Biomedical Engineering
Applicable to students admitted in 2016-17

Major Programme Requirement

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

		Units
1.	Faculty Package: ENGG1100/ESTR1000, ENGG1110/ESTR1002, ENGG2601, 2602	9

2.   Foundation Science Courses: 9
(a)   6 units of Physics[a]:
       ENGG1310/ESTR1003, PHYS1110
(b)   3 units of Science Course:
       CHEM1280, 1380[b], LSCI1001, 1003[c]

3.   Foundation Mathematics Courses: 12
       ENGG1410/ESTR1004,   ENGG2420/ESTR2000,   ENGG2450/
       ESTR2005, MATH1510[d]

4.   Required Courses:
(a)   BMEG2001/ESTR2201,   BMEG2011/ESTR2203,   BMEG2210/   27
       ESTR2204, BMEG2300, 3101, 3320, BMEG3430/ESTR3208,
       BMEG4010, SBMS1431, 1432, 1440
(b)   Research Component Courses[e]:   6
       BMEG4998, 4999

5.   Elective Courses: 12
       BIOL2120, BMEG3102, 3120, 3130, BMEG3210/ESTR3212,
       BMEG3330, 3420, 3910, 4103, 4220, BMEG4320/ESTR4200,
       BMEG4330/ESTR4201,   BMEG4410/ESTR4203,   BMEG4450/
       ESTR4202, BMEG4510/ESTR4204, BMEG4520, BMEG4530/
       ESTR4214, BMEG4540, 5140, 5530, 5610, ELEG3201/ESTR3200,
       ELEG5101, 5102, 5103, 5104, 5302, ENGG2120, MAEG5080,
       MBTE4320, CSCI courses[f]

Streams
Students may choose not to specialize in any stream or to specialize in one of the three streams and complete a minimum of 12 units of courses, at most one elective at 2000 or below level, plus BMEG4998 and 4999[e], prescribed by the stream.

Medical Instrumentation and Biosensors
a)   Elective Courses (at least 12 units chosen from the following courses): BMEG3130, BMEG3210/ESTR3212, BMEG3330, 3420, 4220, BMEG4330/ESTR4201, BMEG4410/ESTR4203, BMEG4450/ESTR4202, BMEG4520, 4540, ELEG3201/ESTR3200, ENGG2120, CSCI courses[f]
b)   BMEG4998 and 4999[e] in an approved topic relevant to the Stream

Biomedical Imaging, Informatics and Modeling
a)   Elective Courses (at least 12 units chosen from the following courses): BMEG3102, 3120, 4103, BMEG4320/ESTR4200,

BMEG4330/ESTR4201, CSCI courses[f]
b) BMEG4998 and 4999[e] in an approved topic relevant to the Stream

Molecular, Cell and Tissue Engineering
a) Elective Courses (at least 12 units chosen from the following courses): BIOL2120, BMEG3210/ESTR3212, BMEG4410/ ESTR4203, BMEG4450/ESTR4202, BMEG4510/ESTR4204, BMEG4530/ESTR4214, MBTE4320, CSCI courses[f]
b) BMEG4998 and 4999[e] in an approved topic relevant to the Stream

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[g]
Elective Courses:
15 units of courses[h]:
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[i]
ii) 3 units of BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level[j]

Explanatory Notes:
1. Students who have completed the courses ENGG1110/ESTR1002, ENGG2601 and 2602 (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. BIOL2120, MAEG5080, MBTE4320, BMEG/CSCI/ELEG/ENGG courses at 2000 and above level as included in the Major Programme Requirement, ESTR2104, 2300, 4300, ESTR4998/4999 and ESTR courses of which the reciprocal departmental courses are BMEG or ELEG courses will be included in the calculation of Major GPA for honours classification, excluding courses in Faculty Package, Foundation Science courses and Foundation Mathematics courses.
3. Results of the graduation project as prescribed by BMEG4999/ESTR4999 will be included in the calculation for honours classification.
4. 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.　For details, please refer to the Programme for information.
[a] Students without HKDSE Physics or who have attained Level 2 or below in HKDSE Physics or Combined Science with Physics component shall take PHYS1003 in advance. PHYS1003 would be counted as a free elective but could not be used to fulfill the Foundation Science course requirements.
[b] Students are strongly advised to take any one course from CHEM1280 or 1380 if they have not attained Level 3 or above in HKDSE Chemistry, or other equivalent qualifications.
[c] Students are strongly advised to take either LSCI1001 or 1003 if they have not attained Level 3 or above in HKDSE Biology, or other equivalent qualifications. LSCI1001 is only for students who have not taken science courses with Biology

component in HKDSE.

