The Hong Kong University of Science and Technology
Academy of Interdisciplinary Studies
An Example on Student's Pathway (as of August 3, 2023)

COECON 2023-24 Intake (Via DDP PBA)

School: School of Engineering and School of Business Management

Program: Dual Degree Program (BEng in Computer Science and BBA in Economics)

Student's Pathway — << Declaration of BEng major / << Declaration of BBA major

Course Offering Dept. (prefix)	Course Code	Course Title / Courses List	Credits	Y1 Fall	Y1 Spring	Y2 Fall	Y2 Spring	Y3 Fall	Y3 Spring	Y4 Fall	Y4 Spring	Y5 Fall	Y5 Spring	Sub-total	Remarks
BEng in Computer Science															
Major Requirements															
Engineering Fundamental Courses															
COMP	1021	Note: COMP1021 OR COMP1022P. Introduction to Computer Science	3	3										3	Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020
COMP	1022P	Introduction to Computing with Java	3												
CHEM	1008	Note: CHEM1008 OR CHEM1020 OR LIFS1901 OR PHYS1101 OR PHYS1112 OR PHYS1312. Introductory Chemistry	3	3										3	
CHEM	1020	General Chemistry I	3												
LIFS	1901	General Biology I	3												
PHYS	1101	Introductory Physics	4												
PHYS	1112	General Physics I with Calculus	3												
PHYS	1312	Honors General Physics I	3												
LANG	2030	Technical Communication I	3	---	---	---	---	---	---	---	---	---	---	0	Waived for DDP students
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]. Calculus IA	4-7 / 4	3	3									6	
MATH	1013	Calculus IB	3												
MATH	1014	Calculus II	3												
MATH	1020	Accelerated Calculus	4												
MATH	1023	Honors Calculus I	3												
MATH	1024	Honors Calculus II	3												
MATH	2111	Note: MATH 2111 OR MATH 2121 OR MATH 2131. Matrix Algebra and Applications	3-4			3								3	
MATH	2121	Linear Algebra													
MATH	2131	Honors in Linear and Abstract Algebra I													
SENG		Engineering Introduction course (COMP students may also use COMP1022P to fulfill this requirement)	3-4	(3)										0	
		Required credits for Engineering Fundamental Courses	19-23											15	
Major Required Courses and Electives															
COMP	2011	Note: (COMP2011 AND COMP2012) OR COMP2012H. Programming with C++	5-8 / 4			4	4							8	
COMP	2012	Object-Oriented Programming and Data Structures	4												
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5												
COMP	2611	Computer Organization	4					4						4	
COMP	2711	Note: COMP2711 OR COMP2711H. Discrete Mathematical Tools for Computer Science	4			4								4	
COMP	2711H	Honors Discrete Mathematical Tools for Computer Science	4												
COMP	3111	Note: COMP3111 OR COMP3111H. Software Engineering	4				4							4	
COMP	3111H	Honors Software Engineering	4												
COMP	3511	Operating Systems	3						3					3	
COMP	3711	Note: COMP3711 OR COMP3711H. Design and Analysis of Algorithms	3-4 / 3					3						3	
COMP	3711H	Honors Design and Analysis of Algorithms	4												
COMP	4900	Note: Students are required to take COMP4900 for every regular term in which they are in residency at HKUST with major in COMP Academic and Professional Development	0	0	0	0	0	0	0	0	0	0	0	0	
COMP	1991	Note: [COMP 1991 AND (COMP 4981 OR COMP 4981H)] OR [COMP 4910]. Industrial Experience	6 / 0								3	3		6	
COMP	4981	Final Year Project	6												
COMP	4981H	Final Year Thesis	6												
COMP	4910	Co-op FYP Program	6												
ELEC/IEDA/MATH	2600	Note: ELEC 2600 OR ELEC 2600H OR IEDA 2520 OR IEDA 2540 OR MATH 2411 OR MATH 2421 OR MATH 2431. Probability and Random Processes in Engineering	3-4 / 4			4								4	Students should take MATH 2411 which will also be used to substitute ISOM 2500.
ELEC	2600H	Honors Probability and Random Processes in Engineering	4												
IEDA	2520	Probability for Engineers	3												
IEDA	2540	Statistics for Engineers	3												
MATH	2411	Applied Statistics	4												
MATH	2421	Probability	4												
MATH	2431	Honors Probability	4												
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0	
LANG	4030	Technical Communication II for CSE, CPEG & DSCT	3								3			3	
COMP		COMP Electives (5 courses from the specified elective list, of which at least 3 courses should be taken from 1 area and at least 2 courses outside that area (including course(s) in the Courses Without Associated Area). Students may use at most one course under Deep Learning Applications (COMP 4471 and COMP 5223) to count towards this elective requirement.)	15						3	6	3	3		15	
COMP		COMP 2000-level or above Elective (Any course(s) of the subject and level as specified)	3				3							3	
		Required credits for Major Requirements Courses and Electives	53-58											57	
BBA in Economics															
School Requirements															
ACCT	2010	Principles of Accounting I	3			3								3	
ACCT	2200	Principles of Accounting II	3					3						3	
ECON	2103	Note: ECON 2103 OR ECON 2113. Principles of Microeconomics	3				3							3	ECON 2103 / 2113 / 2123 is a major pre-requisite
ECON	2113	Microeconomics	3												
ECON	2123	Note: ECON 2123 OR ECON 3123. 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 MATH 2411
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
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023. Calculus and Linear Algebra	3-4 / 3	(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	1012	Calculus IA	4												
MATH	1013	Calculus IB	3												
MATH	1020	Accelerated Calculus	4												
MATH	1023	Honors Calculus I	3												
		Required credits for School Requirements	43-44											32	
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		3		3	3	3	3	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											30	

Term load (excl. free credits): 16 | 17 | 18 | 17 | 18 | 14 | 19 | 15 | 16 | 14 — Total **164##**

<< 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 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.