3701, 3710, 3810, 3910, 4211, ELEG4214/ESTR4222, ELEG4215, 4216, ELEG4311/ESTR4216, ELEG4312, ELEG4511/ESTR4218, ELEG4512, 4701, ENGG3802, 3803, IERG3310#/ESTR3310#, SEEM2440/ESTR2500 (or DSME1030)[c]	18
	Total:	**52**

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[d]
Elective Courses:
15 units of courses[e]:

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[f]
ii) 3 units of BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level[g]

Explanatory Notes:

1. ELEG and ENGG 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.
2. Results of the graduation project as prescribed by ELEG4999/ESTR4999 will be included in the calculation for honours classification.
3. Guidance in course selection:
   Students who wish to pursue their career goals as a professional engineer, research scientist, or engineering entrepreneur may take the elective courses as recommended below:
   Professional Engineering
   a) Elective course: ELEG3710
   b) ELEG4998 and 4999[b] in a topic of professional engineering nature
   Research
   a) Elective courses: ELEG3910
   b) ELEG4998 and 4999[b] in a topic of research nature
   Entrepreneurship
   a) Elective course: ENGG3802 and 3803
   b) ELEG4998 and 4999[b] in a topic of entrepreneurship nature (related to the project chosen for ENGG3803)

[a] Students who have declared to specialize in the ELITE Stream will be required to complete

6 units of ESTR4998 and 4999 to substitute for ELEG4998 and 4999.

[b] Students can use BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level to substitute for elective courses listed in the Major Programme Requirement at 3000 or 4000 level, subject to the approval of the Chairman of Departmental Curriculum Committee and the Department Chairman.

[c] Students can take either one of the courses but not both.

[d] 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/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.

[e] 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.

[f] 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).

[g] 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.

	Recommended Course Pattern (for Higher Diploma holders admitted to senior-year places)	Units
First Year of Attendance	1st term Faculty Package: Major Required: CSCI1120, ELEG2310/ESTR2300, ELEG2700, ENGG2720/ESTR2014 Major Elective(s):	11
	2nd term Faculty Package: ENGG1130/ESTR1006 Major Required: ELEG3201/ESTR3200, ENGG2030/ESTR2206, ENGG2740/ESTR2016 Major Elective(s): 1 course	3 8 3
	Summer session Major Required: ELEG2602	1
Second Year of Attendance	1st term Major Required: ELEG2601, ELEG3213/ESTR3214, ELEG4998 Major Elective(s): 2 courses	8 6
	2nd term Major Required: ELEG4999 Major Elective(s): 3 courses	3 9
	Total (including Faculty Package):	**52**

Bachelor of Engineering (Electronic Engineering) and Bachelor of Business Administration (Integrated BBA Programme) Double Degree Option

1st Degree: Bachelor of Engineering (Electronic Engineering)

Major Programme Requirement

Students 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:	18
(a)	ELEG2700	
(b)	6 units of Physics Courses: ENGG1310/ESTR1003, PHYS1110 (or 1003)[a]	
(c)	9 units of Mathematics Courses: ENGG2720/ESTR2014, ENGG2740/ESTR2016, ENGG2760/ESTR2018, MATH1510[b]	
3.	Required Courses:	
(a)	CSCI1120, ELEG2201, 2202, ELEG2310/ESTR2300, ELEG2601, 2602, ELEG3201/ESTR3200, ELEG3213/ESTR3214, ENGG2030/ESTR2206#	24
(b)	Research Component Courses[c]: ELEG4998, 4999	6
4.	Elective Courses (at least 6 units at 4000 level) [d]: CENG4120#, CSCI2100/ESTR2102, CSCI2120, 3320#, EEEN4020#/ESTR4402#, ELEG3103/ESTR3216, ELEG3202, 3207, 3214, ELEG3301/ESTR3204, ELEG3302, ELEG3303/ESTR3206, ELEG3503, 3601, 3701, 3710, 3810, 3910, 4211, ELEG4214/ESTR4222, ELEG4215, 4216, ELEG4311/ESTR4216, ELEG4312, ELEG4511/ESTR4218, ELEG4512, 4701, ENGG3802, 3803, IERG3310#/ESTR3310#, SEEM2440/ESTR2500 (or DSME1030) [e]	18
	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[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 BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level[i]

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. Students are advised to take some courses of the University Core Requirements or Major courses in summer sessions to reduce their course load in regular terms.
3. ELEG and ENGG 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.

4. Results of the graduation project as prescribed by ELEG4999/ESTR4999 will be included in the calculation for honours classification.