[d]   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, ENGG1410, will also be dropped.

[e]   Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for BMEG4998 and 4999.

[f]   Students are allowed to take a maximum of 3 units of CSCI course(s) at 1000 or above level.

[g]   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.

[h]   Students can use up to 9 units of courses taken to fulfill the requirements of items 1 to 5 above (excluding item 4(b) Research Component Courses) to fulfill the elective requirements of the ELITE Stream. A full list of ESTR courses is available at the ELITE website.

[i]   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).

[j]   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: ENGG1100/1110/ESTR1000/1002 Major Required: CHEM1280/1380/LSCI1001/1003, MATH1510, PHYS1110 Major Elective(s):	3 6-9
	2nd term Faculty Package: ENGG1100/1110/ESTR1000/1002 Major Required: CHEM1280/1380/LSCI1001/1003, ENGG1310/ESTR1003, ENGG1410/ESTR1004 Major Elective(s):	3 6-9
Second Year of Attendance	1st term Major Required: BMEG2001/ESTR2201, BMEG2210/ESTR2204, ENGG2420/ESTR2000, SBMS1431 Major Elective(s):	9
	2nd term Faculty Package: ENGG2601 Major Required: BMEG2011/ESTR2203, BMEG2300, ENGG2450/ESTR2005, SBMS1432, 1440 Major Elective(s):	2 12

	Summer session Faculty Package: ENGG2602	1
Third Year of Attendance	1st term Major Required: BMEG3430/ESTR3208, BMEG3101, 3320 Major Elective(s): 1 elective	9 3
	2nd term Major Required: Major Elective(s): 1 elective	3
Fourth Year of Attendance	1st term Major Required: BMEG4010, 4998 Major Elective(s): 1 elective	6 3
	2nd term Major Required: BMEG4999 Major Elective(s): 1 elective	3 3
	Total (including Faculty Package):	**75**

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

1st degree: Bachelor of Engineering (Biomedical Engineering)

Major Programme Requirement

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

Units

1. Faculty Package: 9
    ENGG1100/ESTR1000, ENGG1110/ESTR1002, ENGG2601, 2602

2. Foundation Science Courses: 9
    (a) 6 units of Physics[a]:
    ENGG1310/ESTR1003, PHYS1110
    (b) 3 units of Science Course:
    CHEM1280, 1380[b], LSCI1001, 1003[c]

3. Foundation Mathematics Courses: 12
    ENGG1410/ESTR1004, ENGG2420/ESTR2000, ENGG2450/ ESTR2005, MATH1510[d]

4. Required Courses:
    (a) BMEG2001/ESTR2201, BMEG2011/ESTR2203, BMEG2210/   27
        ESTR2204, BMEG2300, 3101, 3320, BMEG3430/ESTR3208,
        BMEG4010, SBMS1431, 1432, 1440
    (b) Research Component Courses[e]:   6
        BMEG4998, 4999

5. Elective Courses: 12
    BIOL2120, BMEG3102, 3120, 3130, BMEG3210/ESTR3212,
    BMEG3330, 3420, 3910, 4103, 4220, BMEG4320/ESTR4200,
    BMEG4330/ESTR4201, BMEG4410/ESTR4203, BMEG4450/
    ESTR4202, BMEG4510/ESTR4204, BMEG4520, BMEG4530/
    ESTR4214, BMEG4540, 5140, 5530, 5610, ELEG3201/ESTR3200,
    ELEG5101, 5102, 5103, 5104, 5302, ENGG2120, MAEG5080,

MBTE4320, CSCI courses[f]

Streams
Students may choose not to specialize in any stream or to specialize in one of the three streams and complete a minimum of 12 units of courses, at most one elective at 2000 or below level, plus BMEG4998 and 4999[e], prescribed by the stream.

