

<< Declaration of  
 BEng major << Declaration of  
 BBA major

| School:  |             | School of Engineering and School of Business Management  |  |         |     | Student's Pathway |               |             |               |             |               |             |               |             |               | Remarks |  |
|--|-------------|--|--|---------|-----|-------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|---------|--|
| Program:   |             | Dual Degree Program (BEng in Computer Engineering and BBA in Finance)  |  |         |     | 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  |
| Course Offering Dept. (course code prefix)                           | Course Code | Course Title / Courses List  |  | Credits |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| <b>BEng in Computer Engineering</b>                                  |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| <b>Major Requirements</b>  |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| Engineering Fundamental Courses                                      |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| COMP   | 1021        | Note: COMP1021 OR COMP1022P<br>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       |     |                   |               |             |               |             |               |             |               |             |               |         | Waived for DDP students  |
| LANG   | 2030        | Technical Communication I  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| MATH   | □           | 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       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| MATH   | 1013        | Calculus IB  |  | 3       | 3   | 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           |               |             |               |             |               |         |  |
| MATH   | 2111        | Matrix Algebra and Applications  |  | 3       |     |                   |               |             |               | 3           |               |             |               |             |               |         |  |
| PHYS   | 1112        | Note: PHYS1112 OR PHYS1312<br>General Physics I with Calculus  |  | 3       | 3   |                   |               |             |               |             |               |             |               |             |               |         |  |
| PHYS   | 1312        | Honors General Physics I   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| PHYS   | 1114        | Note: PHYS1114 OR PHYS1314<br>General Physics II   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| PHYS   | 1314        | Honors General Physics II  |  | 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) |                   |               |             |               |             |               |             |               |             |               |         |  |
| <b>Required credits for Engineering Fundamental Courses</b>          |             |  |  | 25-29   |     |                   |               |             |               |             |               |             |               |             |               |         | 21   |
| <b>Major Required Courses and Electives</b>                          |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| CPEG   | 2930        | Academic and Professional Development I  |  | 0       |     |                   | 0             | 0           |               |             |               |             |               |             |               |         |  |
| CPEG   | 3930        | Academic and Professional Development II   |  | 0       |     |                   |               |             | 0             | 0           |               |             |               |             |               |         |  |
| COMP   | 2011        | Note: (COMP2011 AND COMP2012) OR COMP2012H<br>Programming with C++   |  | 5-8     |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| COMP   | 2012        | Object-Oriented Programming and Data Structures  |  | 4       |     |                   | 4             |             | 4             |             |               |             |               |             |               |         |  |
| COMP   | 2012H       | Honors Object-Oriented Programming and Data Structures   |  | 5       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| COMP   | 2611        | Note: COMP2611 OR ELEC2350<br>Computer Organization  |  | 4       |     |                   |               | 4           |               |             |               |             |               |             |               |         |  |
| ELEC   | 2350        | Introduction to Computer Organization and Design   |  | 4       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| COMP   | 2711        | Note: COMP2711 OR COMP2711H OR ELEC 2600<br>Discrete Mathematical Tools for Computer Science   |  | 4       |     |                   |               |             |               |             |               | 4           |               |             |               |         |  |
| COMP   | 2711H       | Honors Discrete Mathematical Tools for Computer Science  |  | 4       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ELEC   | 2600        | Probability and Random Processes in Engineering  |  | 4       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| COMP   | 3511        | Operating Systems  |  | 3       |     |                   |               |             |               |             |               |             | 3             |             |               |         |  |
| COMP   | 4521        | CPEG Restricted Elective (1 course from the specified elective list). The course cannot be double counted in Area Courses requirement.   |  | 3-4     |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| COMP   | 4611        | Mobile Application Development   |  | 3       |     |                   |               |             |               |             |               |             |               | 3           |               |         |  |
| ELEC   | 4310        | Design and Analysis of Computer Architectures  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ELEC   | 4320        | Embedded System Design   |  | 4       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ELEC   | 4330        | FPGA-based Design: From Theory to Practice   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ELEC   | 4330        | Mobile Embedded Systems: Hardware Platform, Software Development, and Applications   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| CPEG   | 1971        | 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       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| CPEG   | 4901        | Industrial Experience  |  | 0       |     |                   |               |             |               |             |               |             |               | 3           | 3             |         | 6  |
