The Hong Kong University of Science and Technology
Academy of Interdisciplinary Studies
An Example on Student's Pathway

BEECON 2025-26 Intake
(Via DDP PBA)

				<< 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 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
Engineering Fundamental Courses

		Note: COMP 1022P OR COMP 1023 OR COMP 2011 OR COMP 2012H	3-5												
COMP	1022P	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	1023	Introduction to Python Programming	3												
COMP	2011	Programming with C++	4												
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
		Note: MATH 1013 OR MATH 1020 OR MATH 1023	3-4												
MATH	1013	Calculus I	4	3										3	DDP students should take MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees
MATH	1020	Accelerated Calculus	3												
MATH	1023	Honors Calculus I	4												
		Note: 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	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				3							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	
		Note: BIEN 3310 OR BIEN 3320	3												
BIEN	3310	Data Science for Neural Engineering	3					[3]	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 Bioinstrumentation and Bioimaging	3					3						3	
BIEN	3420	Biosensors and Bioinstrumentation for Healthcare	3						3					3	
BIEN	3910	Bioengineering Laboratory	4					4						4	
		Note: BIEN 4920 OR BIEN 4930 OR BIEN 4940	6												
BIEN	4920	Bioengineering Capstone Design	6									3	3	6	
BIEN	4930	Bioengineering Thesis Research	6												
BIEN	4940	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	Those entering the Bioengineering in Year 2 will take this course in Year 2 Fall.
CENG	2210	Chemical and Biological Engineering Thermodynamics	3				3							3	
CENG	2310	Modeling for Chemical and Biological Engineering I	3			3								3	
CENG	2320	Modeling for Chemical and Biological Engineering II	3				3							3	
CENG	4020	Academic and Professional Development II	0						0					0	
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 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 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	3												
ECON	2103	Principles of Microeconomics	3			3								3	
ECON	2113	Microeconomics	3												ECON 2103 / 2113 / 2123 is a major pre-requisite
		Note: 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	COMP 1023, COMP 2011 and COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP1023 or COMP2011 or COMP2012H instead of ISOM 2010.
ISOM	2020	Coding for Business	1	-	-	-	-	-	-	-	-	-	-	0	ISOM 2020 is waived for DDP students who have taken and passed COMP 1023, COMP 2011 and COMP 2012H. These two 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	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	
		Note: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4												
MATH	1003	Calculus and Linear Algebra	3	[3]										0	DDP students should take MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees
MATH	1013	Calculus IB	3												
MATH	1020	Accelerated Calculus	3												
MATH	1023	Honors Calculus I	3												
		Required Credits for School Requirements	39-40	3	3	3	3	3	3	3	2	0	2	31	

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		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	0	0	0	0	4	4	4	4	4	3	23	

Additional Requirement for Dual Degree
Requirements for Dual Degree Program

TEMG	1011	T&M Professional Activities I	0	0	0									0	
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	To graduate, students should complete **ALL** requirements as specified for DDP.
TEMG	1015	T&M Professional Activities V	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	0	3	0	0	0	4	0	0	0	0	7	

University Common Core Requirement

CORE	C3 - C9	U CORE - Others	21			3				6	6	6		21	
CORE	C1 & C2	U CORE - English Language	6	3	3									6	
HMAW	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2									3	
		Sub-total for University CORE	30	4	5	3	0	0	0	6	6	6	0	30	

		Term load (excl. free credits)													
				19	21	15	18	17	17	16	15	16	14	**168**
							168##								

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):

>> 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.