**Mechanical and Automation Engineering**
**Applicable to students admitted in 2021-22**

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

**1st Degree: Bachelor of Engineering (Mechanical and Automation Engineering)**

**Major Programme Requirement**

Students are required to complete a minimum of 75 units of courses as follows:

| | | Units |
|---|---|---|
| 1. | Faculty Package:<br>ENGG1110/ESTR1002, ENGG1120/ESTR1005, ENGG1130/ESTR1006 | 9 |
| 2. | Foundation Courses:<br>ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, MATH1510[a], PHYS1110[b] | 13 |
| 3. | Required Courses: | |
| (a) | EEEN3030/ESTR3402, ELEG2202#, MAEG2020/ESTR2400, MAEG2030/ESTR2402, MAEG2601, 2602, 3010, MAEG3020/ESTR3404, MAEG3030, 3040, MAEG3050/ESTR3406, MAEG4030/ESTR4412 | 33 |
| (b) | Research Component Courses[c]:<br>MAEG4998, 4999 | 6 |
| 4. | Elective Courses (at least 6 units of MAEG courses at 4000 and above level or their reciprocal ESTR courses or ENGG courses at 5000 level): | 14 |
| (a) | Breadth Electives (at least 6 units chosen from the following courses):<br>BMEG3420#, CSCI1020, 2040#, CSCI2100#/ESTR2102, CSCI2120#, 3170#, DOTE[DSME]1030, EEEN2020, ELEG2401#, 3101#, ENGG1820, ENGG2020/ESTR2104, ENGG2760/ESTR2018, ENGG2780/ESTR2020, ENGG5404, MAEG1010, 2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, 5080, 5120, 5130, 5140, 5160, MGNT1020, 4090, SEEM3450#/ESTR3502, SEEM3490#, 3500# | |
| (b) | Depth Electives (at least 6 units chosen from the following courses):<br>EEEN4010/ESTR4400, EEEN4020/ESTR4402, EEEN4030/ESTR4404, EEEN4050/ESTR4422, EEEN4060/ESTR4424, ENGG5402, 5403, 5405, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4040/ESTR4414, MAEG4050/ESTR4416, MAEG4060, | |

MAEG4070/ESTR4418, MAEG4080/ESTR4420, MAEG5030, 5060, 5070, 5090, 5110, 5150

**Streams**

Students may choose not to specialize in any stream or to specialize in one of the three streams by completing a minimum of 12 units of courses prescribed by the stream.

**Design and Manufacturing**

(a) Required Courses:
CSCI1020

(b) Elective Courses:
ENGG5404, 5405, MAEG2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4060, MAEG4070/ESTR4418, MAEG5030, 5120, 5130, 5160, SEEM3500

**Mechatronics**

(a) Required Courses:
CSCI1020, MAEG4040/ESTR4414, MAEG4050/ESTR4416

(b) Elective Courses:
ELEG2401, ENGG2020/ESTR2104, ENGG5404, MAEG2050, 3080, 5080

**Robotics and Automation**

(a) Required Courses:
CSCI1020, MAEG3060/ESTR3408, MAEG4050/ESTR4416

(b) Elective Courses:
BMEG3420, ENGG5402, 5403, 5404, MAEG1010, 2050, MAEG4010/ESTR4408, MAEG5090, 5120

**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**[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. 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) 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 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 MAEG4998 and 4999.

[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/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.

[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.

[ ] Subject area code "DSME" changed to "DOTE" with effect from 2024-25.

**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:<br>DOTE[DSME]1030, 1040, MGNT1020 | 9 |
| 2. | Required Courses:<br>ACCT2111, 2121, 2151 or 3151[a], DOTE[DSME]2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010 | 32-33 |
| 3. | Elective Courses (Concentration):<br>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<br>(i) DOTE[DSME]2021, 4110;<br>(ii) two courses selected from: DOTE[DSME]3000, 3011, 3030, 3050, 3080, 3090, 4040, 4080; and<br>(iii) one DOTE[DSME] course at 3000 or above level, excluding the courses taken for fulfillment of requirement (i) or (ii) | |
| (b) | Business Analytics<br>(i) DOTE[DSME]2021, 2040, 4020;<br>(ii) one course selected from: DOTE[DSME]4070, 4240, 4260; and<br>(iii) one course selected from: DOTE[DSME]3030, 4030, 4110, 4220, 4280, MKTG4120 | |
| (c) | Finance<br>(i) DOTE[DSME]2021 or FINA2020; and<br>(ii) 15 units of FINA courses at 3000 or above level, with no more than three 1-unit FINA courses | |
| (d) | Entrepreneurship<br>(i) MGNT1070, 2070, 3070, 4170; and<br>(ii) two courses selected from: MGNT3080, 4070, 4090, 4130, 4160, 4270, 4570, 4711, 4712, 4713 | |
| (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 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 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.

[ ] 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.

2. DOTE[DSME]2051 and the associated units can be exempted from the requirement of the second degree by successfully completing SEEM3490.
3. DOTE[DSME]1030 and the associated units can be used to satisfy both the requirements of the first and second degrees.
4. MGNT1020 and the associated units can be used to satisfy both the requirements of the first and second degrees.
5. MGNT4090 and the associated units can be used to satisfy both the requirements of the first and second degrees.

