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) **2022-23 Intake**

School:		School of Engineering and School of Business Management		Student's Pathway												
Program:		**Dual Degree Program (BEng in Bioengineering and BBA in Economics)**														**Remarks**
Course Offering Dept (course code prefix)	Course Code	Course Title / Courses List	Credits	Year 1 Fall	Year 1 Spring	Year 2 Fall *<< Declaration of BEng major*	Year 2 Spring	Year 3 Fall *<< Declaration of BBA major*	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	**Sub-total**		
BEng in Bioengineering																
Major Requirements																
Engineering Fundamental Courses																
		Note: [COMP 1021] OR [(COMP 1022P OR COMP 2011) AND COMP1029P]	3-5													
COMP	1021	Introduction to Computer Science	3													
COMP	1022P	Introduction to Computing with Java	3		3									3		Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020
COMP	1029P	Python Programming Bridging Course	1													
COMP	2011	Programming with C++	4													
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5													
CHEM	1020	General Chemistry I	3	3										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		
		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7													
MATH	1012	Calculus IA	4													
MATH	1013	Calculus IB	3	3	3									6		
MATH	1014	Calculus II	3													
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
MATH	1024	Honors Calculus II	3													
		Note: PHYS 1112 OR PHYS 1312														
PHYS	1112	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																
		Note: BIEN 1010 OR CENG 1000														
BIEN	1010	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		
		Note: BIEN 3310 OR BIEN 3320														
BIEN	3310	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		
		Note: BIEN 4920 OR BIEN 4930 OR BIEN 4940														
BIEN	4920	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		
		Note: LIFS 3150 OR MATH 2411 OR BIEN 3300	3-4													
LIFS	3150	Biostatistics	3													
MATH	2411	Applied Statistics	4			3								3		
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		
		Note: ECON 2103 OR ECON 2113														
ECON	2103	Principles of Microeconomics	3			3								3		ECON 2103 / 2113 / 2123 is a major pre-requisite
ECON	2113	Microeconomics	3													
		Note: ECON 2123 OR ECON 3123														
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		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		
LABU	2040	Business Case Analyses	3	-	-	-	-	-	-	-	-	-	-	0		Waived for DDP students
LABU	2060	Effective Communication in Business	3					3						3		
		Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4													
MATH	1003	Calculus and Linear Algebra	3													
MATH	1012	Calculus IA	4	(3)										0		DDP students should take MATH 1013 OR MATH 1023 to satisfy the requirements of both BSc and BBA degrees
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 - C9	U CORE - Others	21				3	6	6		6			21		
CORE	C1 & C2	U CORE - English Language	6	3	3									6		
CORE	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	0	3									3		
		Sub-total for University CORE	36											30		
				Term load (excl. free credits)												
				16	18	18	18	19	19	17	16	16	13			
				170##												

<< 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):

>> 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.