| Engineering Fundamental Courses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2600 2600 H 2011 2111 2350 2351 | Note: ELEC2600 OR ELEC2600H) OR MATH2011 OR MATH2111 OR MATH2350 OR MATH 2351 (3 courses out of 6) <br> Probability and Random Processes in Engineering <br> Honors Probability and Random Processes in Engineering <br> Introduction to Multivariable Calculus <br> Matrix Algebra and Applications <br> Applied Linear Algebra and Differential Equations <br> Introduction to Differential Equations | $\begin{gathered} \hline 9-10 \\ 4 \\ 4 \\ 3 \\ 3 \\ 3 \\ 3 \\ \hline \end{gathered}$ | 3 | ! | 3 | ! | $3$ |  |  |  |  |  | 9 |  |
| $\begin{aligned} & \text { comp } \\ & \text { comp } \end{aligned}$ | $\begin{aligned} & 1021 \\ & 102 \mathrm{P} \end{aligned}$ | Note: COMP1021 OR COMP1022P introduction to Computer Science Introduction to Computing with Java | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |  | 31 |  | I |  |  |  |  |  |  | 3 | This course will also be used to substitute ISOM 2010 |
| COMP | 2011 | Programming with C++ | 4 |  |  | 4 |  |  |  |  |  |  |  | 4 |  |
| ENGG | 1010 | Academic Orientation | 0 | 0 | 0 |  |  |  |  |  |  |  |  | 0 |  |
| LANG | 2030 | Technical Communication I | 3 |  | , |  | ! |  | 3 |  |  |  |  | 3 |  |
| $\begin{aligned} & \text { мАTH } \\ & \text { aATH } \\ & \text { NATH } \\ & \text { ANTH } \\ & \text { AATH } \\ & \text { HAH } \end{aligned}$ | 1012 <br> 1013 <br> 1014 <br> 1014 <br> 1020 <br> 1023 <br> 1024 | Note: : [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020] Calculus IA Calculus IB Calculus II Acelerated Calculus Honors Calculus I Honors Calculus II | $4.7$ | 3 | 3 |  | i |  |  |  |  |  |  | 6 |  |
| $\begin{aligned} & \text { pHys } \\ & \text { pHys } \end{aligned}$ | $\begin{aligned} & 1112 \\ & 1312 \\ & 13 \end{aligned}$ | Note: PHYS1112 OR PHYS1312 General Physics I with Calculus Honors General Physics I | 3 3 3 | 3 | i |  | i |  |  |  |  |  |  | 3 |  |
| $\begin{array}{\|l} \mathrm{pHys} \\ \mathrm{pHyys} \end{array}$ | $\begin{aligned} & 1114 \\ & 1314 \end{aligned}$ | $\begin{aligned} & \begin{array}{l} \text { Note: PHYS1114 OR PHYS1314 } \\ \text { Goenal Physics II PHS I } \\ \text { Honors General Physics II } \end{array} \end{aligned}$ | 3 |  | 31 |  | ; |  |  |  |  |  |  | 3 |  |
| SENG |  | Engineering Introduction course (If the students take an introduction course included in the major, this course can be counted towards their major requirement.) | 3.4 |  | ${ }^{(3)}$ ! |  |  |  |  |  |  |  |  | 0 |  |
|  |  | Required credits for Engineering Fundamental Courses | 32-37 |  | ! |  | I |  |  |  |  |  |  | 31 |  |
| Major Required Courses and Electives |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ELEC | 1100 | Introduction to Electro-Robot Design | 4 |  |  | 4 |  |  |  |  |  |  |  | 4 |  |
| ELEC | 1200 | A System View of Communications: from Signals to Packets | 4 |  | I |  | 4 |  |  |  |  |  |  | 4 |  |
| ELEC <br> ELEC | $\left.\right\|_{2100 \mathrm{H}} ^{2100}$ | $\begin{aligned} & \text { Note: ELECE2100 OR ELEC2100H } \\ & \begin{array}{l} \text { Signals and Systems } \\ \text { Honors } \end{array} \text { Sionals and Systems } \end{aligned}$ | $4$ |  | 1 |  |  |  |  | 4 |  |  |  | 4 |  |