**Recommended Course Pattern**

| | **1st degree: Bachelor of Engineering (Mechanical and Automation Engineering)** | Units | **2nd degree: Bachelor of Business Administration (Integrated BBA Programme)** | Units |
|---|---|---|---|---|
| **First Year of Attendance** | 1st term<br>Faculty Package: ENGG1110/ESTR1002<br>Major Required: MATH1510, PHYS1110<br>Major Elective(s): | <br>3<br><br>3-6 | 1st term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| | 2nd term<br>Faculty Package: ENGG1120/ESTR1005, ENGG1130/ESTR1006<br>Major Required: MAEG1020, PHYS1110<br>Major Elective(s): | <br>6<br><br>3-6 | 2nd term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| **Second Year of Attendance** | 1st term<br>Major Required: ELEG2202, ENGG2720/ESTR2014, MAEG2020/ESTR2400<br>Major Elective(s): | <br>8 | 1st term<br>Faculty Package: DOTE[DSME]1030<br>Major Required:<br>Major Elective(s): | 3 |
| | 2nd term<br>Major Required: EEEN3030/ESTR3402, ENGG2740/ESTR2016, MAEG2030/ESTR2402, MAEG2601<br>Major Elective(s): | <br>10 | 2nd term<br>Faculty Package: DOTE[DSME]1040<br>Major Required:<br>Major Elective(s): | 3 |
| | Summer session<br>Major Required: MAEG2602 | <br>1 | | |
| **Third Year of** | 1st term | | 1st term | |

| | | | | |
|---|---|---|---|---|
| **Attendance** | Major Required: MAEG3010, MAEG3050/ESTR3406<br>Major Elective(s): 1 Breadth / Depth Elective course | 6<br>3 | Faculty Package: MGNT1020<br>Major Required: ACCT2111, MGNT2511<br>Major Elective(s): | 3<br>4 |
| | 2nd term<br>Major Required: MAEG3020/ESTR3404, MAEG3030, 3040<br>Major Elective(s): 0 or 1 Breadth / Depth Elective course | 9<br>0-3 | 2nd term<br>Major Required: ACCT2121, MKTG2010<br>Major Elective(s): | 6 |
| **Fourth Year of Attendance** | 1st term<br>Major Required: MAEG4030/ESTR4412, MAEG4998<br>Major Elective(s): 0 or 1 Breadth / Depth Elective course | 6<br>0-3 | 1st term<br>Major Required: DOTE[DSME]2011, 2030, MGNT2611<br>Major Elective(s): | 9 |
| | 2nd term<br>Major Required: MAEG4999<br>Major Elective(s): 2 to 3 Breadth / Depth Elective course(s) | 3<br>5-8 | 2nd term<br>Major Required**:** DOTE[DSME]2051, FINA2010, IBBA3040<br>Major Elective(s): | 7 |
| **Fifth Year of Attendance** | | | 1st term<br>Major Required: ACCT2151 (or 3151), MGNT2512<br>Major Elective(s): 2-3 courses | 3-4<br>6-9 |
| | | | 2nd term<br>Major Required: MGNT4010<br>Major Elective(s): 2-3 courses | 3<br>6-9 |
| | **Total (including Faculty Package):** | **75** | **Total (including Faculty Package):** | **56-60** |

**Mechanical and Automation Engineering**
**Applicable to students admitted in 2022-23**

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

**1st Degree: Bachelor of Engineering (Mechanical and Automation Engineering)**

**Major Programme Requirement**

Students are required to complete a minimum of 75 units of courses as follows:

| | | Units |
|---|---|---|
| 1. | Faculty Package:<br>ENGG1110/ESTR1002, ENGG1120/ESTR1005, ENGG1130/ESTR1006 | 9 |
| 2. | Foundation Courses:<br>ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, MATH1510[a], PHYS1110[b] | 13 |
| 3. | Required Courses: | |
| (a) | EEEN3030/ESTR3402, ELEG2202#, MAEG2020/ESTR2400, MAEG2030/ESTR2402, MAEG2601, 2602, 3010, MAEG3020/ESTR3404, MAEG3030, 3040, MAEG3050/ESTR3406, MAEG4030/ESTR4412 | 33 |
| (b) | Research Component Courses[c]:<br>MAEG4998, 4999 | 6 |
| 4. | Elective Courses (at least 6 units of MAEG courses at 4000 and above level or their reciprocal ESTR courses or ENGG courses at 5000 level): | 14 |
| (a) | Breadth Electives (at least 6 units chosen from the following courses):<br>BMEG3420#, CSCI1020, 2040#, CSCI2100#/ESTR2102, CSCI3170#, DOTE[DSME]1030, EEEN2020, ELEG2401# or 3701#, ENGG1820, ENGG2020/ESTR2104, ENGG2760/ESTR2018, ENGG2780/ESTR2020, ENGG5404, MAEG1010, 2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, 5080, 5120, 5130, 5140, 5160, MGNT1020, 4090, SEEM3450#/ESTR3502, SEEM3490#, 3500# | |
| (b) | Depth Electives (at least 6 units chosen from the following courses):<br>EEEN4010/ESTR4400, EEEN4020/ESTR4402, EEEN4030/ESTR4404, EEEN4050/ESTR4422, EEEN4060/ESTR4424, ENGG5402, 5403, 5405, MAEG4010/ESTR4408, MAEG4020/ESTR4410, | |

MAEG4040/ESTR4414, MAEG4050/ESTR4416, MAEG4060, MAEG4070/ESTR4418, MAEG4080/ESTR4420, MAEG5030, 5060, 5070, 5090, 5110, 5150

**Streams**

Students may choose not to specialize in any stream or to specialize in one of the three streams by completing a minimum of 12 units of courses prescribed by the stream.

**Design and Manufacturing**

(a) Required Courses:
CSCI1020

(b) Elective Courses:
ENGG5404, 5405, MAEG2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4060, MAEG4070/ESTR4418, MAEG5030, 5120, 5130, 5160, SEEM3500

**Mechatronics**

(a) Required Courses:
CSCI1020, MAEG4040/ESTR4414, MAEG4050/ESTR4416

(b) Elective Courses:
ELEG2401 or 3701, ENGG2020/ESTR2104, ENGG5404, MAEG2050, 3080, 5080

**Robotics and Automation**

(a) Required Courses:
CSCI1020, MAEG3060/ESTR3408, MAEG4050/ESTR4416

(b) Elective Courses:
BMEG3420, ENGG5402, 5403, 5404, MAEG1010, 2050, MAEG4010/ESTR4408, MAEG5090, 5120

**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**[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 AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/SEEM research postgraduate courses at 5000 level[g]

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) 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 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 MAEG4998 and 4999.

[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/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.

[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 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).

[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.

[ ] Subject area code "DSME" changed to "DOTE" with effect from 2024-25.

