The Hong Kong University of Science and Technology
Interdisciplinary Programs Office
An Example on Student's Pathway (as of July 22, 2022)

BEECON
(Via DDP PBA)   2021-22 Intake

School:	School of Engineering and School of Business Management														Student's Pathway		

| Program: | Dual Degree Program (BEng in Bioengineering and BBA in Economics) | | | | | | | | | | | | | | | | |

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																
Major Requirements																
Engineering Fundamental Courses																
COMP	1021	Note: [COMP 1021] OR [(COMP 1022P OR COMP 2011) AND COMP1029P] Introduction to Computer Science	3-5 / 3											3	Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020
COMP	1022P	Introduction to Computing with Java	3		3										
COMP	1029P	Python Programming Bridging Course	1												
COMP	2011	Programming with C++	4												
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5												
ENGG	1010	Academic Orientation	0	0	0									0	
CHEM	1010	Note: CHEM1010 OR CHEM 1020 General Chemistry IA	3	3										3	
CHEM	1020	General Chemistry IB	3												
CHEM	1050	Laboratory for General Chemistry I	1	1										1	
LANG	2030	Technical Communication I	3	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students
LIFS	1901	General Biology I	3	3										3	
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020] Calculus IA	4-7 / 4	3	3									6	
MATH	1013	Calculus IB	3												
MATH	1014	Calculus II	3												
MATH	1020	Accelerated Calculus	4												
MATH	1023	Honors Calculus I	3												
MATH	1024	Honors Calculus II	3												
PHYS	1112	Note: PHYS 1112 OR PHYS 1312 General Physics I with Calculus	3	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		(3)									0	
		Required credits for Engineering Fundamental Courses	23-29											19	
Major Required Courses and Electives																
BIEN	1010	Note: BIEN 1010 OR CENG 1000 Introduction to Biomedical Engineering	3		3									3	
CENG	1000	Introduction to Chemical and Biological Engineering	3												
BIEN	2310	Modeling for Chemical and Biological Engineering	3			3								3	
BIEN	2410	Cellular and Systems Physiology for Engineers	3					3						3	
BIEN	2610	Chemical Biology for Engineers	3			3								3	
BIEN	2990	Academic and Professional Development I	1			1								1	
BIEN	3310	Note: BIEN 3310 OR BIEN 3320 Data Science for Neural Engineering	3				3							3	
BIEN	3320	Data Science for Biology and Medicine	3												
BIEN	3410	Introduction to Bioinstrumentation and Bioimaging	3						3					3	
BIEN	3910	Bioengineering Laboratory	4							4				4	
BIEN	4920	Note: BIEN 4920 OR BIEN 4930 OR BIEN 4940 Bioengineering Capstone Design	6									3	3	6	
BIEN	4930	Bioengineering Thesis Research	6												
BIEN	4940	Bioengineering Industrial Project	6												
BIEN	4990	Academic and Professional Development II	1									1		1	
CENG	2210	Chemical and Biological Engineering Thermodynamics	3				3							3	
CENG	2220	Transport Phenomena I	3								3			3	
CENG	3230	Chemical and Biological Reaction Engineering	3						3					3	
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0	
LIFS	3150	Note: LIFS 3150 OR MATH 2411 OR BIEN 3300 Biostatistics	3-4 / 3			3								3	
MATH	2411	Applied Statistics	4												
BIEN	3300	Data Science for Molecular Engineering	3												
LANG	4035	Technical Communication II for Chemical and Biological Engineering	3								3			3	
SSCI/SENG		Bioengineering Electives (5 courses from the specified elective list, of which at least 9 credits should be taken from a single specialty area (Area 1 or Area 2). Out of the 15 credits taken, at least 9 credits should be at 4000-level).	15								6	3	6	15	
		Required credits for Major Required Courses and Electives	60-61											60	
BBA in Economics																
School Requirements																
ACCT	2010	Principles of Accounting I	3			3								3	
ACCT	2200	Principles of Accounting II	3					3						3	
ECON	2103	Note: ECON 2103 OR ECON 2113 Principles of Microeconomics	3			3								3	ECON 2103 / 2113 / 2123 is a major pre-requisite
ECON	2113	Microeconomics	3												
ECON	2123	Note: ECON 2123 OR ECON 3123 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	Substituted by COMP 1021/1022P/2011/2012H
ISOM	2020	Coding for Business	1	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students if they have taken and passed COMP1021 or COMP 1029P
ISOM	2500	Business Statistics	3	-	-	-	-	-	-	-	-	-	-	0	Substituted by LIFS 3150/MATH 2411/BIEN 3300
ISOM	2600	Introduction to Business Analytics	1	-	-	-	-	-	-	-	-	-	-	0	Substituted by BIEN 3310/3320
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	
SBMT	1111	Business Student Induction	0	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students
LABU	2040	Business Case Analyses	3	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students
LABU	2060	Effective Communication in Business	3					3						3	
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023 Calculus and Linear Algebra	3-4 / 3	(3)										0	DDP students should take MATH 1013 OR MATH 1023 to satisfy the requirements of both BSc and BBA degrees
MATH	1012	Calculus IA	4												
MATH	1013	Calculus IB	3												
MATH	1020	Accelerated Calculus	4												
MATH	1023	Honors Calculus I	3												
		Required credits for School Requirements	43-44											31	
Major Requirements																
Major Required Courses and Electives																
ECON	3014	Managerial Microeconomics	4					4						4	
ECON	3024	Managerial Macroeconomics	4						4					4	
ECON	3334	Introduction to Econometrics	4							4				4	
ECON	4670	Economics Research and Communication	0									0		0	
ECON		ECON 4000-level Electives (Any 3 courses of the subject and level as specified)	11								4	4	3	11	
		Required credits for Major Required Courses and Electives	23											23	
Additional Requirements																
Requirements for Dual Degree Program																
Required Courses																
TEMG	1010	T&M Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0	
TEMG	3950	T&M Case Analysis and Product Innovation	3		3									3	
TEMG	4950	T&M Corporate Consulting Project	3-5					4						4	
		Required credits for Additional Requirements	7											7	
University CORE																
CORE	C3 - C12	U CORE - Others	30		3		3	6	6		6	3	3	30	
CORE	C1 & C2	U CORE - English Language	6	3	3									6	
		Sub-total for University CORE	36											36	

Term load (excl. free credits)

	16	18	18	18	19	19	17	16	19	16	
					176##						

<< Declaration of BEng major   << Declaration of BBA major

Notes:

( ) indicates the reuse of the same course to fulfill more than one requirement.

--- denotes the course/requirement is either waived or substitued

To graduate, students should complete all requirements specified for DDP.

**Remarks on course(s):