# The Hong Kong University of Science and Technology
## Academy of Interdisciplinary Studies
An Example on Student's Pathway (as of August 8, 2024)

**IEGBUS** 2024-25 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 Industrial Engineering and Engineering Management and BBA in Global Business)** | | | | | | | | | | | | | | |
| 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 Industrial Engineering and Engineering Management

#### Major Requirements

##### Engineering Fundamental Courses

| Dept | Code | Title | Credits | Y1F | Y1S | Y2F | Y2S | Y3F | Y3S | Y4F | Y4S | Y5F | Y5S | Sub-total | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H | 3-5 | | | | | | | | | | | | Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020 |
| COMP | 1021 | Introduction to Computer Science | 3 | 3 | | | | | | | | | | 3 | |
| COMP | 1022P | Introduction to Computing with Java | 3 | | | | | | | | | | | | |
| COMP | 2011 | Programming with C++ | 4 | | | | | | | | | | | | |
| COMP | 2012H | Honors Object-Oriented Programming and Data Structures | 5 | | | | | | | | | | | | |
| | | Note: CHEM1012 OR PHYS1112 OR PHYS1312 | | | | | | | | | | | | | |
| CHEM | 1012 | General Chemistry B: Atomic Structure, Molecules, and Bonding Theories | 3 | 3 | | | | | | | | | | 3 | |
| PHYS | 1112 | General Physics I with Calculus | 3 | | | | | | | | | | | | |
| PHYS | 1312 | Honors General Physics I | 3 | | | | | | | | | | | | |
| | | 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 | 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 | 2011 | Introduction to Multivariable Calculus | 3 | | | | 3 | | | | | | | 3 | |
| MATH | 2111 | Matrix Algebra and Applications | 3 | | | 3 | | | | | | | | 3 | |
| SENG | | Engineering Introduction course (If the students take an introduction course included in their major, this course can be counted towards their major requirement.) | 3-4 | (3) | | | | | | | | | | 0 | |
| | | **Required credits for Engineering Fundamental Courses** | 19-25 | | | | | | | | | | | 18 | |

##### Major Required Courses and Electives

| Dept | Code | Title | Credits | Y1F | Y1S | Y2F | Y2S | Y3F | Y3S | Y4F | Y4S | Y5F | Y5S | Sub-total | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IEDA | 1010 | Academic and Professional Development I | 0 | | | 0 | 0 | | | | | | | 0 | |
| IEDA | 1020 | Academic and Professional Development II | 0 | | | | | 0 | 0 | | | | | 0 | |
| IEDA | 1901 | Industrial Training and Experience | 0 | | | | | | | | | 0 | | 0 | |
| IEDA | 2520 | Probability for Engineers | 3 | | | 3 | | | | | | | | 3 | |
| IEDA | 2540 | Statistics for Engineers | 3 | | | | 3 | | | | | | | 3 | Substitute ISOM 2500 |
| IEDA | 3010 | Prescriptive Analytics | 3 | | | | | 3 | | | | | | 3 | |
| IEDA | 3230 | Engineering Economics and Accounting | 3 | | | | | | 3 | | | | | 3 | |
| IEDA | 3250 | Stochastic Models | 3 | | | | | 3 | | | | | | 3 | |
| IEDA | 3300 | Industrial Data Systems | 3 | | | | | | | 3 | | | | 3 | |
| IEDA | 4100 | Integrated Production Systems | 3 | | | | | | | | 3 | | | 3 | This course will also be used to substitute ISOM 2700 |
| IEDA | 4130 | System Simulation | 3 | | | | | | | | 3 | | | 3 | |
| | | Note: IEDA 4901 OR IEDA 4960 (Students taking the Research Option must take IEDA 4901) | 6 | | | | | | | | | 3 | 3 | 6 | |
| IEDA | 4901 | Final Year Thesis | 6 | | | | | | | | | | | | |
| IEDA | 4960 | Industrial Engineering and Engineering Management Final Year Project | 6 | | | | | | | | | | | | |
| ENGG | 2010 | Engineering Seminar Series | 0 | | | 0 | 0 | 0 | 0 | | | | | 0 | |
| | | Note: ECON 2103 OR ECON 2113 | 3 | | | | | | | | | | | | |
| ECON | 2103 | Principles of Microeconomics | 3 | | | 3 | | | | | | | | 3 | |
| ECON | 2113 | Microeconomics | 3 | | | | | | | | | | | | |
| IEDA | | Industrial Engineering Electives (Courses from the specified elective list, of which at least 15 credits should be taken from 1 of the 2 areas and at least 6 credits outside that area.) | 21 | | | 6 | 3 | | | 3 | | 3 | 6 | 21 | |
| | | **Required credits for Major Requirements Courses and Electives** | 54 | | | | | | | | | | | 54 | |

