

<< 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 Civil and Environmental Engineering 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 Civil and Environmental Engineering | | | | | | | | | | | | | | | |
| Major Requirements | | | | | | | | | | | | | | | |
| Engineering Fundamental Courses | | | | | | | | | | | | | | | |
| COMP | 1021 | Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H | 3-5 | | | | | | | | | | | | |
| 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 | Programming with C++ | 4 | | | | | | | | | | | | |
| COMP | 2012H | Honors Object-Oriented Programming and Data Structures | 5 | | | | | | | | | | | | |
| CHEM | 1020 | General Chemistry I | 3 | | | | | | | | | | | | |
| LANG | 2030 | Technical Communication I | 3 | | | | | | | | | | | 0 | Waived for DDP students |
| | | 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 | | | | | | | | | | | | |
| MATH | 1014 | Calculus II | 3 | 3 | 3 | | | | | | | | | 6 | |
| 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 | 2350 | Applied Linear Algebra and Differential Equations | 3 | | | | | 3 | | | | | | 3 | |
| PHYS | 1112 | Note: PHYS 1112 OR PHYS 1312 | 3 | 3 | | | | | | | | | | 3 | |
| PHYS | 1312 | General Physics I with Calculus | 3 | | | | | | | | | | | | |
| | | Honors General Physics I | 3 | | | | | | | | | | | | |
| Required credits for Engineering Fundamental Courses | | | 22-27 | | | | | | | | | | | 21 | |
| Major Required Courses and Electives | | | | | | | | | | | | | | | |
| CIVL | 1010 | Academic Professional Development I | 0 | | | 0 | 0 | | | | | | | 0 | |
| CIVL | 1100 | Discovering Civil and Environmental Engineering | 3 | | | 3 | | | | | | | | 3 | |
| CIVL | 2010 | Academic Professional Development II | 0 | | | | | 0 | 0 | | | | | 0 | |
| CIVL | 2020 | Industrial and BIM Training | 0 | | | 0* | 0 | | | | | | | 0 | |
| CIVL | 2110 | Statics | 3 | | | 3 | | | | | | | | 3 | |
| CIVL | 2120 | Mechanics of Materials | 3 | | | | 3 | | | | | | | 3 | |
| CIVL | 2160 | Modeling Systems with Uncertainties | 3 | | | 3 | | | | | | | | 3 | This course will also be used to substitute ISOM 2500 |
| CIVL | 2170 | Infrastructure Systems Engineering and Management | 3 | | | | 3 | | | | | | | 3 | |
| CIVL | 2410 | Environmental Assessment and Management | 3 | | | | 3 | | | | | | | 3 | |
| CIVL | 2510 | Fluid Mechanics | 3 | | | | 3 | | | | | | | 3 | |
| CIVL | 2810 | Construction Materials | 3 | | | | | 3 | | | | | | 3 | |
| CIVL | 3010 | Academic Professional Development III | 0 | | | | | | 0 | 0 | | | | 0 | |
| CIVL | 3020 | Internship Training | 0 | | | | | | | 0* | | | | 0 | |
| CIVL | 3210 | Note: CIVL3210 OR CIVL3610 | 3 | | | | | | 3 | | | | | 3 | |
| CIVL | 3610 | Introduction to Construction Management | 3 | | | | | | | | | | | | |
| CIVL | 3310 | Traffic and Transportation Engineering | 3 | | | | | 3 | | | | | | 3 | |
| CIVL | 3320 | Structural Analysis | 3 | | | | | | 3 | | | | | 3 | |
| CIVL | 3320 | Reinforced Concrete Design | 3 | | | | | | 3 | | | | | 3 | |
| CIVL | 3420 | Water and Wastewater Engineering | 3 | | | | | | 3 | | | | | 3 | |
| CIVL | 3510 | Hydrosystems Engineering | 3 | | | | | 3 | | | | | | 3 | |
| CIVL | 3730 | Fundamentals of Geotechnics | 3 | | | | | | 3 | | | | | 3 | |
| CIVL | 3740 | Geotechnical Analysis and Design | 3 | | | | | | | 3 | | | | 3 | |
| CIVL | 4910 | Note: CIVL 4910 OR CIVL 4920 (Students taking the Research Option must take CIVL 4920) | 6 | | | | | | | | | 3 | 3 | 6 | |
| CIVL | 4920 | Civil and Environmental Engineering Final Year Project | 6 | | | | | | | | | | | | |