**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:<br>DOTE[DSME]1030, 1040, MGNT1020 | 9 |
| 2. | Required Courses:<br>ACCT2111, 2121, 2151 or 3151[a], DOTE[DSME]2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010 | 32-33 |
| 3. | Elective Courses (Concentration):<br>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) 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**

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 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.

[ ] 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.
2. DOTE[DSME]2051 and the associated units can be exempted from the requirement of the second degree by successfully completing SEEM3490.
3. DOTE[DSME]1030 and the associated units can be used to satisfy both the requirements of the first and second degrees.
4. MGNT1020 and the associated units can be used to satisfy both the requirements of

the first and second degrees.

5. MGNT4090 and the associated units can be used to satisfy both the requirements of the first and second degrees.

| **Recommended Course Pattern** | | | | |
|---|---|---|---|---|
| | **1st degree: Bachelor of Engineering (Mechanical and Automation Engineering)** | Units | **2nd degree: Bachelor of Business Administration (Integrated BBA Programme)** | Units |
| **First Year of Attendance** | 1st term<br>Faculty Package:<br>ENGG1110/ESTR1002<br>Major Required: MATH1510, PHYS1110<br>Major Elective(s): | <br>3<br><br>3-6 | 1st term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| | 2nd term<br>Faculty Package:<br>ENGG1120/ESTR1005, ENGG1130/ESTR1006<br>Major Required: MAEG1020, PHYS1110<br>Major Elective(s): | <br>6<br><br>3-6 | 2nd term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| **Second Year of Attendance** | 1st term<br>Major Required: ELEG2202, ENGG2720/ESTR2014, MAEG2020/ESTR2400<br>Major Elective(s): | <br>8 | 1st term<br>Faculty Package:<br>DOTE[DSME]1030<br>Major Required:<br>Major Elective(s): | <br>3 |
| | 2nd term<br>Major Required:<br>EEEN3030/ESTR3402, ENGG2740/ESTR2016, MAEG2030/ESTR2402, MAEG2601<br>Major Elective(s): | <br>10 | 2nd term<br>Faculty Package:<br>DOTE[DSME]1040<br>Major Required:<br>Major Elective(s): | <br>3 |
| | Summer session<br>Major Required: MAEG2602 | <br>1 | | |
| **Third Year of Attendance** | 1st term<br>Major Required: MAEG3010, MAEG3050/ESTR3406<br>Major Elective(s): 1 Breadth / Depth Elective course | <br>6<br><br>3 | 1st term<br>Faculty Package: MGNT1020<br>Major Required: ACCT2111, MGNT2511<br>Major Elective(s): | <br>3<br>4 |
| | 2nd term<br>Major Required:<br>MAEG3020/ESTR3404, | <br>9 | 2nd term<br>Major Required: ACCT2121, MKTG2010 | <br>6 |

| | | | | |
|---|---|---|---|---|
| | MAEG3030, 3040<br>Major Elective(s): 0 or 1<br>Breadth / Depth Elective course | <br>0-3 | Major Elective(s): | |
| **Fourth Year of Attendance** | 1st term<br>Major Required: MAEG4030/ESTR4412, MAEG4998<br>Major Elective(s): 0 or 1<br>Breadth / Depth Elective course | <br>6<br><br>0-3 | 1st term<br>Major Required: DOTE[DSME]2011, 2030, MGNT2611<br>Major Elective(s): | <br>9 |
| | 2nd term<br>Major Required: MAEG4999<br>Major Elective(s): 2 to 3<br>Breadth / Depth Elective courses | <br>3<br>5-8 | 2nd term<br>Major Required**:** DOTE[DSME]2051, FINA2010, IBBA3040<br>Major Elective(s): | <br>7 |
| **Fifth Year of Attendance** | | | 1st term<br>Major Required: ACCT2151 (or 3151), MGNT2512<br>Major Elective(s): 2-3 courses | <br>3-4<br><br>6-9 |
| | | | 2nd term<br>Major Required: MGNT4010<br>Major Elective(s): 2-3 courses | <br>3<br>6-9 |
| **Total (including Faculty Package):** | | **75** | **Total (including Faculty Package):** | **56-60** |

**Mechanical and Automation Engineering**
**Applicable to students admitted in 2023-24**

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

**1st Degree: Bachelor of Engineering (Mechanical and Automation Engineering)**

**Major Programme Requirement**

Students are required to complete a minimum of 75 units of courses as follows:

| | | Units |
|---|---|---|
| 1. | Faculty Package:<br>ENGG1110/ESTR1002, ENGG1120/ESTR1005, ENGG1130/ESTR1006 | 9 |
| 2. | Foundation Courses:<br>ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, MATH1510[a], PHYS1110[b] | 13 |
| 3. | Required Courses: | |
| (a) | EEEN3030/ESTR3402, ELEG2202#, MAEG2020/ESTR2400, MAEG2030/ESTR2402, MAEG2601, 2602, 3010, MAEG3020/ESTR3404, MAEG3030, 3040, MAEG3050/ESTR3406, MAEG4030/ESTR4412 | 33 |
| (b) | Research Component Courses[c]:<br>MAEG4998, 4999 | 6 |
| 4. | Elective Courses (at least 6 units of MAEG courses at 4000 and above level or their reciprocal ESTR courses or ENGG courses at 5000 level): | 14 |
| (a) | Breadth Electives (at least 6 units chosen from the following courses):<br>BMEG3420#, CSCI1020, 2040#, CSCI2100#/ESTR2102, CSCI3170#, DOTE[DSME]1030, EEEN2020, ELEG2401# or 3701#, ENGG1820, ENGG2020/ESTR2104, ENGG2760/ESTR2018, ENGG2780/ESTR2020, ENGG5404, MAEG1010, 2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, 5080, 5120, 5130, 5140, 5160, MGNT1020, 4090, SEEM3450#/ESTR3502, SEEM3490#, 3500# | |
| (b) | Depth Electives (at least 6 units chosen from the following courses):<br>EEEN4010/ESTR4400, EEEN4020/ESTR4402, EEEN4030/ESTR4404, EEEN4050/ESTR4422, EEEN4060/ESTR4424, ENGG5402, 5403, 5405, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4040/ESTR4414, MAEG4050/ESTR4416, MAEG4060, | |

MAEG4070/ESTR4418, MAEG4080/ESTR4420, MAEG5030, 5060, 5070, 5090, 5110, 5150

**Streams**

Students may choose not to specialize in any stream or to specialize in one of the three streams by completing a minimum of 12 units of courses prescribed by the stream.

