

<< 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 Decision Analytics and BBA in Finance) | | | | | | | | | | | | | |
| 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 Decision Analytics

Major Requirements

Engineering Fundamental Courses

| | | | | | | | | | | | | | | | |
|---|-------|--|-------|---|-----|---|---|--|--|--|--|--|--|----|--|
| COMP | 1021 | Note: COMP 1021 OR COMP 1022P OR COMP 2011 | 3-4 | | | | | | | | | | | | |
| COMP | 1022P | 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 | 2011 | Introduction to Computing with Java Programming with C++ | 4 | | | | | | | | | | | | |
| ENGG | 1010 | Academic Orientation | 0 | 0 | 0 | | | | | | | | | 0 | |
| CHEM | 1010 | Note: CHEM1010 OR CHEM1020 OR PHYS1112 OR PHYS1312 | 3 | | | | | | | | | | | | |
| CHEM | 1020 | General Chemistry IA | 3 | 3 | | | | | | | | | | 3 | |
| PHYS | 1112 | General Chemistry IB | 3 | | | | | | | | | | | | |
| PHYS | 1312 | General Physics I with Calculus | 3 | | | | | | | | | | | | |
| LANG | 2030 | Honors General Physics I | 3 | | | | 3 | | | | | | | 3 | |
| MATH | 1012 | Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020] | 4-7 | | | | | | | | | | | | |
| MATH | 1013 | Calculus IA | 4 | | | | | | | | | | | | |
| MATH | 1014 | Calculus IB | 4 | | | | | | | | | | | | |
| MATH | 1020 | Calculus II | 4 | 3 | 3 | | | | | | | | | 6 | |
| MATH | 1023 | Accelerated Calculus | 4 | | | | | | | | | | | | |
| MATH | 1024 | 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 | | | 22-27 | | | | | | | | | | | 21 | |

Major Required Courses and Electives

| | | | | | | | | | | | | | | | |
|--|------|--|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-------------------------|
| 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* | | | | | 0 | |
| IEDA | 2520 | Probability for Engineers | 3 | | | 3 | | | | | | | | 3 | |
| IEDA | 2540 | Statistics for Engineers | 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0 | Substituted by ISOM2500 |
| 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 | 3560 | Predictive Analytics | 3 | | | | | | | | 3 | | | 3 | |
| IEDA | 4901 | Note: IEDA4901 OR IEDA4920 | 6 | | | | | | | | | 3 | 3 | 6 | |
| IEDA | 4920 | Final Year Thesis Decision Analytics Final Year Project | 6 | | | | | | | | | | | | |
| ENGG | 2010 | Engineering Seminar Series | 0 | | | 0 | 0 | 0 | 0 | | | | | 0 | |
| ECON | 2103 | Note: ECON2103 OR ECON2113 | 3 | | | 3 | | | | | | | | 3 | |
| ECON | 2113 | Principles of Microeconomics | 3 | | | | | | | | | | | | |
| LANG | 4032 | Technical Communication II for IEDA and ISDN | 3 | | | | | | | | 3 | | | 3 | |
| IEDA | | Area Electives (5 courses from the specified elective list, of which all 5 courses should be taken from the same area) | 15 | | | | | 3 | 6 | 3 | 3 | | | 15 | |
| Required credits for Major Required Courses and Electives | | | 48 | | | | | | | | | | | 45 | |

