## The Hong Kong University of Science and Technology

|   |                       |   |               |          |               | 022)<br><< <i>D</i> ecla                         |               |   |                |          |               |          |           |           |  |
|---|-----------------------|---|---------------|----------|---------------|--|---------------|---|----------------|----------|---------------|----------|-----------|-----------|--|
| chool:                                    |                       | School of Engineering and School of Business Management   |               |          |               | BEng ma  | ijor          | BBA maj                                       | ior            | Stude    | nt's Pathwa   | ıy       |           |           |  |
| rogram:                                   |                       | Dual Degree Program (BEng in Computer Engineering and BBA in Marketi  | ng)           |          |               |  |               |   |                |          |               |          |           |           |  |
| Course Offering Dept. Course code prefix) | Course Code           | Course Title / Courses List   | Credits       | Year 1 F | Year 1 Spring | Year 2 Fall                                      | Year 2 Spring | Year 3 Fall                                   | Year 3 Spring  | Year 4 F | Year 4 Spring | Year 5 F | Year 5 Sp | Sub-total | Remarks  |
| BEng in Co                                | mputer En             | gineering   | -             | Fall     | ring          | ≅  | ring          | ≅   | ring           | Fall     | ring          | Fa⊟      | Spring    | <u>a.</u> |  |
| Major Require                             | ements                |   |               |          |               |  |               |   |                |          |               |          |           |           |  |
| ngineering Fund                           | 1021                  | Note: COMP1021 OR COMP1022P<br>Introduction to Computer Science   | 3             | 3        |               | !  |               | <del>!</del>                                  |                |          |               |          |           | 3         | Students should take COMP1021 v<br>will also be used to substitute ISOM    |
| OMP<br>ANG                                | 1022P<br>2030         | Introduction to Computing with Java Technical Communication I   | 3             | -        | -             | <u> </u>   | -             | -   | -              | -        | -             | -        | -         | 0         | and to waive ISOM 2020<br>Waived for DDP students                          |
| IATH                                      | 1012                  | Note: (IMATH 1012 OR MATH 1013 OR MATH 1023) AND<br>(MATH 1014 OR MATH 1024)] OR [MATH 1020]<br>Calculus IA   | 4-7<br>4      |          |               | į  |               | į   |                |          |               |          |           |           |  |
| IATH<br>IATH<br>IATH                      | 1013<br>1014<br>1020  | Calculus IB<br>Calculus II<br>Accelerated Calculus  | 3<br>3<br>4   | 3        | 3             | !<br>!   |               | !<br>!  |                |          |               |          |           | 6         |  |
| IATH<br>IATH                              | 1023<br>1024          | Honors Calculus I<br>Honors Calculus II   | 3<br>3        |          |               | <u>i</u>   |               | <u> </u>                                      |                |          |               |          |           |           |  |
| IATH<br>IATH                              | 2011                  | Introduction to Multivariable Calculus  Matrix Algebra and Applications  Note: PHYS1112 OR PHYS1312   | 3             |          |               | <u>!</u>   |               | 3   |                |          |               |          |           | 3         | 1  |
| HYS<br>HYS                                | 1112<br>1312          | General Physics I with Calculus<br>Honors General Physics I   | 3<br>3        | 3        |               | <u>i</u>   |               | <u>i</u>                                      |                |          |               |          |           | 3         |  |
| HYS<br>HYS                                | 1114<br>1314          | Note: PHYS1114 OR PHYS1314<br>General Physics II<br>Honors General Physics II   | 3             |          |               | !<br>!   |               | !<br>!  | 3              |          |               |          |           | 3         |  |
| ENG                                       |                       | 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)      |               | į  |               | į   |                |          |               |          |           | 0         |  |
| Major Required C                          | Courses and Elec      | Required credits for Engineering Fundamental Courses  | 25-29         |          |               |  |               |   |                |          |               |          |           | 21        | 1  |
| PEG<br>PEG                                | 2930<br>3930          | Academic and Professional Development I Academic and Professional Development II  | 0             |          |               | 0  | 0             | 0   | 0              |          |               |          |           | 0         | <u> </u>   |
| OMP                                       | 2011                  | Note: (COMP2011 AND COMP2012) OR COMP2012H Programming with C++   | 5-8<br>4      |          |               | 4  |               | 4   |                |          |               |          |           | 8         |  |
| OMP<br>OMP                                | 2012<br>2012H         | Object-Oriented Programming and Data Structures Honors Object-Oriented Programming and Data Structures Note: COMP2611 OR ELEC2350   | 4<br>5<br>4   |          |               | <u>i                                      </u>   |               | <u>i                                     </u> |                |          |               |          |           |           | <del> </del>   |
| OMP<br>LEC                                | 2611<br>2350          | Computer Organization<br>Introduction to Computer Organization and Design<br>Note: COMP2711 OR COMP2711H OR ELEC 2600   | 4<br>4<br>4   |          |               | !  | 4             | <u>!</u>                                      |                |          |               |          |           | 4         | 1  |