**Design and Manufacturing**

(a) Required Courses:
CSCI1020

(b) Elective Courses:
ENGG5404, 5405, MAEG2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4060, MAEG4070/ESTR4418, MAEG5030, 5120, 5130, 5160, SEEM3500

**Mechatronics**

(a) Required Courses:
CSCI1020, MAEG4040/ESTR4414, MAEG4050/ESTR4416

(b) Elective Courses:
ELEG2401 or 3701, ENGG2020/ESTR2104, ENGG5404, MAEG2050, 3080, 5080

**Robotics and Automation**

(a) Required Courses:
CSCI1020, MAEG3060/ESTR3408, MAEG4050/ESTR4416

(b) Elective Courses:
BMEG3420, ENGG5402, 5403, 5404, MAEG1010, 2050, MAEG4010/ESTR4408, MAEG5090, 5120

**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**[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 AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/SEEM research postgraduate courses at 5000 level[g]

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) 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 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 MAEG4998 and 4999.

[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/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.

[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 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).

[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.

[ ] Subject area code “DSME” changed to “DOTE” with effect from 2024-25.

**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:<br>DOTE[DSME]1030, 1040, MGNT1020 | 9 |
| 2. | Required Courses:<br>ACCT2111, 2121, 2151 or 3151[a], DOTE[DSME]2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010 | 32-33 |
| 3. | Elective Courses (Concentration):<br>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) 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**

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 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.

[ ] 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.
2. DOTE[DSME]2051 and the associated units can be exempted from the requirement of the second degree by successfully completing SEEM3490.
3. DOTE[DSME]1030 and the associated units can be used to satisfy both the requirements of the first and second degrees.
4. MGNT1020 and the associated units can be used to satisfy both the requirements of the first and second degrees.
5. MGNT4090 and the associated units can be used to satisfy both the requirements of

| |
|---|
| the first and second degrees. |

| **Recommended Course Pattern** | | | | |
|---|---|---|---|---|
| | **1st degree: Bachelor of Engineering (Mechanical and Automation Engineering)** | Units | **2nd degree: Bachelor of Business Administration (Integrated BBA Programme)** | Units |
| **First Year of Attendance** | 1st term<br>Faculty Package:<br>ENGG1110/ESTR1002<br>Major Required: MATH1510, PHYS1110<br>Major Elective(s): | <br>3<br><br>3-6 | 1st term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| | 2nd term<br>Faculty Package:<br>ENGG1120/ESTR1005, ENGG1130/ESTR1006<br>Major Required: MAEG1020, PHYS1110<br>Major Elective(s): | <br>6<br><br>3-6 | 2nd term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| **Second Year of Attendance** | 1st term<br>Major Required: ELEG2202, ENGG2720/ESTR2014, MAEG2020/ESTR2400<br>Major Elective(s): | <br>8 | 1st term<br>Faculty Package:<br>DOTE[DSME]1030<br>Major Required:<br>Major Elective(s): | <br>3 |
| | 2nd term<br>Major Required:<br>EEEN3030/ESTR3402, ENGG2740/ESTR2016, MAEG2030/ESTR2402, MAEG2601<br>Major Elective(s): | <br>10 | 2nd term<br>Faculty Package:<br>DOTE[DSME]1040<br>Major Required:<br>Major Elective(s): | <br>3 |
| | Summer session<br>Major Required: MAEG2602 | <br>1 | | |
| **Third Year of Attendance** | 1st term<br>Major Required: MAEG3010, MAEG3050/ESTR3406<br>Major Elective(s): 1 Breadth / Depth Elective course | <br>6<br><br>3 | 1st term<br>Faculty Package: MGNT1020<br>Major Required: ACCT2111, MGNT2511<br>Major Elective(s): | <br>3<br>4 |
| | 2nd term<br>Major Required:<br>MAEG3020/ESTR3404, MAEG3030, 3040<br>Major Elective(s): 0 or 1 Breadth / Depth Elective | <br>9<br><br>0-3 | 2nd term<br>Major Required: ACCT2121, MKTG2010<br>Major Elective(s): | <br>6 |

| | | | | |
|---|---|---|---|---|
| | course | | | |
| **Fourth Year of Attendance** | 1st term<br>Major Required: MAEG4030/ESTR4412, MAEG4998<br>Major Elective(s): 0 or 1 Breadth / Depth Elective course | 6<br><br><br>0-3 | 1st term<br>Major Required: DOTE[DSME]2011, 2030, MGNT2611<br>Major Elective(s): | 9 |
| | 2nd term<br>Major Required: MAEG4999<br>Major Elective(s): 2 to 3 Breadth / Depth Elective courses | 3<br>5-8 | 2nd term<br>Major Required**:** DOTE[DSME]2051, FINA2010, IBBA3040<br>Major Elective(s): | 7 |
| **Fifth Year of Attendance** | | | 1st term<br>Major Required: ACCT2151 (or 3151), MGNT2512<br>Major Elective(s): 2-3 courses | 3-4<br><br>6-9 |
| | | | 2nd term<br>Major Required: MGNT4010<br>Major Elective(s): 2-3 courses | 3<br>6-9 |
| **Total (including Faculty Package):** | | **75** | **Total (including Faculty Package):** | **56-60** |