BBA in Finance

School Requirements

| | | | | | | | | | | | | | | | |
|---|------|---|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|---|
| ACCT | 2010 | Principles of Accounting I | 3 | 3 | | | | | | | | | | 3 | |
| ACCT | 2200 | Principles of Accounting II | 3 | | | | | | | | 3 | | | 3 | |
| ECON | 2103 | Note: ECON 2103 OR ECON 2113 | 3 | | | (3) | | | | | | | | 0 | |
| ECON | 2113 | Principles of Microeconomics | 3 | | | | | | | | | | | | |
| ECON | 2123 | Note: ECON 2123 OR ECON 3123 | 3 | | | | | | | | 3 | | | 3 | |
| ECON | 3123 | Macroeconomics | 3 | | | | | | | | | | | | |
| FINA | 2303 | Financial Management | 3 | | | | 3 | | | | | | | 3 | FINA 2303 is a major pre-requisite |
| ISOM | 2010 | Introduction to Information Systems | 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0 | Substituted by COMP 1021/1022P/2011 |
| ISOM | 2020 | Coding for Business | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0 | Waived for DDP students if they have taken and passed COMP1021 or COMP 1029P |
| ISOM | 2500 | Business Statistics | 3 | | | 3 | | | | | | | | 3 | This course will also be used to substitute IEDA2540 |
| 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 | |
| SBMT | 1111 | Business Student Induction | 0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0 | Waived for DDP students |
| LABU | 2040 | Business Case Analyses | 3 | | | | | 3 | | | | | | 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 | 3-4 | | | | | | | | | | | | |
| MATH | 1012 | Calculus and Linear Algebra | 3 | | | | | | | | | | | | |
| MATH | 1013 | Calculus IA | 4 | | | | | | | | | | | | |
| MATH | 1013 | Calculus IB | 3 | | | | | | | | | | | | |
| MATH | 1020 | Accelerated Calculus | 4 | | | | | | | | | | | | |
| MATH | 1023 | Honors Calculus I | 3 | | | | | | | | | | | | |
| Required credits for School Requirements | | | 43-44 | | | | | | | | | | | 35 | To satisfy the requirements of both BEng and BBA degrees, DDP students should NOT take MATH 1003. |

Major Requirements

Major Required Courses and Electives

| | | | | | | | | | | | | | | | |
|--|------|--|-------|--|--|--|--|---|---|---|---|---|---|----|--|
| FINA | 3001 | Key Skills for Finance Professionals (A) | 1 | | | | | 1 | | | | | | 1 | |
| FINA | 3103 | Intermediate Investments | 3 | | | | | 3 | | | | | | 3 | |
| FINA | 3203 | Derivative Securities | 3 | | | | | | 3 | | | | | 3 | |
| FINA | 3303 | Intermediate Corporate Finance | 3 | | | | | | | 3 | | | | 3 | |
| FINA | 3810 | Bloomberg Market Concepts Certification | 0 | | | | | 0 | | | | | | 0 | |
| ACCT | 3010 | Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030 | 3-6 | | | | | | | | | | | | |
| ACCT | 3020 | Financial Accounting I | 3 | | | | | 3 | | | | | | 3 | |
| ACCT | 3030 | Financial Accounting II | 3 | | | | | | | | | | | | |
| ACCT | 3030 | Intermediate Financial Accounting for Non-Accounting Majors | 3 | | | | | | | | | | | | |
| ISOM | 3230 | Note: ISOM 3230 OR ISOM 3400 | 3 | | | | | | | | | | | | |
| ISOM | 3400 | Business Applications Programming | 3 | | | | | | 3 | | | | | 3 | If DDP students took COMP 1021 in BEng requirement, they are required to enroll ISOM 3230. |
| 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 | |
| Required credits for Major Required Courses and Electives | | | 25-28 | | | | | | | | | | | 25 | |

Additional Requirements

Requirements for Dual Degree Program

| | | | | | | | | | | | | | | | |
|---|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Required Courses | | | | | | | | | | | | | | | |
| TEMG | 1010 | Technology and Management Professional Activities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TEMG | 3950 | Case-based Problem Solving | 3 | | 3 | | | | | | | | | | 3 |
| Required credits for Additional Requirements | | | 3 | | | | | | | | | | | 3 | |

University CORE

| | | | | | | | | | | | | | | | |
|--------------------------------------|----------|---------------------------|----|---|---|---|--|--|---|---|--|---|---|----|--|
| CORE | C3 - C12 | U CORE - Others | 30 | 3 | 3 | 3 | | | 3 | 6 | | 3 | 9 | 30 | |
| CORE | C1 & C2 | U CORE - English Language | 6 | 3 | 3 | | | | | | | | | 6 | |
| Sub-total for University CORE | | | 36 | | | | | | | | | | | 36 | |

| | | | | | | | | | |
|--------------------------------|----|----|----|----|----|----|----|----|----|
| Term load (excl. free credits) | | | | | | | | | |
| 15 | 15 | 18 | 15 | 19 | 18 | 17 | 18 | 15 | 15 |
| 165## | | | | | | | | | |

Notes: << Declaration of BEng major << Declaration of BBA major

() 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 specified for DDP.

**Remarks on course(s):