Medical Instrumentation and Biosensors
a)   Elective Courses (at least 12 units chosen from the following courses): BMEG3130, BMEG3210/ESTR3212, BMEG3330, 3420, 4220, BMEG4330/ESTR4201, BMEG4410/ESTR4203, BMEG4450/ESTR4202, BMEG4520, 4540, ELEG3201/ESTR3200, ENGG2120, CSCI courses[f]
b)   BMEG4998 and 4999[e] in an approved topic relevant to the Stream

Biomedical Imaging, Informatics and Modeling
a)   Elective Courses (at least 12 units chosen from the following courses): BMEG3102, 3120, 4103, BMEG4320/ESTR4200, BMEG4330/ESTR4201, CSCI courses[f]
b)   BMEG4998 and 4999[e] in an approved topic relevant to the Stream

Molecular, Cell and Tissue Engineering
a)   Elective Courses (at least 12 units chosen from the following courses): BIOL2120, BMEG3210/ESTR3212, BMEG4410/ESTR4203, BMEG4450/ESTR4202, BMEG4510/ESTR4204, BMEG4530/ESTR4214 MBTE4320, CSCI courses[f]
b)   BMEG4998 and 4999[e] in an approved topic relevant to the Stream

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[g]
Elective Courses:
15 units of courses[h]:
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[i]
ii)   3 units of BMEG/CENG/CSCI/ELEG/ENGG/IERG/MAEG/SEEM courses at 5000 level[j]

Explanatory Notes:
1.   Students who have completed the courses ENGG1110/ESTR1002, ENGG2601 and 2602 (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.   BIOL2120, MAEG5080, MBTE4320, BMEG/CSCI/ELEG/ENGG courses at 2000 and above level as included in the Major Programme Requirement, ESTR2104,

2300, 4300, ESTR4998/4999 and ESTR courses of which the reciprocal departmental courses are BMEG or ELEG courses will be included in the calculation of Major GPA for honours classification, excluding courses in Faculty Package, Foundation Science courses and Foundation Mathematics courses.

3. Results of the graduation project as prescribed by BMEG4999/ESTR4999 will be included in the calculation for honours classification.

4. 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.

5. 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.   For details, please refer to the Programme for information.

[a] Students without HKDSE Physics or who have attained Level 2 or below in HKDSE Physics or Combined Science with Physics component shall take PHYS1003 in advance. PHYS1003 would be counted as a free elective but could not be used to fulfill the Foundation Science course requirements.

[b] Students are strongly advised to take any one course from CHEM1280 or 1380 if they have not attained Level 3 or above in HKDSE Chemistry, or other equivalent qualifications.

[c] Students are strongly advised to take either LSCI1001 or 1003 if they have not attained Level 3 or above in HKDSE Biology, or other equivalent qualifications. LSCI1001 is only for students who have not taken science courses with Biology component in HKDSE.

[d] 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, ENGG1410, will also be dropped.

[e] Students who have declared to specialize in the ELITE Stream will be required to complete 6 units of ESTR4998 and 4999 to substitute for BMEG4998 and 4999.

[f] Students are allowed to take a maximum of 3 units of CSCI course(s) at 1000 or above level.

[g] 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.

[h] Students can use up to 9 units of courses taken to fulfill the requirements of items 1 to 5 above (excluding item 4(b) Research Component Courses) to fulfill the elective requirements of the ELITE Stream.   A full list of ESTR courses is available at the ELITE website.

[i] 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).

[j] 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 55 units of courses as follows:

		Units
1.	Faculty Package: DSME1030, 1040, MGNT1020	9
2.	Required Courses: ACCT2111, 2121, DSME2011, 2030, 2051, FINA2010, MGNT2510, 2610, 4010, MKTG2010	31
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: DSME3030, 3050, 3080, 3090, 4040, 4080; and
   (iii) one DSME course at 3000 or above level and other than those 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)   General Finance
   (i)   DSME2021 or FINA2020;
   (ii)   12 units of FINA courses at 3000 or above level, with no more than three 1-unit FINA courses; and
   (iii) one course from FINA3070, 3080, 4040, 4130, 4140, 4390