**Mechanical and Automation Engineering**
**Applicable to students admitted in 2024-25**

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

**1st Degree: Bachelor of Engineering (Mechanical and Automation Engineering)**

**Major Programme Requirement**

Students are required to complete a minimum of 75 units of courses as follows:

| | | Units |
|---|---|---|
| 1. | Faculty Package:<br>ENGG1110/ESTR1002, ENGG1120/ESTR1005, ENGG1130/ESTR1006 | 9 |
| 2. | Foundation Courses:<br>ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, MATH1510[a], PHYS1110[b] | 13 |
| 3. | Required Courses: | |
| (a) | EEEN3030/ESTR3402, ELEG2202#, MAEG2020/ESTR2400, MAEG2030/ESTR2402, MAEG2601, 2602, 3010, MAEG3020/ESTR3404, MAEG3030, 3040, MAEG3050/ESTR3406, MAEG4030/ESTR4412 | 33 |
| (b) | Research Component Courses[c]:<br>MAEG4998, 4999 | 6 |
| 4. | Elective Courses (at least 6 units of MAEG courses at 4000 and above level or their reciprocal ESTR courses or ENGG courses at 5000 level): | 14 |
| (a) | Breadth Electives (at least 6 units chosen from the following courses):<br>BMEG3420#, CSCI1020, 2040#, CSCI2100#/ESTR2102, CSCI3170#, DOTE1030, EEEN2020, ELEG3701#, ENGG1820, ENGG2020/ESTR2104, ENGG2760/ESTR2018, ENGG2780/ESTR2020, ENGG5404, MAEG1010, 2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, 5080, 5120, 5130, 5140, 5160, MGNT1020, 4090, SEEM3450#/ESTR3502, SEEM3490#, 3500# | |
| (b) | Depth Electives (at least 6 units chosen from the following courses):<br>EEEN4010/ESTR4400, EEEN4020/ESTR4402, EEEN4030/ESTR4404, EEEN4050/ESTR4422, EEEN4060/ESTR4424, ENGG5402, 5403, 5405, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4040/ESTR4414, MAEG4050/ESTR4416, MAEG4060, | |

MAEG4070/ESTR4418, MAEG4080/ESTR4420, MAEG5030, 5060, 5070, 5090, 5110, 5150

**Streams**

Students may choose not to specialize in any stream or to specialize in one of the three streams by completing a minimum of 12 units of courses prescribed by the stream.

**Design and Manufacturing**

(a) Required Courses:
CSCI1020

(b) Elective Courses:
ENGG5404, 5405, MAEG2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4060, MAEG4070/ESTR4418, MAEG5030, 5120, 5130, 5160, SEEM3500

**Mechatronics**

(a) Required Courses:
CSCI1020, MAEG4040/ESTR4414, MAEG4050/ESTR4416

(b) Elective Courses:
ELEG3701, ENGG2020/ESTR2104, ENGG5404, MAEG2050, 3080, 5080

**Robotics and Automation**

(a) Required Courses:
CSCI1020, MAEG3060/ESTR3408, MAEG4050/ESTR4416

(b) Elective Courses:
BMEG3420, ENGG5402, 5403, 5404, MAEG1010, 2050, MAEG4010/ESTR4408, MAEG5090, 5120

**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**[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 AIST/BMEG/CENG/CSCI/EEEN/ELEG/ENGG/IERG/MAEG/SEEM research postgraduate courses at 5000 level[g]

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) 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 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 MAEG4998 and 4999.

[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/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.

[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 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).

[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.

**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:<br>DOTE1030, 1040, MGNT1020 | 9 |
| 2. | Required Courses:<br>ACCT2111, 2121, 2151 or 3151[a], DOTE2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010 | 32-33 |
| 3. | Elective Courses (Concentration):<br>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<br>(i) DOTE2021, 4110;<br>(ii) two courses selected from: DOTE3000, 3011, 3030, 3050, 3080, 3090, 4040, 4080; and<br>(iii) one DOTE course at 3000 or above level, excluding the courses taken for fulfillment of requirement (i) or (ii) | |
| (b) | Business Analytics<br>(i) DOTE2021, 2040, 4020;<br>(ii) one course selected from: DOTE4070, 4240, 4260; and<br>(iii) one course selected from: DOTE3030, 4030, 4110, 4220, 4280, MKTG4120 | |
| (c) | Finance<br>(i) DOTE2021 or FINA2020; and<br>(ii) 15 units of FINA courses at 3000 or above level, with no more than three 1-unit FINA courses | |
| (d) | Entrepreneurship<br>(i) MGNT1070, 2070; and<br>(ii) four courses selected from: MGNT3080, 4070, 4090, 4130, 4160, 4170, 4270, 4570, 4711, 4712, 4713 | |
| (e) | Management of International Business<br>(i) MGNT3580, 4150; and<br>(ii) four courses selected from: MGNT3010, 3080, 3100, 4080, 4090, 4110, 4130, 4140, 4510, 4530, 4540, 4550, 4570 | |
| (f) | Human Resource Management<br>(i) MGNT2040, 3010; and<br>(ii) four courses selected from: MGNT3040, 3060, 3090, 3100, 4050, 4060, 4080, 4110, 4130, 4140 | |
| (g) | Marketing<br>(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.
3. 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 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. DOTE2011 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.
2. DOTE2051 and the associated units can be exempted from the requirement of the second degree by successfully completing SEEM3490.
3. DOTE1030 and the associated units can be used to satisfy both the requirements of the first and second degrees.
4. MGNT1020 and the associated units can be used to satisfy both the requirements of the first and second degrees.
5. MGNT4090 and the associated units can be used to satisfy both the requirements of the first and second degrees.

