## The Hong Kong University of Science and Technology Academy of Interdisciplinary Studies

CEECON 2024-25 Intake (Via DDP PBA)

School of Engineering and School of Business Management

An Example on Student's Pathway (as of August 8, 2024)

School:		Dual Degree Program (PEns in Chemical Engineering and PPA in Econom		Student's Patriway											
Program:		Dual Degree Program (BEng in Chemical Engineering and BBA in Econom	nics)												1
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
				_	g		ng		g	_	g	_	g		
BEng in Che		neering													
Major Require															
		Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H	3-5			:		:							T
COMP	1021 1022P	Introduction to Computer Science Introduction to Computing with Java	3	3		:		! !						3	Students should take COMP1021 which will also be used to substitute
COMP COMP	2011 2012H	Programming with C++ Honors Object-Oriented Programming and Data Structures	4 5			!		!							ISOM 2010 and to waive ISOM 2020
CHEM	1012	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories  Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND	3 4-7	3		<u> </u>		<u> </u>						3	
MATH	□ 1012	(MATH 1014 OR MATH 1024)] OR [MATH 1020] Calculus IA	4			! :		:							
MATH MATH	1012 1013 1014	Calculus IB Calculus II	3	3	3	:		:						6	
MATH	1020	Accelerated Calculus	4			:		!							
MATH MATH	1023 1024	Honors Calculus I Honors Calculus II	3 3			<u> </u>		<u> </u>							
MATH	2011	Introduction to Multivariable Calculus  Note: PHYS 1112 OR PHYS 1312	3			<u>!                                      </u>		3						3	
PHYS PHYS	1112 1312	General Physics I with Calculus Honors General Physics I	3		3	:		:						3	
		Required credits for Engineering Fundamental Courses	16-21			:								18	
Major Required Co	ourses and Electiv	PS Note: CENG1000 OR CENG1500		1				<u> </u>							T
CENG CENG	1000 1500	Introduction to Chemical and Biological Engineering A First Course on Materials Science and Applications	3	3		:		:						3	
CENG	1600	Note: CENG1600 OR CENG1700 OR BIEN1010 Biotechnology and Its Business Opportunities	3			<del>:                                    </del>		:							
CENG BIEN	1700 1010	Introduction to Environmental Engineering	3		3	:		:						3	
CENG	1010	Introduction to Biomedical Engineering Academic and Professional Development I	0			0		!						0	
CENG	1980	Industrial Training	0										0	0	
CENG	2110 2210	Process and Product Design Principles  Chemical and Biological Engineering Thermodynamics	3	1		3	3	<u>:</u>					+	3	-
CENG	2220	Transport Phenomena I	3			<del></del>	3	<u> </u>					1	3	+
CENG	2310	Modeling for Chemical and Biological Engineering	3			3								3	
CENG	3110	Process Dynamics and Control	3			!	<u> </u>	!	3				1	3	
CENG CENG	3150 3210	Integrated Chemical Process & Product Design Separation Processes	5	1		!	<del>                                     </del>	3	5				+	5	+
CENG	3220	Heat and Mass Transfer	3					3						3	
CENG	3230	Chemical and Biological Reaction Engineering	3					3						3	
CENG	3330 3950	Data Science for Molecular Engineering  Chemical and Environment Engineering Laboratory	3			3		<del>!</del>			4			3	
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 CENG	4920 4930	Chemical Engineering Capstone Design Chemical Engineering Thesis Research	6			ļ		ļ.				3	3	6	
CENG	4940	Chemical Engineering Industrial Project	6	-					0					0	
ENGG CHEM	2010 1052	Engineering Seminar Series  Laboratory for General Chemistry B	1		1	0	0	0	0				1	1	
CHEM	2111	Fundamentals of Organic Chemistry	3			!	3	!						3	
CHEM	2155	Fundamental Organic Chemistry Laboratory  Note: BIEN2410 OR BIEN2610 OR LIFS1901	1			!	1	!						1	
BIEN BIEN	2410 2610	Cellular and Systems Physiology for Engineers	3			ļ .	3	!						3	
LIFS	1901	Chemical Biology for Engineers General Biology I	3			<u>!</u>		<u> </u>							
CENG/CHEM	Re	CENG Elective (9 credits from specified elective list)  quired credits for Major Requirements Courses and Electives	9 65			3		3	3					9 65	
