

<< Declaration of major

School:		School of Engineering and School of Business Management				Student's Pathways (i.e. Study Pattern)										
Department:		Dual Degree Program (BEng in Chemical and Biomolecular Engineering and BBA in General Business Management)				Pathway 1										
Program:		Dual Degree Program (BEng in Chemical and Biomolecular Engineering and BBA in General Business Management)				Background: HKDSE 4 Core + 2 Elec (incl. 1/2x PHYS) Profile: Normative. Students to graduate in (BEng & BBA) CBGBM Note: w.r.t. CBME pathway for students who decide to choose CBME early on and have CENG 1000 and CHEM 1010/1020 in Year 1										
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	Sub-term	Remarks	
BEng in Chemical and Biomolecular Engineering																
Major Requirements																
Engineering Fundamental Courses																
COMP	1021	Note: COMP 1021 OR COMP 1022 OR COMP 1023 OR COMP 1024 OR COMP 2011	3-4													
COMP	1022P	Introduction to Computer Science	3													
COMP	1022Q	Introduction to Computing with Java	3													
COMP	2011	Introduction to Computing with Excel VBA Programming with C++	4													
ENGG	1010	Academic Orientation	0	0	0											
CHEM	1010	Note: CHEM 1010 OR CHEM 1020	3													
CHEM	1020	General Chemistry IA	3	3												
CHEM	1030	General Chemistry IB	3													
LANG	2030	Technical Communication I	3						3							
MATH	1012	Note: (MATH 1012 OR MATH 1013 OR MATH 1014 OR MATH 1020) OR (MATH 1024) OR (MATH 1020)	4													
MATH	1013	Calculus IA	4													
MATH	1014	Calculus IB	3													
MATH	1020	Accelerated Calculus	4	3	3											
MATH	1023	Honors Calculus I	3													
MATH	1024	Honors Calculus II	3													
MATH	2011	Introduction to Multivariable Calculus	3							3						
MATH	2350	Note: MATH2350 OR CENG2310	3													
MATH	2310	Applied Linear Algebra and Differential Equations	3													
CENG	2310	Mathematical Modeling for Chemical and Biological Engineering	3													
PHYS	1112	Note: PHYS 1112 OR PHYS 1312	3													
PHYS	1312	General Physics (with Calculus)	3	3												
PHYS	1312	Honors General Physics I	3													
SENG		Engineering Introduction course (If the students take an introduction course included in their major, this course can be counted towards their major requirement.)	3-4													
Required credits for Engineering Fundamental Courses			24-29													
Major Required Courses and Electives																
CENG/BIEN	1000	Note: CENG1000 OR BIEN1010	3													
CENG	1010	Introduction to Chemical and Biological Engineering	3													
BIEN	1010	Introduction to Biomedical Engineering	3													
CENG	1010	Academic and Professional Development I	0				0									
CENG	1600	Biotechnology and Its Business Opportunities	3													
CENG	1980	Industrial Training	0							0	0	0	0			
CENG	2110	Process Principles	3													
CENG	2210	Chemical and Biological Engineering Thermodynamics	3													
CENG	2220	Process Fluid Mechanics	3													
CENG	3120	Process Design and Integration	3													
CENG	3210	Separation Processes	3													
CENG	3220	Heat and Mass Transfer	3													
CENG	3230	Chemical and Biological Reaction Engineering	3													
CENG	4120	Process Dynamics and Control	3													
CENG	4620	Bioprocesses and Processing	3													
CENG	4640	Biomolecular Engineering	3													
CENG	4640	Note: CENG4620 OR CENG4930 OR CENG4940	6													
CENG	4920	Chemical Engineering Capstone Design	6													
CENG	4930	Chemical Engineering Thesis Research	6													
CENG	4940	Chemical Engineering Industrial Project	6													
BIEN	3910	Bioengineering Laboratory	4													
ENGG	2010	Engineering Seminar Series	0				0	0	0	0	0					
CHEM	1050	Laboratory for General Chemistry I	1	1												
CHEM	2111	Fundamentals of Organic Chemistry	3													
CHEM	2155	Note: CHEM 2155 OR CHEM 2355	1													
CHEM	2355	Fundamental Organic Chemistry Laboratory**	1													
CHEM	2311	Fundamental Analytical Chemistry Laboratory**	1													
CHEM	2311	Analytical Chemistry	3													