**Recommended Course Pattern**

| | **1st degree: Bachelor of Engineering (Mechanical and Automation Engineering)** | Units | **2nd degree: Bachelor of Business Administration (Integrated BBA Programme)** | Units |
|---|---|---|---|---|
| **First Year of Attendance** | 1st term<br>Faculty Package: ENGG1110/ESTR1002<br>Major Required: MATH1510, PHYS1110<br>Major Elective(s): | <br>3<br><br>3-6 | 1st term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| | 2nd term<br>Faculty Package: ENGG1120/ESTR1005, ENGG1130/ESTR1006<br>Major Required: MAEG1020, PHYS1110<br>Major Elective(s): | <br>6<br><br>3-6 | 2nd term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| **Second Year of Attendance** | 1st term<br>Major Required: ELEG2202, ENGG2720/ESTR2014, MAEG2020/ESTR2400<br>Major Elective(s): | <br>8 | 1st term<br>Faculty Package: DOTE1030<br>Major Required:<br>Major Elective(s): | <br>3 |
| | 2nd term<br>Major Required: EEEN3030/ESTR3402, ENGG2740/ESTR2016, MAEG2030/ESTR2402, MAEG2601<br>Major Elective(s): | <br>10 | 2nd term<br>Faculty Package: DOTE1040<br>Major Required:<br>Major Elective(s): | <br>3 |
| | Summer session<br>Major Required: MAEG2602 | <br>1 | | |
| **Third Year of Attendance** | 1st term<br>Major Required: MAEG3010, MAEG3050/ESTR3406<br>Major Elective(s): 1 Breadth / Depth Elective course | <br>6<br><br>3 | 1st term<br>Faculty Package: MGNT1020<br>Major Required: ACCT2111, MGNT2511<br>Major Elective(s): | <br>3<br><br>4 |
| | 2nd term<br>Major Required: MAEG3020/ESTR3404, MAEG3030, 3040<br>Major Elective(s): 0 or 1 Breadth / Depth Elective course | <br>9<br><br>0-3 | 2nd term<br>Major Required: ACCT2121, MKTG2010<br>Major Elective(s): | <br>6 |
| **Fourth Year of** | 1st term | | 1st term | |

| | | | | |
|---|---|---|---|---|
| **Attendance** | Major Required: MAEG4030/ESTR4412, MAEG4998<br>Major Elective(s): 0 or 1 Breadth / Depth Elective course | 6<br><br><br>0-3 | Major Required: DOTE2011, 2030, MGNT2611<br>Major Elective(s): | 9 |
| | 2nd term<br>Major Required: MAEG4999<br>Major Elective(s): 2 to 3 Breadth / Depth Elective courses | <br>3<br>5-8 | 2nd term<br>Major Required**:** DOTE2051, FINA2010, IBBA3040<br>Major Elective(s): | <br>7 |
| **Fifth Year of Attendance** | | | 1st term<br>Major Required: ACCT2151 (or 3151), MGNT2512<br>Major Elective(s): 2-3 courses | <br>3-4<br><br>6-9 |
| | | | 2nd term<br>Major Required: MGNT4010<br>Major Elective(s): 2-3 courses | <br>3<br>6-9 |
| | **Total (including Faculty Package):** | **75** | **Total (including Faculty Package):** | **56-60** |

**Mechanical and Automation Engineering**
**Applicable to students admitted in 2025-26**

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

**1st Degree: Bachelor of Engineering (Mechanical and Automation Engineering)**

**Major Programme Requirement**

Students are required to complete a minimum of 75 units of courses as follows:

| | | Units |
|---|---|---|
| 1. | Faculty Package:<br>ENGG1110/ESTR1002, ENGG1111, ENGG1120/ESTR1005, ENGG1125/ESTR1007[a] | 9 |
| 2. | Foundation Courses:<br>ENGG1130/ESTR1006[b], ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, PHYS1110[c] | 13 |
| 3. | Required Courses: | |
| (a) | EEEN3030/ESTR3402, ELEG2202#, MAEG2020/ESTR2400, MAEG2030/ESTR2402, MAEG2601, 2602, 3010, MAEG3020/ESTR3404, MAEG3030, 3040, MAEG3050/ESTR3406, MAEG4030/ESTR4412 | 33 |
| (b) | Research Component Courses[d]:<br>MAEG4998, 4999 | 6 |
| 4. | Elective Courses (at least 6 units of MAEG courses at 4000 and above level or their reciprocal ESTR courses or ENGG courses at 5000 level): | 14 |
| (a) | Breadth Electives (at least 6 units chosen from the following courses):<br>BMEG3420#, CSCI1020, 2040#, CSCI2100#/ESTR2102, CSCI3170#, DOTE1030, EEEN2020, ELEG3701#, ENGG1820, ENGG2020/ESTR2104, ENGG2760/ESTR2018, ENGG2780/ESTR2020, ENGG5404, MAEG1010, 2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, 5080, 5120, 5130, 5140, 5160, MGNT1020, 4090, SEEM3450#/ESTR3502, SEEM3490#, 3500# | |
| (b) | Depth Electives (at least 6 units chosen from the following courses):<br>EEEN4010/ESTR4400, EEEN4020/ESTR4402, EEEN4030/ESTR4404, EEEN4050/ESTR4422, EEEN4060/ESTR4424, ENGG5402, 5403, 5405, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4040/ESTR4414, MAEG4050/ESTR4416, MAEG4060, | |

MAEG4070/ESTR4418, MAEG4080/ESTR4420, MAEG5030, 5060, 5070, 5090, 5110, 5150

**Streams**

Students may choose not to specialize in any stream or to specialize in one of the three streams by completing a minimum of 12 units of courses prescribed by the stream.

**Design and Manufacturing**

(a) Required Courses:
CSCI1020

(b) Elective Courses:
ENGG5404, 5405, MAEG2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4060, MAEG4070/ESTR4418, MAEG5030, 5120, 5130, 5160, SEEM3500

**Mechatronics**

(a) Required Courses:
CSCI1020, MAEG4040/ESTR4414, MAEG4050/ESTR4416

(b) Elective Courses:
ELEG3701, ENGG2020/ESTR2104, ENGG5404, MAEG2050, 3080, 5080

**Robotics and Automation**

(a) Required Courses:
CSCI1020, MAEG3060/ESTR3408, MAEG4050/ESTR4416

(b) Elective Courses:
BMEG3420, ENGG5402, 5403, 5404, MAEG1010, 2050, MAEG4010/ESTR4408, MAEG5090, 5120

**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) 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) 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 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 MAEG4998 and 4999.

[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.