| CPEG   | 4902        | Computer Engineering Final Year Project in COMP  |  | 6       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| CPEG   | 4911        | Computer Engineering Final Year Thesis in COMP   |  | 6       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| CPEG   | 4912        | Computer Engineering Final Year Project in ELEC  |  | 6       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| CPEG   | 4910        | Computer Engineering Final Year Thesis in ELEC   |  | 6       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| CPEG   | 4910        | Co-op Program  |  | 6       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ELEC   | 1100        | Introduction to Electro-Robot Design   |  | 4       |     |                   | 4             |             |               |             |               |             |               |             |               |         |  |
| ELEC   | 1200        | Note: ELEC1200 OR ELEC2100 OR ELEC2400 (2 courses out of 3)  |  | 8       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ELEC   | 2100        | A System View of Communications: from Signals to Packets   |  | 4       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ELEC   | 2400        | Signals and Systems  |  | 4       |     |                   |               | 4           |               | 4           |               |             |               |             |               |         |  |
| ELEC   | 2400        | Electronic Circuits  |  | 4       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ELEC   | 3300        | Introduction to Embedded Systems   |  | 4       |     |                   |               |             |               |             |               |             | 4             |             |               |         |  |
| ENGG   | 2010        | Engineering Seminar Series   |  | 0       |     |                   | 0             | 0           | 0             | 0           |               |             |               |             |               |         |  |
| LANG   | 4030        | Note: LANG4030 OR LANG4031<br>Technical Communication I for CSE, CPEG & DSCT   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| LANG   | 4031        | Technical Communication II for CSE & CPEG  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| COMP/ELEC  |             | Area Courses (At least 2 courses should be taken from one 15 single area and at least 2 courses outside that area. Courses taken as Major Required Courses may not be counted towards the elective requirement.) |  | 15      |     |                   | 3             |             |               |             |               |             | 4             | 4           | 4             |         | 15   |
| <b>Required credits for Major Requirements Courses and Electives</b> |             |  |  | 59-63   |     |                   |               |             |               |             |               |             |               |             |               |         | 62   |
| <b>BBA in Finance</b>  |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| <b>School Requirements</b>   |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ACCT   | 2010        | Principles of Accounting I   |  | 3       | 3   |                   |               |             |               |             |               |             |               |             |               |         |  |
| ACCT   | 2200        | Principles of Accounting II  |  | 3       |     |                   |               |             |               | 3           |               |             |               |             |               |         |  |
| ECON   | 2103        | Note: ECON 2103 OR ECON 2113<br>Principles of Microeconomics   |  | 3       |     |                   | 3             |             |               |             |               |             |               |             |               |         |  |
| ECON   | 2113        | Microeconomics   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ECON   | 2123        | Note: ECON 2123 OR ECON 3123<br>Macroeconomics   |  | 3       |     |                   |               |             |               |             |               |             |               | 3           |               |         |  |
| ECON   | 3123        | Macroeconomic Theory I   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| FINA   | 2303        | Financial Management   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ISOM   | 2010        | Introduction to Information Systems  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ISOM   | 2020        | Coding for Business  |  | 1       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ISOM   | 2500        | Business Statistics  |  | 3       |     |                   | 3             |             |               |             |               |             |               |             |               |         |  |
| ISOM   | 2600        | Introduction to Business Analytics   |  | 1       |     |                   |               |             |               | 1           |               |             |               |             |               |         |  |
| ISOM   | 2700        | Operations Management  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| MARK   | 2120        | Marketing Management   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| MGMT   | 2010        | Business Ethics and the Individual   |  | 2       |     |                   |               |             |               |             |               |             | 2             |             |               |         |  |
| MGMT   | 2110        | Organizational Behavior  |  | 3       |     |                   | 3             |             |               |             |               |             |               |             |               |         |  |
| MGMT   | 2130        | Business Ethics and Social Responsibility  |  | 2       |     |                   |               |             |               |             |               |             | 2             |             |               |         |  |
| LABU   | 2040        | Business Case Analyses   |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| LABU   | 2060        | Effective Communication in Business  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               | 3       | 3  |