LANG	4035**	Technical Communication II for Chemical and Biological Engineering	3													
BIEN/CIPS	2610	Note: BIEN2610 OR CIPS3602 OR CIPS3604 OR CIPS3606 OR CIPS3608	3													
BIEN	1901	Chemical Biology for Engineers	3													
LIFS	1902	General Biology II	3													
LIFS	2040	Cell Biology	3													
LIFS	2210	Biochemistry I	3													
CENG		CBME Depth Elective (1 course from the specified elective list)	3													
Required credits for Major Requirements Courses and Electives			63													
BBA in General Business Management																
School Requirements																
ACCT	2010	Principles of Accounting I	3													
ACCT	2200	Principles of Accounting II	3													
ECON	2103	Note: ECON 2103 OR ECON 2113	3													
ECON	2113	Principles of Microeconomics	3													
ECON	2123	Note: ECON 2123 OR ECON 3123 (Students who wish to pursue BSc ECoF must take ECON 3123)	3													
ECON	3123	Macroeconomics	3													
FINA	2303	Financial Management	3													
ISOM	2010	Introduction to Information Systems	3													
ISOM	2500	Business Statistics	3													
ISOM	2700	Operations Management	3													
MARK	2120	Marketing Management	3													
MGMT	2010**	Business Ethics and the Individual	2													
MGMT	2110	Organizational Behavior	3													
MGMT	2130	Business Ethics and Social Responsibility	2													
SBMT	1111	Business Student Induction	0													
LABU	2060**	Effective Communication in Business**	3													
LABU	2040**	Business Case Analyses**	3													
MATH	1003	Note: MATH1003 OR MATH1012 OR MATH1013 OR MATH1020 OR MATH1023	3-4													
MATH	1012	Calculus and Linear Algebra	3													
MATH	1013	Calculus IA	4													
MATH	1020	Calculus IB	3													
MATH	1023	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
Required credits for School Requirements			43-44													
Major Requirements																
Major Required Courses and Electives																
SB&M		SB&M Electives (Any 9 courses offered by the departments under SB&M, of which at least 4 courses are of 3000-level or above.)	29													
Required credits for Major Required Courses and Electives			29													
Additional Requirements																
Requirements for Dual Degree Program																
Required Courses																
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0	0	
Required credits for Additional Requirements			0													
University CORE																
CORE	C3 - C12	U CORE - Others	30	6								6	6	6	6	
CORE	C1 & C2	U CORE - English Language	6	3	3											
Sub-total for University CORE			36													
Term load (excl. free credits)																
19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4																
189##																

<< Declaration of major

Notes:
 () indicates the reuse of the same course to fulfill more than one requirement.
 * Courses offered in winter term
 ^ Courses offered in summer term
 --- denotes the course/requirement is either waived or substituted
 ## To graduate, students should complete all requirements as specified for DDP.

**Remarks on course(s):
 - CHEM 2155: This is a new course subject to approval. (effective from 2016/17 and applicable to students admitted in or after 2015/16)
 - CHEM 2355: This is a new course subject to approval. (effective from 2016/17 and applicable to students admitted in or after 2015/16)
 - LABU 2040: This is a new course subject to approval. (effective from 2016/17 and applicable to students admitted in or after 2016/17)
 - LABU 2060: This is a new course subject to approval. (effective from 2016/17 and applicable to students admitted in or after 2016/17)
 - LANG 4035: This is a new course to take effect in Fall, 2019-20
 - MGMT2010: Previous Course Code: SBMT 2010

--> The content of this example is not necessarily equivalent to a complete list of graduation requirements of the program. Students should refer to the Program Catalog/UG Curriculum Handbook for updated graduation requirements. For up-to-date information on course offering and scheduling, students should check it out from respective School and Department.