### BBA in Global Business

#### School Requirements

| Dept | Code | Title | Credits | Y1F | Y1S | Y2F | Y2S | Y3F | Y3S | Y4F | Y4S | Y5F | Y5S | Sub-total | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCT | 2010 | Principles of Accounting I | 3 | 3 | | | | | | | | | | 3 | |
| ACCT | 2200 | Principles of Accounting II | 3 | | | | | | | | 3 | | | 3 | |
| | | Note: ECON 2103 OR ECON 2113 | | | | | | | | | | | | | This course will be counted as an IE major required course. |
| ECON | 2103 | Principles of Microeconomics | 3 | | | (3) | | | | | | | | 0 | |
| 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 COMP 1021 or COMP 1029P |
| ISOM | 2500 | Business Statistics | 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0 | Substituted by IEDA2540 |
| ISOM | 2600 | Introduction to Business Analytics | 1 | | | | | | | | | 1 | | 1 | |
| ISOM | 2700 | Operations Management | 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0 | Substituted by IEDA 4100 |
| 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 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023 | 3-4 | | | | | | | | | | | | 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 | 1003 | Calculus and Linear Algebra | 3 | | | | | | | | | | | | |
| MATH | 1012 | Calculus IA | 4 | (3) | | | | | | | | | | 0 | |
| MATH | 1013 | Calculus IB | 3 | | | | | | | | | | | | |
| MATH | 1020 | Accelerated Calculus | 4 | | | | | | | | | | | | |
| MATH | 1023 | Honors Calculus I | 3 | | | | | | | | | | | | |
| | | **Required credits for School Requirements** | 39-40 | | | | | | | | | | | 23 | |

#### Major Requirements

##### Major Required Courses and Electives

| Dept | Code | Title | Credits | Y1F | Y1S | Y2F | Y2S | Y3F | Y3S | Y4F | Y4S | Y5F | Y5S | Sub-total | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GBUS | 1000 | Global Leadership Development | 0 | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| GBUS | 2010 | Global Business Analysis | 3 | | | | | 3 | | | | | | 3 | |
| GBUS/SBMT | | Note: GBUS 2020 OR GBUS 2040 OR SMBT 2100-2110 | 1-4 | | | | | | | | | | | | |
| GBUS | 2020 | Public Service Project | 1 | | | | | | 1 | [1] | | | | 1 | |
| GBUS | 2040 | Environmental, Social, and Governance (ESG) Corporate Project | 1 | | | | | | | | | | | | |
| SBMT | 2100-2110 | Community Services Project | 4 | | | | | | | | | | | | |
| GBUS/ISOM | | Note: GBUS 3030 OR ISOM 4780 | 3-4 | | | | | | | | | | | | |
| GBUS | 3030 | Global Business Case Studies | 4 | | | | | | 3 | [3] | | | | 3 | |
| ISOM | 4780 | Integrated Planning and Execution | 3 | | | | | | | | | | | | |
| GBUS | 4910 | Capstone Project | 4 | | | | | | | | | 4 | [4] | 4 | |
| GBUS | | Global Business Electives (Courses from the specified elective list, of which at least 6 credits from each area and at least 2 courses must be offered by GBUS. Courses taken to fulfill requirements of an additional major in SBM may not be counted towards this elective requirement.) | 15 | | | | | | | | 6 | 3 | 6 | 15 | |
| | | **Required credits for Major Required Courses and Electives** | 26-30 | | | | | | | | | | | 26 | |

### Additional Requirements

#### Requirements for Dual Degree Program

##### Required Courses

| Dept | Code | Title | Credits | Y1F | Y1S | Y2F | Y2S | Y3F | Y3S | Y4F | Y4S | Y5F | Y5S | Sub-total | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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

| Dept | Code | Title | Credits | Y1F | Y1S | Y2F | Y2S | Y3F | Y3S | Y4F | Y4S | Y5F | Y5S | Sub-total | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CORE | C3 - C9 | U CORE - Others | 21 | | 6 | 3 | | 3 | 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 | | | | | | | | | | | 30 | |

| Term load (excl. free credits) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 16 | 17 | 18 | 18 | 16 | 15 | 14 | 15 | 13 | 16 | **158##** | | |

<< 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):