BBA in Eco		quirou oroano for major resquiromonio obultoso una Electrico	- 00										1	00	1
School Requir															
ACCT	2010	Principles of Accounting I	3		3	!		:						3	
ACCT	2200	Principles of Accounting II Note: ECON 2103 OR ECON 2113	3			!		!	3					3	
ECON	2103	Principles of Microeconomics	3			3		!						3	EOON 0400 / 0440 / 0400 is a secil
ECON	2113	Microeconomics Note: ECON 2123 OR ECON 3123	3			<del>!                                    </del>		<del>!</del>							ECON 2103 / 2113 / 2123 is a major pre-requisite
ECON ECON	2123 3123	Macroeconomics Macroeconomic Theory I	3			<u>!</u>		<u>!</u>		3				3	
FINA	2303	Financial Management	3			<u> </u>	3	<u> </u>						3	Substituted by COMP
ISOM	2010	Introduction to Information Systems	3	-	-	<u> </u>		<u> </u>	-	-	-	-	-	0	1021/1022P/2011/2012H
ISOM	2020	Coding for Business	1	-	-		-		-	-	-	-	-	0	Waived for DDP students if they have taken and passed COMP1021
ISOM	2500	Business Statistics	3	3		<del>i</del>		<del>!</del>						3	or COMP 1029P
ISOM	2600	Introduction to Business Analytics	1			ĺ		1						1	
ISOM	2700	Operations Management	3			<u> </u>		<u> </u>				3	1	3	
MARK MGMT	2120	Marketing Management Business Ethics and the Individual	3	1		<u>:                                    </u>	3	<u> </u>				2	+	3	+
MGMT	2110	Organizational Behavior	3								3			3	
MGMT	2130	Business Ethics and Social Responsibility  Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	2			<u> </u>		<u> </u>					2	2	
MATH	1003	Calculus and Linear Algebra	3-4			į		į							DDP students should take MATH 1012 or MATH 1013 or MATH 1020
MATH MATH	1012 1013	Calculus IA Calculus IB	3	(3)		į	Ì	į	Ī	Ī	Ī			0	or MATH 1023 to satisfy the requirements of both BEng and BBA
MATH MATH	1020 1023	Accelerated Calculus Honors Calculus I	4 3			<u>į                                    </u>		<u>į                                    </u>							degrees
Major Darri	morts	Required credits for School Requirements	39-40			i		<u>i                                      </u>					1	32	
Major Require  Major Required Co	ements ourses and Electiv	es													
ECON ECON	3014	Managerial Microeconomics	4			i		4						4	
ECON	3024	Managerial Macroeconomics	4					<u> </u>	4					4	
ECON	3334	Introduction to Econometrics	4			Į		<u>i                                      </u>		4				4	
ECON		ECON 4000-level Electives (Any 3 courses of the subject and level as specified)	11	<u> </u>		<u> </u>		<u> </u>			4	4	3	11	
A d d!4! ! =	Daguelus	Required credits for Major Required Courses and Electives	23	1	ļ	<u> </u>	Ь	<u>:                                    </u>	<u> </u>	<u> </u>	<u> </u>	ļ	1	23	<u> </u>
	Requirement														
Requirements Required Courses	for Dual Degr	ee riogiani													
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			!	İ	!		4			1	4	
		Required credits for Additional Requirements				<u> </u>		<u>i</u>					1	7	
University CO	RE								•	•	•				
CORE	C3 - C9	U CORE - Others	21			3		:		6	6		6	21	
CORE	C1 & C2	U CORE - English Language	6	3	3	<u>!</u>		<u> </u>					1	6	
HMAW	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness  Sub-total for University CORE	3 30	1	2	<del>i                                    </del>		<del>i                                    </del>					1	3	
		Sub-total for Offiversity CORE	30	+	İ	-	Т	erm load (ex	cl. free cred	its)	<u> </u>		İ	30	<u> </u>
											14	1			
									5##						
Notes:						<< Declar BEng ma		<< Declaration of BBA major							
( ) indicates the rause	of the same course to	fulfill more than one requirement.													

\*\*Remarks on course(s):

<sup>( )</sup> indicates the reuse of the same course to fulfill more than one requirement.

<sup>---</sup> denotes the course/requirement is either waived or substituted

 $<sup>\</sup>ensuremath{\mathit{##}}$  To graduate, students should complete all requirements as specified for DDP.

<sup>&</sup>gt;> 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.