| ELEC | 2350 | Introduction to Computer Organization and Design | 4 |  | 1 |  | I |  |  | 4 |  |  |  | 4 |  |
| ELEC | 2400 | Electronic Circuits | 4 |  |  |  |  |  | 4 |  |  |  |  | 4 |  |
| ELEC | 2910 | Academic and Professional Development \| | 0 |  |  | 0 | 0 |  |  |  |  |  |  | 0 |  |
| ELEC | 3910 | Academic and Professional Development II | 0 |  |  |  | I | 0 | 0 |  |  |  |  | 0 |  |
| $\begin{aligned} & \text { ELEC C C C } \\ & \text { ELECCC } \\ & \text { ELLCO } \end{aligned}$ | $\begin{aligned} & 4900 \\ & 4901 \\ & \text { 2901 } \\ & \hline 9910 \end{aligned}$ | Note: (ELEC4900 AND ELEC2991) OR (ELEC4901 AND ELEC2991) OR ELEC4910 (Students taking the Research Option must take ELEC 4901) <br> inal Year Design Project <br> Final Year Thesis <br> Industrial Experience (Electronic Engineering) <br> Co-op Program | $6$ |  | ! |  | ! |  |  |  |  | 3 | 3 | 6 |  |
| ENGG | 2010 | Engineering Seminar Series | 0 |  |  | 0 | 0 ' | 0 | 0 |  |  |  |  | 0 |  |
| LANG | 4031 | Technical Communication II for ECE \& CPEG | 3 |  |  |  |  |  |  |  |  | 3 |  | 3 |  |
| ELEC |  | ELEC 3000 -level or 4000 -level Electives (Any 2 courses ELEC 4000-levek courses. ELEC4940 cannot be used to count towards this elective requirement) | 21 |  |  |  | 3 |  | 3 |  | 6 | 3 | 6 | 21 |  |
|  |  | uired credits for Major Requirements Courses and Electives | 50 |  |  |  |  |  |  |  |  |  |  | 50 |  |
| BBA in Management |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| School Requirements |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ACCT | 2010 | Principles of Accounting I | 3 |  | , | 3 | , |  |  |  |  |  |  | 3 |  |
| ACCT | 2200 | Principles of Accounting II | 3 |  | , |  | , |  | 3 |  |  |  |  | 3 |  |
| $\begin{aligned} & \text { ECON } \\ & \text { ECON } \end{aligned}$ | $\begin{aligned} & 2103 \\ & 2113 \end{aligned}$ | Note: ECON2103 OR ECON2113 Principles of Microeconomics Microeconomics | $\begin{array}{r} 3 \\ 3 \\ \hline \end{array}$ |  |  | 3 |  |  |  |  |  |  |  | 3 |  |
| ECON ECON | $\begin{aligned} & 2123 \\ & 3123 \end{aligned}$ | $\begin{array}{\|l\|l\|} \hline \begin{array}{l} \text { Notet: ECON2123 OR ECON3123 } \\ \text { Macroeconomics } \\ \text { Macroeconomic Theory । } \end{array} \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ 3 \\ \hline \end{array}$ |  | I |  |  | 3 |  |  |  |  |  | 3 |  |
| FINA | 2303 | Financial Management | 3 |  |  |  | 3 ' |  |  |  |  |  |  | 3 |  |
| ISOM | 2010 | Introduction to Ifformation Systems | 3 | -- | -- | -- | -- | -- | $\cdots$ | -- | -- | $\cdots$ | -- | 0 | Substituted by COMP 1021/1022P |
| ISOM | 2020 | Coding for Business | 1 |  | I |  | 1 | 1 |  |  |  |  |  | 1 |  |
| ISOM | 2500 | Business Stataisics | 3 |  | I | 3 | I |  |  |  |  |  |  | 3 |  |
| 150M | 2600 | Introduction to Business Analytics | 1 |  |  |  |  | 1 |  |  |  |  |  | 1 |  |
| ISOM | 2700 | Operations Management | 3 |  |  |  |  | 3 |  |  |  |  |  | 3 |  |
| MARK | 2120 | Marketing Management | 3 |  | , |  | 31 |  |  |  |  |  |  | 3 |  |
| MGMT | 2010 | Business Ethics and the Individual | 2 |  | L |  | , | 2 |  |  |  |  |  | 2 |  |
| MGmt | 2110 | Organizational Behavior | 3 |  | I |  | i |  |  |  |  |  |  | 3 | MGMT 2110 is a major pre- requisite |