| MATH   | 1003        | Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023<br>Calculus and Linear Algebra   |  | 3-4     |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| MATH   | 1012        | Calculus IA  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| MATH   | 1013        | Calculus IB  |  | 4       | (3) |                   |               |             |               |             |               |             |               |             |               |         |  |
| MATH   | 1020        | Accelerated Calculus   |  | 4       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| MATH   | 1023        | Honors Calculus I  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| <b>Required credits for School Requirements</b>                      |             |  |  | 43-44   |     |                   |               |             |               |             |               |             |               |             |               |         | 35   |
| <b>Major Requirements</b>  |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| Major Required Courses and Electives                                 |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| FINA   | 3001        | Key Skills for Finance Professionals (A)   |  | 1       |     |                   |               |             |               | 1           |               |             |               |             |               |         |  |
| FINA   | 3103        | Intermediate Investments   |  | 3       |     |                   |               |             |               | 3           |               |             |               |             |               |         |  |
| FINA   | 3203        | Derivative Securities  |  | 3       |     |                   |               |             |               |             | 3             |             |               |             |               |         |  |
| FINA   | 3303        | Intermediate Corporate Finance   |  | 3       |     |                   |               |             |               |             |               | 3           |               |             |               |         |  |
| FINA   | 3810        | Bloomberg Market Concepts Certification  |  | 0       |     |                   |               |             |               | 0           |               |             |               |             |               |         |  |
| ACCT   | 3010        | Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030<br>Financial Accounting I   |  | 3-6     |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ACCT   | 3020        | Financial Accounting II  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ACCT   | 3030        | Intermediate Financial Accounting for Non-Accounting Majors  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ISOM   | 3230        | Note: ISOM 3230 OR ISOM 3400<br>Business Applications Programming  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| ISOM   | 3400        | Python Programming for Business Analytics  |  | 3       |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| FINA   |             | FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)   |  | 9       |     |                   |               |             |               |             |               |             | 3             | 3           | 3             |         | 9  |
| <b>Required credits for Major Required Courses and Electives</b>     |             |  |  | 25-28   |     |                   |               |             |               |             |               |             |               |             |               |         | 25   |
| <b>Additional Requirements</b>                                       |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| <b>Requirements for Dual Degree Program</b>                          |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| Required Courses   |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| TEMG   | 1010        | T&M Professional Activities  |  | 0       | 0   | 0                 | 0             | 0           | 0             | 0           | 0             | 0           | 0             | 0           | 0             | 0       | 0  |
| TEMG   | 3950        | T&M Case Analysis and Product Innovation   |  | 3       |     | 3                 |               |             |               |             |               |             |               |             |               |         |  |
| TEMG   | 4950        | T&M Corporate Consulting Project   |  | 3-5     |     |                   |               |             |               | 4           |               |             |               |             |               |         |  |
| <b>Required credits for Additional Requirements</b>                  |             |  |  | 7       |     |                   |               |             |               |             |               |             |               |             |               |         | 7  |
| <b>University CORE</b>   |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| CORE   | C3 - C9     | U CORE - Others  |  | 21      |     |                   | 3             | 3           |               |             |               | 6           |               |             |               | 6       | 18   |
| CORE   | C1 & C2     | U CORE - English Language  |  | 6       | 3   | 3                 |               |             |               |             |               |             | 3             |             |               |         | 9  |
| CORE   | 1905        | Behavioral Foundations of University Education: Habits, Mindsets, and Wellness   |  | 3       | 1   | 2                 |               |             |               |             |               |             |               |             |               |         | 3  |
| <b>Sub-total for University CORE</b>                                 |             |  |  | 30      |     |                   |               |             |               |             |               |             |               |             |               |         | 30   |
| Term load (excl. free credits)                                       |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| 16 17 17 17 19 19 18 19 19 19  |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |
| 180##  |             |  |  |         |     |                   |               |             |               |             |               |             |               |             |               |         |  |