| CIVL | 4950 | Civil and Environmental Engineering Final Year Thesis | 3 | | | | | | | | | | | 3 | |
| CIVL | 4950 | Civil Engineering Capstone Design Project | 3 | | | | | | | | | | | 3 | |
| ENGG | 2010 | Engineering Seminar Series | 0 | | | 0 | 0 | 0 | 0 | | | | | 0 | |
| LANG | 4033 | Technical Communication II for Civil and Environmental Engineering | 3 | | | | | | | | | 3 | | 3 | |
| CIVL | 4450 | Note: CIVL4450 OR CIVL 5450 OR CIVL5460 | 3 | | | | | | | | | | | | |
| CIVL | 5450 | Carbon Footprint Analysis and Reduction | 3 | | | | | | | | 3 | | | 3 | |
| CIVL | 5460 | Hazardous Waste Treatment and Site Remediation | 3 | | | | | | | | | | | | |
| CIVL | 5460 | Landfill Engineering and Design | 3 | | | | | | | | | | | | |
| CIVL/SENG | | CIVL (Environmental) Electives [2 courses from the specified elective list. At least 1 course (3 credits) should be selected from the "Restricted Electives"] | 6 | | | | | | | | | | | 6 | |
| | | Restricted electives: at least 1 course AND (CIVL: Any CIVL courses at 4000-level or above except those listed as "Restricted Electives" from the list OR SENG: Any 3000-level or above courses offered by the Engineering School or engineering departments other than CIVL.) | | | | | | | | | | | | | |
| Required credits for Major Requirements Courses and Electives | | | 66 | | | | | | | | | | | 66 | |
| 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 | | | | | | | | 3 | |
| ECON | 2113 | Principles of Microeconomics | 3 | | | | | | | | | | | | |
| ECON | 2123 | Note: ECON 2123 OR ECON 3123 | 3 | | | | | | 3 | | | | | 3 | |
| ECON | 3123 | Macroeconomics | 3 | | | | | | | | | | | | |
| ECON | 3123 | Macroeconomic Theory I | 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/2011/2012H |
| ISOM | 2020 | Coding for Business | 1 | | | | | | | | | | | 0 | Waived for DDP students if they have taken and passed COMP1021 or COMP 1022P |
| ISOM | 2500 | Business Statistics | 3 | | | | | | | | | | | 0 | Substituted by CIVL 2160 |
| 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 | |
| LANG | 2061 | Note: LANG 2061 OR 2062 OR 3060 | 3 | | | | | | | | | 3 | | 3 | Non DDP-ECON students take ONLY a 3-credit of SBM-specific English course, in which they can choose from one of the three LANG courses (LANG 2061, LANG 2062, or LANG 3060) |
| LANG | 2062 | Professional Writing for the Workplace | 3 | | | | | | | | | | | | |
| LANG | 3060 | Professional Speaking for the Workplace | 3 | | | | | | | | | | | | |
| LANG | 3060 | Advanced Academic Writing | 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 | (3) | | | | | | | | | | 0 | 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 | 1013 | Calculus IB | 3 | | | | | | | | | | | | |
| MATH | 1020 | Accelerated Calculus | 4 | | | | | | | | | | | | |
| MATH | 1023 | Honors Calculus I | 3 | | | | | | | | | | | | |
| | | | 3 | | | | | | | | | | | | |
| Required credits for School Requirements | | | 43-44 | | | | | | | | | | | 32 | |
| 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 Programming in VBA | 3 | | | | | | 3 | | | | | 3 | If DDP students took COMP 1021 in BEng requirement, they are required to enroll ISOM 3230. |
| ISOM | 3400 | Business Applications Development in Python | 3 | | | | | | | | | | | | |
| FINA | | FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified) | 9 | | | | | | | | | 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 | 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 | | | | | | | | | | | | | | | |
| CORE | C3 - C9 | U CORE - Others | 21 | | 3 | | | | | 6 | 6 | | 6 | 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 | | | | | | | | | | | | |