The Hong Kong University of Science and Technology

Academy of Interdisciplinary Studies

An Example on Student's Pathway (as of April 1, 2025)

CEGBM **2025-26 Intake**

(Via DDP PBA)

School:	School of Engineering and School of Business Management			<< Declaration of BEng major				<< Declaration of BBA major							Student's Pathway
Program:	**Dual Degree Program (BEng in Chemical Engineering 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 Chemical Engineering															
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	
		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	13-19	6	6	0	0	0	0	0	0	0	0	12	
Major Required Courses and Electives															
CENG	1000	Foundations of Chemical and Biological Engineering	3	3										3	NOTE: Those entering the department in Year 2 will takethis cousre in Year 2 Fall.
CENG	1010	Academic and Professional Development I	0	0										0	
CENG	1110	Introduction to Chemical Engineering	3		3									3	NOTE: Those entering the department in Year 2 will takethis cousre in Year 2 Fall.
CENG	1500	A First Course on Materials Science and Applications	3			3								3	
CENG	2210	Chemical and Biological Engineering Thermodynamics	3				3							3	
CENG	2220	Transport Phenomena I	3					3						3	
CENG	2310	Modeling for Chemical and Biological Engineering	3			3								3	
CENG	2320	Modeling for Chemical and Biological Engineering II	3				3							3	
CENG	3110	Process Dynamics and Control	3						3					3	
CENG	3150	Integrated Chemical Process & Product Design	5						5					5	
CENG	3210	Separation Processes	3					3						3	
CENG	3220	Transport Phenomena II	3						3					3	
CENG	3230	Chemical and Biological Reaction Engineering	3					3						3	
CENG	3300	Data Science for Molecular Engineering	3					3						3	
CENG	3950	Chemical and Environment Engineering Laboratory	4						4					4	
CENG	4020	Academic and Professional Development II	0						0					0	
		Note: CENG 4920 OR CENG 4930 OR CENG 4940 (Students taking the Research Option must take CENG 4930)	6												
CENG	4920	Chemical Engineering Capstone Design	6									3	3	6	
CENG	4930	Chemical Engineering Thesis Research	6												
CENG	4940	Chemical Engineering Industrial Project	6												
		Note: BIEN2410 OR BIEN2610 OR LIFS1901	3												
BIEN	2410	Cellular and Systems Physiology for Engineers	3			3								3	
BIEN	2610	Chemical Biology for Engineers	3												
LIFS	1901	General Biology I	3												
CHEM	1052	Laboratory for General Chemistry B	1		1									1	
CHEM	2111	Fundamentals of Organic Chemistry	3			3								3	CHEM 2111 offered in Fall
CHEM	2155	Fundamental Organic Chemistry Laboratory	1			1								1	
CENG/BIEN/COMP/ ENE/CHEM		CENG Elective (Courses from the specified list)	12							3	3	3	3	12	
		BEng in Chemical Engineering Major Requirements	71	3	4	13	6	12	15	3	3	6	6	71	
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	
		Note: ECON 2103 OR ECON 2113	3												
ECON	2103	Principles of Microeconomics	3			3								3	
ECON	2113	Microeconomics	3												
		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 1022P, COMP 2011 and COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP 1022P, COMP 1023, COMP 2011 or COMP 2012H 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 or COMP 1029P 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						1					1	
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 and MATH 1023 or MATH 1020 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	6	3	1	3	3	5	2	32	
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					3	4	4	6	6	6	29	
		Required Credits for Major Required Courses and Electives	23	0	0	0	0	3	4	4	6	6	6	29	
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	4	0	0	0	0	0	0	7	
University Common Core Requirement															
CORE	C3 - C9	U CORE - Others	21			3	3			6	6		3	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	3	0	0	6	6	0	3	30	
									Term load (excl. free credits)						
				16	21	19	19	18	20	16	18	17	17	**181**	
									181##						

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.