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

**AIECON** (Via DDP PBA) — 2025-26 Intake

| | << 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 Artificial Intelligence 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 Artificial Intelligence (AI)** | | | | | | | | | | | | | | | |
| *Engineering Fundamental Courses* | | | | | | | | | | | | | | | |
| COMP | 1023 | Introduction to Python Programming | 3 | 3 | | | | | | | | | | 3 | Students should take COMP1023 which will also be used to substitute ISOM 2010 and to waive ISOM 2020 |
| | | Note: [(MATH 1013 OR MATH1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020] | 4-6 | | | | | | | | | | | | |
| MATH | 1013 | Calculus IB | 3 | 3 | 3 | | | | | | | | | 6 | DDP students should take MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees |
| MATH | 1014 | Calculus II | 3 | | | | | | | | | | | | |
| MATH | 1020 | Accelerated Calculus | 3 | | | | | | | | | | | | |
| MATH | 1023 | Honors Calculus I | 3 | | | | | | | | | | | | |
| MATH | 1024 | Honors Calculus II | 3 | | | | | | | | | | | | |
| | | Note: MATH 2121 OR MATH 2131 | 4 | | | | | | | | | | | | |
| MATH | 2121 | Linear Algebra | 4 | | | 4 | | | | | | | | 4 | |
| MATH | 2131 | Honors in Linear and Abstract Algebra I | 4 | | | | | | | | | | | | |
| | | **Required Credits for Engineering Fundamental Courses** | 11–13 | 6 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | |
| *Major Required Courses and Electives* | | | | | | | | | | | | | | | |
| COMP | 1944 | Artificial Intelligence Ethics | 3 | | | | | 3 | | | | | | 3 | |
| | | Note: (COMP 2011 AND COMP 2012) OR COMP 2012H | 5-8 | | | | | | | | | | | | |
| COMP | 2011 | Programming with C++ | 4 | | 4 | 4 | | | | | | | | 8 | |
| COMP | 2012 | Object-Oriented Programming and Data Structures | 4 | | | | | | | | | | | | |
| COMP | 2012H | Honors Object-Oriented Programming and Data Structures | 5 | | | | | | | | | | | | |
| COMP | 2211 | Exploring Artificial Intelligence | 3 | | | 3 | | | | | | | | 3 | |
| COMP | 2611 | Computer Organization | 4 | | | 4 | | | | | | | | 4 | |
| | | Note: COMP 2711 OR COMP 2711H | 4 | | | | | | | | | | | | |
| COMP | 2711 | Discrete Mathematical Tools for Computer Science | 4 | | | | 4 | | | | | | | 4 | |
| COMP | 2711H | Honors Discrete Mathematical Tools for Computer Science | 4 | | | | | | | | | | | | |
| COMP | 3211 | Fundamentals of Artificial Intelligence | 3 | | | | 3 | | | | | | | 3 | |
| | | Note: COMP 3711 OR COMP 3711H | 3-4 | | | | | | | | | | | | |
| COMP | 3711 | Design and Analysis of Algorithms | 3 | | | | | 3 | | | | | | 3 | |
| COMP | 3711H | Honors Design and Analysis of Algorithms | 4 | | | | | | | | | | | | |
| COMP | 4211 | Machine Learning | 3 | | | | | 3 | | | | | | 3 | |
| | | Note: COMP 4221 OR COMP 4471 | 3 | | | | | | | | | | | | |
| COMP | 4221 | Introduction to Natural Language Processing | 3 | | | | | | 3 | | | | | 3 | |
| COMP | 4471 | Deep Learning in Computer Vision | 3 | | | | | | | | | | | | |
| COMP | 4900 | Note: Students are required to take COMP 4900 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 | |
| | | Note: [COMP 1991 AND (COMP 4981 OR COMP 4981H)] OR [COMP 4910] | 6 | | | | | | | | | | | | |
| COMP | 1991 | Industrial Experience | 0 | | | | | | | | | | | 6 | |
| COMP | 4910 | Co-op Program | 6 | | | | | | | 0 | 3 | 3 | | | |
| COMP | 4981 | Final Year Project | 6 | | | | | | | | | | | | |
| COMP | 4981H | Final Year Thesis | 6 | | | | | | | | | | | | |
| MATH | 2411 | Applied Statistics | 4 | | | | 4 | | | | | | | 4 | Students should take MATH2411 which will also be used to substitute ISOM2500 |
| COMP | | COMP Electives (6 courses from the specified elective list, of which at least 4 courses should be taken from Artificial Intelligence area and at least 2 courses from Other-COMP area). | 18 | | | | | | | 3 | 6 | 6 | 3 | 18 | |
| | | **BEng in Artificial Intelligence Major Requirements** | 59-63 | 0 | 4 | 11 | 11 | 9 | 3 | 3 | 6 | 9 | 6 | 62 | |
| **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 2103 / 2113 / 2123 is a major pre-requisite |
| 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 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 | - | - | - | - | - | - | - | - | - | - | 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 | |
| | | 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 | 4 | | | | | | | | | | | | |
| MATH | 1023 | Honors Calculus I | 3 | | | | | | | | | | | | |
| | | **Required Credits for School Requirements** | 39-40 | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 2 | 0 | 2 | 29 | |
| *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 | 3 | 3 | 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 | 0 | 0 | 0 | 3 | 6 | 3 | 3 | 6 | 30 | |
| | | Term load (excl. free credits) | | 13 | 18 | 18 | 18 | 16 | 17 | 16 | 15 | 16 | 17 | **164** | |
| | | | | | | | | 164## | | | | | | | |

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.