The Hong Kong University of Science and Technology

Academy of Interdisciplinary Studies

An Example on Student's Pathway (as of August 3, 2023)

CEECON **2023-24 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 Chemical Engineering 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	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring	Year 5 Fall	Year 5 Spring	**Sub-total**	
BEng in Chemical Engineering															
Major Requirements															
Engineering Fundamental Courses															
		Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H	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	2011	Programming with C++	4												
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5												
CHEM	1020	General Chemistry I	3	3										3	
LANG	2030	Technical Communication I	3	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students
	□	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												
MATH	2011	Introduction to Multivariable Calculus	3					3						3	
		Note: PHYS 1112 OR PHYS 1312													
PHYS	1112	General Physics I with Calculus	3		3									3	
PHYS	1312	Honors General Physics I	3												
		Required credits for Engineering Fundamental Courses	19-24											18	
Major Required Courses and Electives															
		Note: CENG1000 OR CENG1500													
CENG	1000	Introduction to Chemical and Biological Engineering	3	3										3	
CENG	1500	A First Course on Materials Science and Applications	3												
		Note: CENG1600 OR CENG1700 OR BIEN1010													
CENG	1600	Biotechnology and Its Business Opportunities	3		3									3	
CENG	1700	Introduction to Environmental Engineering	3												
BIEN	1010	Introduction to Biomedical Engineering	3												
CENG	1010	Academic and Professional Development I	0			0								0	
CENG	1980	Industrial Training	0										0	0	
CENG	2110	Process and Product Design Principles	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	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	Heat and Mass Transfer	3					3						3	
CENG	3230	Chemical and Biological Reaction Engineering	3					3						3	
CENG	3330	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 6 taking the Research Option must take CENG 4930)													
CENG	4920	Chemical Engineering Capstone Design	6									3	3	6	
CENG	4930	Chemical Engineering Thesis Research	6												
CENG	4940	Chemical Engineering Industrial Project	6												
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0	
CHEM	1050	Laboratory for General Chemistry I	1		1									1	
CHEM	2111	Fundamentals of Organic Chemistry	3				3							3	
CHEM	2155	Fundamental Organic Chemistry Laboratory	1				1							1	
LANG	4035	Technical Communication II for Chemical and Biological Engineering	3									3		3	
		Note: BIEN2410 OR BIEN2610 OR LIFS1901													
BIEN	2410	Cellular and Systems Physiology for Engineers	3				3							3	
BIEN	2610	Chemical Biology for Engineers	3												
LIFS	1901	General Biology I	3												
CENG/CHEM		CENG Elective (9 credits from specified elective list)	9			3		3	3					9	
		Required credits for Major Requirements Courses and Electives	68											68	
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	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	
ECON	3700	Writing as an Economist	3									3		3	
LANG	2062	Professional Speaking for the Workplace	3	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students
		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 1012 or 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	4												
MATH	1023	Honors Calculus I	3												
		Required credits for School Requirements	45-46											35	
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		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	
HMAW	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2									3	
		Sub-total for University CORE	30											30	
				Term load (excl. free credits)											
				19	21	18	19	20	18	17	17	18	14		
				181##											
						<< Declaration of BEng major		<< Declaration of BBA major							

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.