5. Guidance in course selection:
Students who wish to pursue their career goals as a professional engineer, research scientist, or engineering entrepreneur may take the elective courses as recommended below:

Professional Engineering

a) Elective course: ELEG3710
b) ELEG4998 and 4999[c] in a topic of professional engineering nature

Research

a) Elective courses: ELEG3910
b) ELEG4998 and 4999[c] in a topic of research nature

Entrepreneurship

a) Elective course: ENGG3802 and 3803
b) ELEG4998 and 4999[c] in a topic of entrepreneurship nature (related to the project chosen for ENGG3803)

[a] Students are required to take either PHYS1003 or 1110 to fulfill the Foundation course (Physics) requirements in accordance with students' HKDSE results or placement test results as follows:

i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) AND Level 4 or above in Physics or 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.
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.

[b] 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.

[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 ELEG4998 and 4999.

[d] Students can use BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level to substitute for elective courses listed in the Major Programme Requirement at 3000 or 4000 level, subject to the approval of the Chairman of Departmental Curriculum Committee and the Department Chairman.

[e] Students can take either one of the courses but not both.

[f] 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/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 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).

[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:

		Units
1.	Faculty Package: DSME1030, 1040, MGNT1020	9
2.	Required Courses: ACCT2111, 2121, 2151 or 3151[a], DSME2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611,4010, MKTG2010	32-33
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:	15-18

(a) Business Economics
   (i) DSME2021, 4110;
   (ii) two courses selected from: DSME3000, 3011, 3030, 3050, 3080, 3090, 4040, 4080; and
   (iii) one DSME course at 3000 or above level, excluding the courses taken for fulfillment of requirement (i) or (ii)

(b) Business Analytics
   (i) DSME2021, 2040, 4020;
   (ii) one course selected from: DSME4070, 4240, 4260; and
   (iii) one course selected from: DSME3030, 4030, 4110, 4220, 4280,

MKTG4120

(c) Finance
  (i) DSME2021 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: MGNT4070, 4090, 4130, 4270, 4570

(e) Management of International Business
  (i) MGNT3080, 3580, 4150; and
  (ii) three courses selected from: MGNT3010, 3100, 4080, 4090, 4130, 4140, 4510, 4530, 4540, 4550, 4570, 4600, 4620

(f) Human Resource Management
  (i) MGNT2040, 3010, 3090; and
  (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 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 DSME/FINA/MGNT/MKTG courses at 2000 or above level; and
  (ii) 12 units of 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/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. DSME2021 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 General Business Concentration cannot be counted towards the requirements of concentrations(a) to (h).
5. Students claiming Entrepreneurship Concentration are not allowed to declare Minor in Entrepreneurship and Innovation.

[a] ACCT2151 and ACCT3151 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. DSME1030 and the associated units can be used to satisfy both the requirements of the first and second degrees.
2. DSME2011 and the associated units can be exempted from the requirement of the second degree by successfully completing ENGG2450/ESTR2005 OR ENGG2760/ESTR2018 and ENGG2780/ESTR2020.

3. DSME4140 and the associated units can be exempted from the requirement of the second degree by successfully completing IERG3310/ESTR3310.

Recommended Course Pattern				
	1st degree: Bachelor of Engineering (Electronic Engineering)	Units	**2nd degree: Bachelor of Business Administration (Integrated BBA Programme)**	Units
First Year of Attendance	1st term Faculty Package: ENGG1110/ ESTR1002 Major Required: MATH1510, PHYS1110 (or 1003) Major Elective(s): ELEG2201	 3 6 3	1st term Faculty Package: Major Required: Major Elective(s):	
	2nd term Faculty Package: ENGG1120/ ESTR1005, ENGG1130/ ESTR1006 Major Required: ENGG1310/ ESTR1003 Major Elective(s):	 6 3	2nd term Faculty Package: Major Required: Major Elective(s):	
	Summer session Major Required: ELEG2602	 1	Summer session Faculty Package: DSME1030/ 1040	3
Second Year of Attendance	1st term Major Required: CSCI1120, ELEG2202, 2700, ENGG2720/ ESTR2014, ENGG2760/ ESTR2018 Major Elective(s):	 13	1st term Faculty Package: DSME1030/ 1040 Major Required: Major Elective(s):	3
	2nd term Major Required: ELEG3201/ ESTR3200, ENGG2030/ ESTR2206, ENGG2740/ ESTR2016 Major Elective(s):	 8	2nd term Major Required: Major Elective(s):	
			Summer session Faculty Package: MGNT1020	3
Third Year of Attendance	1st term Major Required: ELEG2310/ ESTR2300, ELEG2601, ELEG3213/ESTR3214 Major Elective(s): 1 course	 8 3	1st term Major Required/Major Elective(s):	1-2
	2nd term Major Required: Major Elective(s): 3 courses	 9	2nd term Major Required/Major Elective(s):	9
Fourth Year of Attendance	1st term Major Required: ELEG4998 Major Elective(s): 2 courses	 3 6	1st term Major Required/Major Elective(s):	6
	2nd term Major Required: ELEG4999 Major Elective(s):	 3	2nd term Major Required/Major Elective(s):	6

