

				<= declaration of BEng major				<= declaration of BBA major															
School:		School of Engineering and School of Business Management		Student's Pathway																			
Program:		Dual Degree Program (BEng in Bioengineering and BBA in General Business Management)																					
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-total	Remarks							
BEng in Bioengineering																							
Engineering Fundamental Courses																							
COMP	1022P	New: COMP 1022P OR COMP 1023 OR COMP 2011 OR COMP 2012H		3-5																			
COMP	1023	Introduction to Computing with Java		3		3									3	Students should take COMP 1022P, COMP 1023, COMP 2011 or COMP 2012H which will also be used to substitute ISOM 2010 and to waive ISOM 2020							
COMP	2011	Introduction to Python Programming		3																			
COMP	2012H	Honors Object-Oriented Programming and Data Structures		5																			
CHEM	1012	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories		3	3										3								
CHEM	1052	Laboratory for General Chemistry B		1		1									1								
LIFS	1901	General Biology I		3	3										3	Students with level 3 or above in HKDSE 1x Biology are exempted from taking LIFS 1901							
		New: MATH 1013 OR MATH 1020 OR MATH 1023		3-4																			
MATH	1013	Calculus I		4	3																		
MATH	1020	Accelerated Calculus		3												ODP students should take MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees							
MATH	1023	Honors Calculus I		4																			
		New: PHYS 1112 OR PHYS 1312		3																			
PHYS	1112	General Physics I with Calculus		3		3									3								
PHYS	1312	Honors General Physics I		3																			
Required Credits for Engineering Fundamental Courses				16-19	9	7	0	0	0	0	0	0	0	0	0	16							
Major Required Courses and Electives																							
BIEN	1600	Introduction to Bioengineering		3		3									3	Those entering the Bioengineering in Year 2 will take this course in Year 2 Spring							
BIEN	2410	Cellular and Systems Physiology for Engineers		3																			
BIEN	2610	Chemical Biology for Engineers		3			3								3								
BIEN	3250	Rate and Transport Processes in Biological Systems		3					3						3								
BIEN	3300	Data Science for Molecular Engineering		3			3								3								
		New: BIEN 3310 OR BIEN 3320		3																			
BIEN	3310	Data Science for Neural Engineering		3					[E]	3					3	BIEN 3310/3320 which will also be used to substitute ISOM 2600							
BIEN	3320	Data Science for Biology and Medicine		3																			
BIEN	3410	Introduction to Biostatistics and Biomechanics		3					3														
BIEN	3420	Biomechanics and Biomaterials for Healthcare		3						3					3								
BIEN	3510	Bioengineering Laboratory		4					4						4								
		New: BIEN 4020 OR BIEN 4030 OR BIEN 4040		6																			
BIEN	4020	Bioengineering Capstone Design		6									3	3	6								
BIEN	4030	Bioengineering Thesis Research		6																			
BIEN	4040	Bioengineering Industrial Project		6																			
CENG	1000	Foundations of Chemical and Biological Engineering		3	3										3	Those entering the Bioengineering in Year 2 will take this course in Year 2 Fall.							
CENG	1010	Academic and Professional Development I		0	0										0								
CENG	2210	Chemical and Biological Engineering Thermodynamics		3				3							3								
CENG	2310	Modeling for Chemical and Biological Engineering I		3				3							3	Those entering the Bioengineering in Year 2 will take this course in Year 2 Fall.							
CENG	2320	Modeling for Chemical and Biological Engineering II		3				3							3								
CENG	4020	Academic and Professional Development II		0					0						0								
BIEN/BIEN		Bioengineering Electives (5 courses from the specified elective list, of which at least 3 credits should be taken from a single specialty area (Area 1 or Area 2). Out of the 15 credits taken, at least 3 credits should be at 400-level or above). Courses taken as Major Required Courses may not be counted towards this elective requirement.		15							3	3	3	6	15								
BEng in Bioengineering Major Requirements				61	3	3	9	9	10	6	3	3	6	9	61								
BBA in General Business Management																							
School Requirements																							
ACCT	2010	Principles of Accounting I		3	3										3								
ACCT	2200	Principles of Accounting II		3					3						3								
		New: ECON 2103 OR ECON 2113		3																			
ECON	2103	Principles of Microeconomics		3			3								3								
ECON	2113	Microeconomics		3																			
		New: ECON 2123 OR ECON 3123		3																			
ECON	2123	Macroeconomics		3							3				3								
ECON	3123	Macroeconomic Theory I		3																			
FINA	2303	Financial Management		3				3							3								
ISOM	2010	Introduction to Information Systems		3	-	-	-	-	-	-	-	-	-	-	0								
ISOM	2020	Coding for Business		1	-	-	-	-	-	-	-	-	-	-	0	ISOM 2020 is waived for ODP students who have taken and passed COMP 1022 or COMP 1022P or COMP2011 or COMP2012H. These COMP courses are similar or more advanced coding (Python) courses as ISOM 2020.							
ISOM	2500	Business Statistics		3	-	3	-	-	-	-	-	-	-	-	3								
ISOM	2600	Introduction to Business Analytics		1											0								
ISOM	2700	Operations Management		3					3						3								
MARK	2120	Marketing Management		3				3							3								
MGMT	2010	Business Ethics and the Individual		2							2				2								
MGMT	2110	Organizational Behavior		3				3							3								
MGMT	2130	Business Ethics and Social Responsibility		2									2		2								
		New: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023		3-4																			
MATH	1003	Calculus and Linear Algebra		3		(3)										ODP students should take MATH 1013 and MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees							
MATH	1013	Calculus I		3																			
MATH	1020	Accelerated Calculus		4																			
MATH	1023	Honors Calculus I		3																			
Required Credits for School Requirements				39-40	3	3	3	9	3	3	3	2	0	2	31								
Major Required Courses and Electives																							
BBM		BBM Electives (any 9 courses offered by the departments under BBM, of which at least 4 courses are at 300-level or above.)		29					3	4	4	9	6	3	29								
Required Credits for Major Required Courses and Electives				29	0	0	0	0	3	4	4	9	6	3	29								
Additional Requirement for Dual Degree																							
Requirements for Dual Degree Program																							
TEMG	1011	T&M Professional Activities I		0	0	0									0	To graduates, students should complete ALL requirements as specified for ODP.							
TEMG	1012	T&M Professional Activities II		0			0	0							0								
TEMG	1013	T&M Professional Activities III		0				0	0						0								
TEMG	1014	T&M Professional Activities IV		0						0	0				0								
TEMG	1015	T&M Professional Activities V		0								0	0		0								
TEMG	9950	T&M Case Analysis and Product Innovation		3		3									3								
TEMG	4950	T&M Corporate Consulting Project		3-5											4								
Required Credits for Additional Requirements				7	0	3	0	0	0	4	0	0	0	0	7								
University Common Core Requirement																							
CORE	C3 - C9	U CORE - Others		21				6				6	3	3	3	21							
CORE	C1 & C2	U CORE - English Language		6	3	3									6								
IBBMW	1909	Behavioral Foundations of University Education: Health, Mindsets, and Wellbeing		3	1	2									3								
Sub-total for University CORE				30	4	5	6				6	3	3	3	30								
Term total (incl. free credits)																							
174##																							
174																							