(d)   Financial Engineering
  (i)   DSME2021 or FINA2020;
  (ii)   four courses selected from: FINA3080, 3220, 4110, 4120, 4150, 4160, 4190, 4210, 4220, 4250, 4260, 4370, 4380; and
  (iii)   one course from FINA4040, 4130, 4140, 4390
(e)   Insurance and Risk Management
  (i)   DSME2021 or FINA2020, and FINA3210;
  (ii)   three courses selected from: FINA2210, 3080, 3230, 3240, 3280, 4230, 4240; and
  (iii)   one course from FINA4040, 4130, 4140, 4270, 4291, 4390
(f)   Management of International Business
  (i)   MGNT3580, 4150, MKTG3010; and
  (ii)   three courses selected from: MGNT3010, 4080, 4090, 4130, 4140, 4510, 4530, 4540, 4550, 4570, 4600, 4620
(g)   Human Resource Management
  (i)   MGNT2040, 3010, MKTG3010; and
  (ii)   three courses selected from: MGNT3040, 3060, 4050, 4060, 4080, 4110, 4130, 4140, 4620
(h)   Marketing
  (i)   MKTG3010, 3020, 3030, 4040; and
  (ii)   two courses selected from: MKTG3040, 3050, 4010, 4020, 4030, 4050, 4070, 4080, 4090, 4100, 4110
(i)   Quantitative Marketing
  (i)   MKTG3010, 4080, 4090, 4120; and
  (ii)   two courses selected from: MKTG3020, 3030, 4030, 4040, 4070, 4130, 4150
(j)   General Business
  (i)   DSME2021/FINA2020/MKTG3010; and
  (ii)   12 units of DSME/FINA/MGNT/MKTG courses at 3000 or above level, with no more than three 1-unit FINA courses

Total: 55-58

Explanatory Notes:
1.   ACCT/DSME/FINA/IBBA/MGNT/MKTG courses at 2000 and above level (excluding ACCT2111 and 2121) will be included in the calculation of Major GPA for honours classification.
2.   Double concentrations (i) among the finance-related concentration areas (i.e. any combination of General Finance, Financial Engineering, Insurance and Risk Management), and (ii) in Marketing 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 (e) and (j), except for the impermissible combination of concentrations as stipulated in Note 2 above.
    MKTG3010 and the associated units can be used to satisfy concentration requirements of double concentrations within (f) to (j), except for the impermissible combination of concentrations as stipulated in Note 2 above.
    FINA2020 and the associated units can be used to satisfy concentration requirements of double concentrations within (c) to (e) and (j), except for the impermissible combination of concentrations as stipulated in Note 2 above.
    MGNT3010 and the associated units can be used to satisfy concentration requirements of double concentrations within (f) and (g).

Explanatory Notes on Mutual Recognition or Exclusion:
1.   DSME2011 and the associated units can be exempted from the requirement of the second degree by successfully completing ENGG2450/ESTR2005.

	1st degree: Bachelor of Engineering (Biomedical Engineering)	Units	2nd degree: Bachelor of Business Administration (Integrated BBA Programme)	Units
Recommended Course Pattern				
First Year of Attendance	1st term Faculty Package: ENGG1100/1110/ESTR1000/1002 Major Required: CHEM1280/1380/LSCI1001/1003, MATH1510, PHYS1110 Major Elective(s):	3 6-9	1st term Faculty Package: Major Required: Major Elective(s):	
	2nd term Faculty Package: ENGG1100/1110/ESTR1000/1002 Major Required: CHEM1280/1380/LSCI1001/1003, ENGG1310/ESTR1003, ENGG1410/ESTR1004 Major Elective(s):	3 6-9	2nd term Faculty Package: MGNT1020 Major Required: Major Elective(s):	3
Second Year of Attendance	1st term Major Required: BMEG2001/ESTR2201, BMEG2210/ESTR2204, ENGG2420/ESTR2000, SBMS1431 Major Elective(s):	9	1st term Faculty Package: DSME1030/1040 Major Required: Major Elective(s):	3
	2nd term Faculty Package: ENGG2601 Major Required: BMEG2011/ESTR2203, BMEG2300, ENGG2450/ESTR2005, SBMS1432, 1440 Major Elective(s):	2 12	2nd term Major Required: Major Elective(s):	
	Summer session Faculty Package: ENGG2602	1	Summer session Faculty Package: DSME1030/1040	3
Third Year of Attendance	1st term Major Required: BMEG3430/ESTR3208, BMEG3101, 3320 Major Elective(s):	9	1st term Major Required: Major Elective(s):	
	2nd term Major Required: Major Elective(s): 1 elective	3	2nd term Major Required/Major Elective(s):	9
Fourth Year of Attendance	1st term Major Required: BMEG4010, 4998 Major Elective(s): 2 electives	6 6	1st term Major Required/Major Elective(s):	6
	2nd term Major Required: BMEG4999 Major Elective(s): 1 elective	3 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):**	**55-58**