| OMP<br>OMP<br>LEC                         | 2711<br>2711H<br>2600 | Discrete Mathematical Tools for Computer Science<br>Honors Discrete Mathematical Tools for Computer Science<br>Probability and Random Processes in Engineering  | 4<br>4<br>4   |          |               | į  |               | į   |                | 4        |               |          |           | 4         |  |
| OMP                                       | 3511                  | Probability and Karldom Processes in Engineering Operating Systems  CPEG Restricted Elective (1 course from the specified elective list). The course cannot be  | 3             |          |               | <del>!</del>                                     |               | <del> </del>                                  |                |          | 3             |          |           | 3         |  |
| OMP                                       | 4521                  | double counted in Area Courses requirement.  Mobile Application Develoepment  | 3-4<br>3      |          |               | į  |               | į   |                |          |               | _        |           | _         |  |
| OMP<br>LEC<br>LEC                         | 4611<br>4310<br>4320  | Design and Analysis of Computer Architectures<br>Embedded System Design<br>FPGA-based Design: From Theory to Practice   | 3<br>4<br>3   |          |               | !  |               | <u>!</u>                                      |                |          |               | 3        |           | 3         |  |
| LEC                                       | 4330                  | Mobile Embedded Systems: Hardware Platform, Software Development, and Applications  Note: (CPEG 1971 AND (CPEG 4901 OR CPEG 4902 OR CPEG 4911 OR CPEG 4912))  OR (CPEG 4910) (Students taking the Research Option must take either CPEG 4902 or CPEG 4912)) | 6             |          |               | <u>i</u><br>i                                    |               | <u>i</u><br>i<br>:                            |                |          |               |          |           |           |  |
| PEG<br>PEG                                | 1971<br>4901          | Industrial Experience   | 0             |          |               | !<br>!   |               | <u>!</u>                                      |                |          |               | 3        | 3         | 6         |  |
| PEG<br>PEG                                | 4902<br>4911          | Computer Engineering Final Year Project in COMP Computer Engineering Final Year Thesis in COMP Computer Engineering Final Year Project in ELEC  | 6<br>6<br>6   |          |               | į  |               | į   |                |          |               |          |           |           |  |
| PEG<br>PEG                                | 4912<br>4910          | Computer Engineering Final Year Thesis in ELEC<br>Co-op Program   | 6<br>6        |          |               | <u> </u>   |               | !<br>!  |                |          |               |          |           |           |  |
| LEC                                       | 1100                  | Introduction to Electro-Robot Design  Note: ELEC1200 OR ELEC2100 OR ELEC2400 (2 courses out of 3)  A System View of Communications: from Signals to Packets   | 8<br>4        |          |               | 4  |               | <del> </del>                                  |                |          |               |          |           | 4         |  |
| LEC<br>LEC                                | 2100<br>2400          | Signals and Systems<br>Electronic Circuits  | 4<br>4        |          |               | !<br><del> </del>                                | 4             | !<br><del> </del>                             | 4              |          |               |          |           | 8         |  |
| NGG                                       | 3300<br>2010          | Introduction to Embedded Systems Engineering Seminar Series   | 4<br>0        |          |               | 0  | 0             | 0   | 0              |          | 4             |          |           | 4<br>0    |  |
| ANG<br>ANG                                | 4030<br>4031          | Note: LANG4030 OR LANG4031<br>Technical Communication II for CSE, CPEG & DSCT<br>Technical Communication II for ECE & CPEG  | 3<br>3        |          |               | !<br>i   |               | !<br>!  |                |          |               | 3        |           | 3         |  |
| OMP/ELEC                                  |                       | Area Courses (At least 2 courses should be taken from one 15 single area and at least 2<br>courses outside that area. Courses taken as Major Required Courses may not be counted<br>towards the elective requirement.)                                      | 15            |          |               | 3  |               | į   |                |          | 4             | 4        | 4         | 15        |  |
| BBA in Mar                                |                       | equired credits for Major Requirements Courses and Electives  | 59-63         |          |               | <u>.                                    </u>     |               |   |                |          |               |          |           | 62        |  |
| School Requi                              | rements               |   | 1             | 11       |               |  |               |   |                |          |               | 1        |           |           |  |
| CCT<br>CCT                                | 2010<br>2200          | Principles of Accounting I Principles of Accounting II  | 3             | 3        |               | <u> </u><br>                                     |               |   | 3              |          |               |          |           | 3         |  |
| CON                                       | 2103<br>2113          | Note: ECON 2103 OR ECON 2113 Principles of Microeconomics Microeconomics  | 3             |          | 3             | į  |               | •   |                |          |               |          |           | 3         |  |
| CON<br>CON                                | 2123<br>3123          | Note: ECON 2123 OR ECON 3123<br>Macroeconomics<br>Macroeconomic Theory I  | 3             |          |               | <u> </u>   |               | 3   |                |          |               |          |           | 3         |  |
| INA<br>SOM                                | 2303                  | Financial Management Introduction to Information Systems  | 3             |          | -             |  | 3             |   | _              |          |               |          |           | 3         | Substituted by COMP 1021/ 1022   |