| MGMT | 2130 | Business Ettics and Social Responsibility | 2 |  |  |  |  |  | 2 |  |  |  |  | 2 |  |
| SBMT | 1111 | Business Student Induction | 0 | - | -' | $\cdots$ | - ' | -- | -- | -- | $\cdots$ | -- | -- | 0 | Waived for DDP students |
| LABU | 2040 | Business Case Analyses | 3 |  | + |  | 3 , |  |  |  |  |  |  | 3 |  |
| LABU | 2060 | Effective Communication in Business |  |  | , |  | ! | 3 |  |  |  |  |  | 3 |  |
|  | 1003 1012 1013 1020 1023 | $\qquad$ <br> R MATH 1023 Calas and liearAgebra <br> Accelerated Calculus <br> Honors Calculus 1 | $\begin{gathered} \hline 3.4 \\ 3 \\ 4 \\ 3 \\ 4 \\ 3 \\ \hline \end{gathered}$ | (3) | ! |  | ! |  |  |  |  |  |  | 0 | DDP students should take MATH 1012 or MATH 1013 or MATH requirements of both BEng and BBA degrees |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Major Requirements

| Majo | urs |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \substack{\text { MGMT } \\ \text { MGMT }} \end{array}$ | $\begin{aligned} & 310 \\ & 3120 \\ & 310 \end{aligned}$ | Note: MGMT 3110 OR MGMT 3120 (For students in the Consulting Option, they will use MGMT 3110 to fulfill the Option Requirements and should take MGMT 3120 to fulfill this requirement.) <br> Human Resources Management <br> Managerial Leadership | $\begin{aligned} & 4 \\ & 4 \\ & \hline \end{aligned}$ |  |  |  | $i$ | 4 |  |  |  |  | 4 | Students in the Consulting Option must take MGMT 3120 |
| $\left\lvert\, \begin{gathered} \text { MGMT } \\ \text { MGMT } \end{gathered}\right.$ | $\begin{aligned} & 3130 \\ & 3140 \end{aligned}$ | Note: MGMT 3130 OR MGMT 3140 (Students in the Consulting Option must take MGMT 3140 to fulfill this requirement.) <br> Judgement and Decision Making in Organizations <br> Negotiation |  |  |  |  | $!^{4}$ |  |  |  |  |  | 4 | Students in the Consulting Option must take MGMT 3140 |
| $\begin{array}{\|c\|c\|} \hline \text { MGMT } \\ \text { MGMT } \end{array}$ | $\begin{aligned} & 4210 \\ & 4220 \\ & 4 \end{aligned}$ | Note: MGMT 4210 OR MGMT 4220 (Students in the Consulting Option or in the Corporate Social Responsibility and Sustainability Option must take MGMT 4210 to fulfill this requirement.) <br> Corporate Strategy <br> Entrepreneurship and Innovation | $\begin{gathered} \hline \text { 3-4 } \\ \\ 3 \\ 4 \end{gathered}$ |  |  |  | i |  | 3 |  |  |  | 3 | Students in the Consulting Students in the CSR Option must take MGMT 4210 |
| мGмт |  | MGMT 3000-level or above Electives (Any 3 courses of the subject and level as specified. Courses taken as Option Required Courses may not be counted towards the elective requirement.) | 9 |  |  |  |  |  | 3 | 3 | 3 |  | 9 | Students in the Consulting Option are recommended to course in Simulating Strategy to fulfill the major elective requirement |
|  |  | Required credits for Major Required Courses and Electives | 20-21 |  | , |  | i |  |  |  |  |  | 20 |  |

Additional Requirements
Requirements for Dual Degree Program

echnology and Management Professional Activities
() indicates the reuse of the same course to fuffill more than one requiremen.

- denotes the courserrequirement is either waived or substituted -
-- $\mathrm{\#}$ To to graduate, students should complete all requirements as specified for DDP.
"Remarks on course(s):