Minor Programme Title
Biomedical Engineering

Minor Programme Requirement

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

Units

1. Required Courses: 3
   BMEG2001/ESTR2201, BMEG2011/ESTR2203

2. Elective Courses: 15
   BMEG2210/ESTR2204, BMEG2300, 3101, 3102, 3120, 3130, BMEG3210/ESTR3212, BMEG3320, 3330, 3420, BMEG3430/ ESTR3208, BMEG3910, 4010, 4103, 4220, BMEG4320/ ESTR4200, BMEG4330/ESTR4201, BMEG4410/ESTR4203, BMEG4450/ESTR4202, BMEG4510/ESTR4204, BMEG4520, BMEG4530/ESTR4214, BMEG4540, 5140, 5530, 5610

                                                     Total: **18**

Course List		
Course Code	*Course Title*	*Unit(s)*
BMEG2001	Introduction to Biomedical Engineering	1
BMEG2011	Biomedical Engineering Laboratory	2
BMEG2210	Orthopaedic Biomechanics and Musculoskeletal Injury	3
BMEG2300	Circuits and Signals for Biomedical Engineering	3
BMEG3101	Medical Instrumentation and Design	3
BMEG3102	Bioinformatics	3
BMEG3120	Database and Security for Biomedical Engineering	3
BMEG3130	Tele-Medicine and Mobile Healthcare	3
BMEG3210	Biofluids	3
BMEG3320	Biomedical Imaging	3
BMEG3330	Neuroengineering	3
BMEG3420	Medical Robotics	3
BMEG3430	Biomaterials and Tissue Engineering	3
BMEG3910	Undergraduate Research in Biomedical Engineering	3
BMEG4010	Global Medical Device Regulatory Affairs	3
BMEG4103	Biomedical Modelling	3
BMEG4220	Body Sensor Networks	3
BMEG4320	Biomedical Imaging Applications	3
BMEG4330	Sound and Light Waves in Medicine	3
BMEG4410	BioMEMS	3

BMEG4450	Bionanotechnology	3
BMEG4510	Biomolecular Engineering	3
BMEG4520	Cardiovascular Engineering	3
BMEG4530	Musculoskeletal Tissue Engineering	3
BMEG4540	Electrophysiology	3
BMEG4998	Final Year Project I	3
BMEG4999	Final Year Project II	3
BMEG5140	Rehabilitation Engineering	3
BMEG5530	Tissue Engineering	3
BMEG5610	Research Methods in Biomedical Engineering	3
ENGG1310	Engineering Physics: Electromagnetics, Optics and Modern Physics	3
ENGG1410	Linear Algebra and Vector Calculus for Engineers	3
ENGG2120	Introduction to Digital and Microprocessor Systems	3
ENGG2420	Complex Analysis and Differential Equations for Engineers	3
ENGG2450	Probability and Statistics for Engineers	3
ESTR1003	Engineering Physics: Electromagnetics, Optics and Modern Physics	3
ESTR1004	Linear Algebra and Vector Calculus for Engineers	3
ESTR2000	Complex Analysis and Differential Equations for Engineers	3
ESTR2005	Probability and Statistics for Engineers	3
ESTR2201	Introduction to Biomedical Engineering	3
ESTR2203	Biomedical Engineering Laboratory	3
ESTR2204	Orthopaedic Biomechanics and Musculoskeletal Injury	3
ESTR3208	Biomaterials and Tissue Engineering	3
ESTR3212	Biofluids	3
ESTR4200	Biomedical Imaging Applications	3
ESTR4201	Sound and Light Waves in Medicine	3
ESTR4202	Bionanotechnology	3
ESTR4203	BioMEMS	3
ESTR4204	Biomolecular Engineering	3
ESTR4214	Musculoskeletal Tissue Engineering	3