| SOM                                       | 2020                  | Coding for Business   | 1             | -        |               |  | -             |   | -              | -        | -             | -        | -         | 0         | 2011/ 2012H Waived for DDP students if they have and passed COMP1021 or CO |
| SOM                                       | 2500                  | Business Statistics   | 3             |          |               | 3  |               | <u> </u>                                      |                |          |               |          |           | 3         | 1029P  |
| SOM<br>SOM                                | 2600<br>2700          | Introduction to Business Analytics  Operations Management   | 3             |          |               | !<br>!   | 1             | !<br>!  | 3              |          |               |          |           | 1 3       |  |
| IARK<br>IGMT                              | 2120<br>2010          | Marketing Management Business Ethics and the Individual   | 3             |          |               | <del>!</del>                                     | 3             | •   |                | 2        |               |          |           | 3 2       | MARK 2120 is a major pre-requi-  |
| IGMT<br>IGMT                              | 2110<br>2130          | Organizational Behavior  Business Ethics and Social Responsibility  | 3             |          | 3             | <u> </u>   |               | i   |                |          | 2             |          |           | 3 2       |  |
| ABU<br>ABU                                | 2040<br>2060          | Business Case Analyses Effective Communication in Business  | 3             | -        | -             | · -  | -             | - 3   | -              | -        | -             | -        | -         | 0         | Waived for DDP students  |
| IATH<br>IATH                              | 1003<br>1012          | Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023<br>Calculus and Linear Algebra<br>Calculus 1  | 3-4<br>3<br>4 |          |               | <del> </del><br>                                 |               | i<br>i  |                |          |               |          |           |           | DDP students should take MATH 1 or MATH 1013 or MATH 1020 or M             |
| IATH<br>IATH                              | 1013<br>1020          | Calculus IB<br>Accelerated Calculus   | 3 4           | (3)      |               | ļ  |               | į   |                |          |               |          |           | 0         | 1023 to satisfy the requirements of<br>BEng and BBA degrees                |
| IATH                                      | 1023                  | Honors Calculus I  Required credits for School Requirements   | 3<br>43-44    |          |               | <u>!</u>   |               | <u>!</u>                                      |                |          |               |          |           | 35        |  |
| <b>Major Require</b><br>Major Required C  | ourses and Elec       |   | ,             |          |               |  |               |   |                |          |               |          |           |           |  |
| ARK<br>ARK                                | 3220<br>3420          | Marketing Research  Consumer Behavior   | 4             |          |               | <u>!</u>   |               | 4   | 4              |          |               |          |           | 4         |  |
| ARK                                       | 4210                  | Strategic Marketing   | 4             |          |               | <del>:                                    </del> |               | į   |                |          |               |          | 4         | 4         | 1  |
| ARK                                       |                       | MARK 3000-level or above Electives (Any 3 courses of the subject and level as specified)  Required credits for Major Required Courses and Electives   | 12<br>24      |          |               | <u>:</u><br>i                                    |               | <u>l</u><br>i                                 |                | 4        | 4             | 4        |           | 12<br>24  | <del> </del>   |
|   | Requireme             | nts   |               | 11       | 1             | •  | 1             | 7   | 1              | 1        | 1             | 1        | 1         | 1         |  |
| Requirements<br>Required Courses          |                       | gree Program  |               |          |               |  |               |   |                |          |               |          |           |           |  |
| EMG<br>EMG                                | 1010<br>3950          | T&M Professional Activities  T&M Case Analysis and Product Innovation   | 0             | 0        | 0             | 0  | 0             | 0   | 0              | 0        | 0             | 0        | 0         | 0         |  |
| =MG<br>EMG                                | 4950                  | T&M Case Analysis and Product Innovation  T&M Corporate Consulting Project  | 3-5           |          | 3             | <u> </u>   |               | <del>!</del>                                  | 4              |          |               |          |           | 4         | <del> </del>   |
| Iniversity 00                             | DE                    | Required credits for Additional Requirements  | 7             |          |               | <u> </u>   |               | <u> </u>                                      |                |          |               |          |           | 7         |  |
| Iniversity CC                             | C3 - C9               | U CORE - Others   | 21            | 3        |               | 3  | 3             |   |                | 6        |               |          | 6         | 21        |  |
| ORE<br>ORE                                | C1 & C2<br>1905       | U CORE - English Language  Behavioral Foundations of University Education: Habits, Mindsets, and Wellness   | 6             | 3        | 3             | !  |               | !   |                |          |               |          |           | 6         |  |
|   | 1                     | Sub-total for University CORE   |               | Ť        |               | :  |               | :   |                |          |               |          |           | 30        | 1  |
|   |                       |   |               |          |               |  |               |   | xcl. free cred |          |               |          |           |           |  |

<sup>( )</sup> 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):

<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.