Fifth Year of Attendance			1st term Major Required/Major Elective(s):	12-15
			2nd term Major Required/Major Elective(s):	13
Total (including Faculty Package):		**75**	**Total (including Faculty Package):**	**56-60**

Minor Programme Title
Electronic Engineering

Minor Programme Requirement

Students are required to complete a minimum of 18 units of courses as follows:

		Units
1.	Required Courses: ELEG2201, 2202[a], ENGG2030/ESTR2206	9
2.	Elective Courses (at least 6 units at 4000 level): ELEG2310/ESTR2300, ELEG3103/ESTR3216, ELEG3201/ESTR3200, ELEG3202, 3207, ELEG3213/ESTR3214, ELEG3214, ELEG3301/ESTR3204, ELEG3302, ELEG3303/ESTR3206, ELEG3503, 3601, 3701, 3710, 3810, 4211, ELEG4214/ESTR4222, ELEG4215, 4216, ELEG4311/ESTR4216, ELEG4312, ELEG4511/ESTR4218, ELEG4512, 4701, ENGG3802, 3803	9
	Total:	**18**

Explanatory Note:

[a] BMEG2300 is equivalent to ELEG2202.

Course List

Course Code	*Course Title*	*Unit(s)*
ELEG2201	Digital Circuits and Computing Systems	3
ELEG2202	Fundamentals of Electric Circuits	3
ELEG2310	Principles of Communication Systems	3
ELEG2601	Technology, Society and Engineering Practice	2
ELEG2602	Engineering Practicum	1
ELEG2700	Introduction to Electronic System Design	3
ELEG3103	Robotic Perception and Intelligence	3
ELEG3201	Microelectronic Devices and Circuits	3
ELEG3202	Analog Integrated Circuits	3
ELEG3207	Introduction to Power Electronics	3
ELEG3213	Fundamentals of Applied Electromagnetics	3
ELEG3214	Antennas and Wave Propagation for Wireless Communications	3
ELEG3301	Principles of Semiconductor Devices	3
ELEG3302	Fundamentals of Photonics	3
ELEG3303	Introduction to Optical Communications	3
ELEG3503	Introduction to Digital Signal Processing	3
ELEG3601	Introduction to Electric Power Systems	3
ELEG3701	Embedded Systems Design	3

ELEG3710	Electronic Product Design and Development	3
ELEG3810	Integrated Design of Mobile Applications with Sensors and Actuators	3
ELEG3910	Undergraduate Research in Electronic Engineering	2
ELEG4211	CMOS Digital Integrated Circuits Design	3
ELEG4214	RF Circuits for Wireless Systems	3
ELEG4215	Power Converter Circuits	3
ELEG4216	Design Methodology of Modern Digital Circuits	3
ELEG4311	Physics and Technology of Semiconductor Devices	3
ELEG4312	Micro-optic Devices and Systems	3
ELEG4511	Digital Signal Processing and Applications	3
ELEG4512	Digital Image Processing	3
ELEG4701	Intelligent Interactive Robots Practice	3
ELEG4998	Final Year Project I	3
ELEG4999	Final Year Project II	3
ENGG1310	Engineering Physics: Electromagnetics, Optics and Modern Physics	3
ENGG2030	Signals and Systems	3
ENGG2720	Complex Variables for Engineers	2
ENGG2740	Differential Equations for Engineers	2
ENGG2760	Probability for Engineers	2
ENGG3802	Introduction to Engineering Entrepreneurship	1
ENGG3803	Engineering Entrepreneurship Development Project	2
ESTR1003	Engineering Physics: Electromagnetics, Optics and Modern Physics	3
ESTR2014	Complex Variables for Engineers	2
ESTR2016	Differential Equations for Engineers	2
ESTR2018	Probability for Engineers	2
ESTR2206	Signals and Systems	3
ESTR2300	Principles of Communication Systems	3
ESTR3200	Microelectronic Devices and Circuits	3
ESTR3204	Principles of Semiconductor Devices	3
ESTR3206	Introduction to Optical Communications	3
ESTR3214	Fundamentals of Applied Electromagnetics	3
ESTR3216	Robotic Perception and Intelligence	3
ESTR4216	Physics and Technology of Semiconductor Devices	3
ESTR4218	Digital Signal Processing and Applications	3
ESTR4222	RF Circuits for Wireless Systems	3