**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:<br>DOTE1030, 1040, MGNT1020 | 9 |
| 2. | Required Courses:<br>ACCT2111, 2121, 2151 or 3151[a], DOTE2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010 | 32-33 |
| 3. | Elective Courses (Concentration):<br>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) DOTE2021, 4110;
- (ii) two courses selected from: DOTE3000, 3011, 3030, 3050, 3080, 3090, 4040, 4080; and
- (iii) one DOTE course 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 selected from: DOTE3010, 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: 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.
3. 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 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. DOTE2011 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.

2. DOTE2051 and the associated units can be exempted from the requirement of the second degree by successfully completing SEEM3490.
3. DOTE1030 and the associated units can be used to satisfy both the requirements of the first and second degrees.
4. MGNT1020 and the associated units can be used to satisfy both the requirements of the first and second degrees.
5. MGNT4090 and the associated units can be used to satisfy both the requirements of the first and second degrees.

| **Recommended Course Pattern** | | | | |
|---|---|---|---|---|
| | **1st degree: Bachelor of Engineering (Mechanical and Automation Engineering)** | Units | **2nd degree: Bachelor of Business Administration (Integrated BBA Programme)** | Units |
| **First Year of Attendance** | 1st term<br>Faculty Package: ENGG1110/ESTR1002, ENGG1111, ENGG1125/ESTR1007<br>Major Required: PHYS1110<br>Major Elective(s): | 6<br><br><br><br>0-3 | 1st term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| | 2nd term<br>Faculty Package: ENGG1120/ESTR1005<br>Major Required: ENGG1130/ESTR1006, MAEG1020, PHYS1110<br>Major Elective(s): | 3<br><br>6-9 | 2nd term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| **Second Year of Attendance** | 1st term<br>Major Required: ELEG2202, ENGG2720/ESTR2014, MAEG2020/ESTR2400<br>Major Elective(s): | 8 | 1st term<br>Faculty Package: DOTE1030<br>Major Required:<br>Major Elective(s): | 3 |
| | 2nd term<br>Major Required: EEEN3030/ESTR3402, ENGG2740/ESTR2016, MAEG2030/ESTR2402, MAEG2601<br>Major Elective(s): | 10 | 2nd term<br>Faculty Package: DOTE1040<br>Major Required:<br>Major Elective(s): | 3 |
| | Summer session<br>Major Required: MAEG2602 | 1 | | |
| **Third Year of** | 1st term | | 1st term | |

| | | | | |
|---|---|---|---|---|
| **Attendance** | Major Required: MAEG3010, MAEG3050/ESTR3406<br>Major Elective(s): 1 Breadth / Depth Elective course | 6<br>3 | Faculty Package: MGNT1020<br>Major Required: ACCT2111, MGNT2511<br>Major Elective(s): | 3<br>4 |
| | 2nd term<br>Major Required: MAEG3020/ESTR3404, MAEG3030, 3040<br>Major Elective(s): 0 or 1 Breadth / Depth Elective course | 9<br>0-3 | 2nd term<br>Major Required: ACCT2121, MKTG2010<br>Major Elective(s): | 6 |
| **Fourth Year of Attendance** | 1st term<br>Major Required: MAEG4030/ESTR4412, MAEG4998<br>Major Elective(s): 0 or 1 Breadth / Depth Elective course | 6<br>0-3 | 1st term<br>Major Required: DOTE2011, 2030, MGNT2611<br>Major Elective(s): | 9 |
| | 2nd term<br>Major Required: MAEG4999<br>Major Elective(s): 2 to 3 Breadth / Depth Elective courses | 3<br>5-8 | 2nd term<br>Major Required**:** DOTE2051, FINA2010, IBBA3040<br>Major Elective(s): | 7 |
| **Fifth Year of Attendance** | | | 1st term<br>Major Required: ACCT2151 (or 3151), MGNT2512<br>Major Elective(s): 2-3 courses | 3-4<br>6-9 |
| | | | 2nd term<br>Major Required: MGNT4010<br>Major Elective(s): 2-3 courses | 3<br>6-9 |
| **Total (including Faculty Package):** | | **75** | **Total (including Faculty Package):** | **56-60** |

**Mechanical and Automation Engineering**
**Applicable to students admitted in 2026-27**

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

**1st Degree: Bachelor of Engineering (Mechanical and Automation Engineering)**

**Major Programme Requirement**

Students are required to complete a minimum of 75 units of courses as follows:

| | | Units |
|---|---|---|
| 1. | Faculty Package:<br>ENGG1110/ESTR1002, ENGG1111, ENGG1120/ESTR1005, ENGG1125/ESTR1007[a] | 9 |
| 2. | Foundation Courses:<br>ENGG1130/ESTR1006[b], ENGG2720/ESTR2014, ENGG2740/ESTR2016, MAEG1020, PHYS1110[c] | 13 |
| 3. | Required Courses: | |
| (a) | EEEN3030/ESTR3402, ELEG2202#, MAEG2020/ESTR2400, MAEG2030/ESTR2402, MAEG2601, 2602, 3010, MAEG3020/ESTR3404, MAEG3030, 3040, MAEG3050/ESTR3406, MAEG4030/ESTR4412 | 33 |
| (b) | Research Component Courses[d]:<br>MAEG4998, 4999 | 6 |
| 4. | Elective Courses (at least 6 units of MAEG courses at 4000 and above level or their reciprocal ESTR courses or ENGG courses at 5000 level): | 14 |
| (a) | Breadth Electives (at least 6 units chosen from the following courses):<br>BMEG3420#, CSCI1020, 2040#, CSCI2100#/ESTR2102, CSCI3170#, DOTE1030, EEEN2020, ELEG3701#, ENGG1820, ENGG2020/ESTR2104, ENGG2760/ESTR2018, ENGG2780/ESTR2020, ENGG5404, MAEG1010, 2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, 5080, 5120, 5130, 5140, 5160, MGNT1020, 4090, SEEM3450#/ESTR3502, SEEM3490#, 3500# | |
| (b) | Depth Electives (at least 6 units chosen from the following courses):<br>EEEN4010/ESTR4400, EEEN4020/ESTR4402, EEEN4050/ESTR4422, EEEN4060/ESTR4424, ENGG5402, 5403, 5405, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4040/ESTR4414, MAEG4050/ESTR4416, MAEG4060, | |

MAEG4070/ESTR4418, MAEG4080/ESTR4420, MAEG5030, 5060, 5070, 5090, 5110, 5150

**Streams**

Students may choose not to specialize in any stream or to specialize in one of the three streams by completing a minimum of 12 units of courses prescribed by the stream.

**Design and Manufacturing**

(a) Required Courses:
CSCI1020

(b) Elective Courses:
ENGG5404, 5405, MAEG2050, MAEG3060/ESTR3408, MAEG3070, 3080, 3920, MAEG4010/ESTR4408, MAEG4020/ESTR4410, MAEG4060, MAEG4070/ESTR4418, MAEG5030, 5120, 5130, 5160, SEEM3500

**Mechatronics**

(a) Required Courses:
CSCI1020, MAEG4040/ESTR4414, MAEG4050/ESTR4416

(b) Elective Courses:
ELEG3701, ENGG2020/ESTR2104, ENGG5404, MAEG2050, 3080, 5080

**Robotics and Automation**

(a) Required Courses:
CSCI1020, MAEG3060/ESTR3408, MAEG4050/ESTR4416

(b) Elective Courses:
BMEG3420, ENGG5402, 5403, 5404, MAEG1010, 2050, MAEG4010/ESTR4408, MAEG5090, 5120

**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) 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) 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 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 MAEG4998 and 4999.

[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.

**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:<br>DOTE1030, 1040, MGNT1020 | 9 |
| 2. | Required Courses:<br>ACCT2111, 2121, 2151 or 3151[a], DOTE2011, 2030, 2051, FINA2010, IBBA3040, MGNT2511, 2512, 2611, 4010, MKTG2010 | 32-33 |
| 3. | Elective Courses (Concentration):<br>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) DOTE2021, 4110;
- (ii) two courses selected from: DOTE3000, 3011, 3030, 3050, 3080, 3090, 4040, 4080; and
- (iii) one DOTE course 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 selected from: DOTE3010, 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: 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.
3. 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 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. DOTE2011 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.
2. DOTE2051 and the associated units can be exempted from the requirement of the second degree by successfully completing SEEM3490.
3. DOTE1030 and the associated units can be used to satisfy both the requirements of the first and second degrees.
4. MGNT1020 and the associated units can be used to satisfy both the requirements of the first and second degrees.
5. MGNT4090 and the associated units can be used to satisfy both the requirements of the first and second degrees.

| **Recommended Course Pattern** | | | | |
|---|---|---|---|---|
| | **1st degree: Bachelor of Engineering (Mechanical and Automation Engineering)** | Units | **2nd degree: Bachelor of Business Administration (Integrated BBA Programme)** | Units |
| **First Year of Attendance** | 1st term<br>Faculty Package:<br>ENGG1110/ESTR1002,<br>ENGG1111,<br>ENGG1125/ESTR1007<br>Major Required: PHYS1110<br>Major Elective(s): | <br>6<br><br><br><br>0-3 | 1st term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| | 2nd term<br>Faculty Package:<br>ENGG1120/ESTR1005<br>Major Required:<br>ENGG1130/ESTR1006,<br>MAEG1020, PHYS1110<br>Major Elective(s): | <br>3<br><br>6-9 | 2nd term<br>Faculty Package:<br>Major Required:<br>Major Elective(s): | |
| **Second Year of Attendance** | 1st term<br>Major Required:<br>ENGG2720/ESTR2014,<br>MAEG2020/ESTR2400,<br>MAEG2030/ESTR2402<br>Major Elective(s): | <br>8 | 1st term<br>Faculty Package: DOTE1030<br>Major Required:<br>Major Elective(s): | 3 |
| | 2nd term<br>Major Required:<br>EEEN3030/ESTR3402,<br>ELEG2202,<br>ENGG2740/ESTR2016, | <br>10 | 2nd term<br>Faculty Package: DOTE1040<br>Major Required:<br>Major Elective(s): | 3 |

| | | | | |
|---|---|---|---|---|
| | MAEG2601<br>Major Elective(s): | | | |
| | Summer session<br>Major Required: MAEG2602 | 1 | | |
| **Third Year of Attendance** | 1st term<br>Major Required: MAEG3010, MAEG3050/ESTR3406<br>Major Elective(s): 1 Breadth / Depth Elective course | 6<br><br>3 | 1st term<br>Faculty Package: MGNT1020<br>Major Required: ACCT2111, MGNT2511<br>Major Elective(s): | 3<br><br>4 |
| | 2nd term<br>Major Required: MAEG3020/ESTR3404, MAEG3030, 3040<br>Major Elective(s): 0 or 1 Breadth / Depth Elective course | 9<br><br>0-3 | 2nd term<br>Major Required: ACCT2121, MKTG2010<br>Major Elective(s): | 6 |
| **Fourth Year of Attendance** | 1st term<br>Major Required: MAEG4030/ESTR4412, MAEG4998<br>Major Elective(s): 0 or 1 Breadth / Depth Elective course | 6<br><br>0-3 | 1st term<br>Major Required: DOTE2011, 2030, MGNT2611<br>Major Elective(s): | 9 |
| | 2nd term<br>Major Required: MAEG4999<br>Major Elective(s): 2 to 3 Breadth / Depth Elective courses | 3<br>5-8 | 2nd term<br>Major Required**:** DOTE2051, FINA2010, IBBA3040<br>Major Elective(s): | 7 |
| **Fifth Year of Attendance** | | | 1st term<br>Major Required: ACCT2151 (or 3151), MGNT2512<br>Major Elective(s): 2-3 courses | 3-4<br><br>6-9 |
| | | | 2nd term<br>Major Required: MGNT4010<br>Major Elective(s): 2-3 courses | 3<br>6-9 |
| | **Total (including Faculty Package):** | **75** | **Total (including Faculty Package):** | **56-60** |