

← Declaration of 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 General Business Management) | | | | | | | | | | | | | | |
| 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 |
| BEng in Civil and Environmental Engineering | | | | | | | | | | | | | | |
| Major Requirements | | | | | | | | | | | | | | |
| Engineering Fundamental Courses | | | | | | | | | | | | | | |
| COMP | 1021 | Note: COMP 1021 OR COMP 1022P OR COMP 1022Q OR COMP 2011 | 3-4 | | | | | | | | | | | |
| COMP | 1022P | Introduction to Computing with Java | 3 | | 3 | | | | | | | | | 3 |
| COMP | 1022Q | Introduction to Computing with Excel VBA | 3 | | | | | | | | | | | 3 |
| COMP | 2011 | Programming with C++ | 4 | | | | | | | | | | | 4 |
| ENGG | 1010 | Academic Orientation | 0 | 0 | 0 | | | | | | | | | 0 |
| CHEM | 1010 | Note: CHEM 1010 OR CHEM 1020 | 3 | 3 | | | | | | | | | | 3 |
| CHEM | 4020 | General Chemistry IA | 3 | | | | | | | | | | | 3 |
| LANG | 2030 | Technical Communication I | 3 | | | | | 3 | | | | | | 3 |
| Note: (ENGG) ENGG1010 OR (CHEM) CHEM 1010 OR (MATH) MATH 1023 AND (MATH) MATH 1012 OR (MATH) MATH 1024 OR (MATH) MATH 1020 | | | | | | | | | | | | | | |
| MATH | 1012 | Calculus IA | 4 | | | | | | | | | | | 4 |
| MATH | 1013 | Calculus IB | 3 | | | | | | | | | | | 3 |
| MATH | 1014 | Calculus II | 3 | 3 | 3 | | | | | | | | | 6 |
| MATH | 1020 | Accelerated Calculus | 4 | | | | | | | | | | | 4 |
| MATH | 1023 | Honors Calculus I | 3 | | | | | | | | | | | 3 |
| MATH | 1024 | Honors Calculus II | 3 | | | | | | | | | | | 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 | | | | | | | | | | | 3 |
| Required credits for Engineering Fundamental Courses 22-26 | | | | | | | | | | | | | | |
| 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 BM 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 |
| CIVL | 2170 | Infrastructure Systems Engineering and Management | 3 | | | | 3 | | | | | | | 3 |
| CIVL | 2410 | Environmental Assessment and Management | 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 |
| CIVL | 3610 | Introduction to Construction Management | 3 | | | | | 3 | | | | | | 3 |
| CIVL | 3200 | Structural Analysis | 3 | | | | | 3 | | | | | | 3 |
| CIVL | 3320 | Reinforced Concrete Design | 3 | | | | | | 3 | | | | | 3 |
| CIVL | 3420 | Water and Wastewater Engineering | 3 | | | | | | 3 | | | | | 3 |
| CIVL | 3510 | Hydro systems 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 | 6 | | | | | | | | | 3 | 3 | 6 |
| CIVL | 4920 | Civil and Environmental Engineering Final Year Project | 6 | | | | | | | | | | | 6 |
| CIVL | 4950 | Civil Engineering Capstone Design Project | 3 | | | | | | | | | 3 | | 3 |
| CIVL | 4450 | Note: CIVL4450 OR CIVL 5450 OR CIVL5460 | 3 | | | | | | | | | 3 | | 3 |
| CIVL | 5450 | Carbon Footprint Analysis and Reduction | 3 | | | | | | | | | 3 | | 3 |
| CIVL | 5460 | Hazardous Waste Treatment and Site Remediation | 3 | | | | | | | | | 3 | | 3 |
| CIVL | 5460 | Landfill Engineering and Design | 3 | | | | | | | | | 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/SENG | | CIVL (Environmental) Electives (at least 1 course should be selected from the "Restricted Electives") | 6 | | | | | | | | | 3 | 3 | 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 | | | | | | | | | | | | | | |
| BBA in General Business Management | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | 3 |
| ECON | 2123 | Note: ECON 2123 OR ECON 3123 | 3 | | | | | 3 | | | | | | 3 |
| ECON | 3123 | Macroeconomics | 3 | | | | | | | | | | | 3 |
| ECON | 3123 | Macroeconomic Theory I | 3 | | | | | | | | | | | 3 |
| FINA | 2303 | Financial Management | 3 | | | 3 | | | | | | | | 3 |
| ISOM | 2010 | Introduction to Information Systems | 3 | | | | | | | | | | | 3 |
| ISOM | 2500 | Introduction to Business Systems | 1 | | | | 1 | | | | | | | 1 |
| ISOM | 2600 | Business Statistics | 3 | | | | | | | | | | | 3 |
| ISOM | 2700 | 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 |
| LABU | 2040 | Business Case Analysis | 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 | | | | | | | | | | | 3-4 |
| MATH | 1012 | Calculus and Linear Algebra | 3 | | | | | | | | | | | 3 |
| MATH | 1013 | Calculus IA | 4 | | | | | | | | | | | 4 |
| MATH | 1013 | Calculus IB | 3 | | | | | | | | | | | 3 |
| MATH | 1020 | Accelerated Calculus | 4 | | | | | | | | | | | 4 |
| MATH | 1023 | Honors Calculus I | 3 | | | | | | | | | | | 3 |
| Required credits for School Requirements 43-44 | | | | | | | | | | | | | | |
| Major Requirements | | | | | | | | | | | | | | |
| Major Required Courses and Electives | | | | | | | | | | | | | | |
| SBAM | | SBAM Electives (Any 9 courses offered by the departments under SB&M, of which at least 4 courses are at 3000-level or above) | 29 | | | 3 | | 3 | | 7 | 3 | 6 | 7 | 29 |
| Required credits for Major Required Courses and Electives 29 | | | | | | | | | | | | | | |
| 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 |
| TEMG | 9950 | Case-based Problem Solving | 2 | | | 2 | | | | | | | | 2 |
| Required credits for Additional Requirements 0 | | | | | | | | | | | | | | |
| University CORE | | | | | | | | | | | | | | |
| CORE | C1 - C12 | U CORE - Others | 30 | 6 | 3 | | | 3 | 6 | 9 | | | 3 | 30 |
| CORE | C1 & C2 | U CORE - English Language | 6 | 3 | 3 | | | | | | | | | 6 |
| Sub-total for University CORE 36 | | | | | | | | | | | | | | |
| Term load (excl. free credits) | | | | | | | | | | | | | | |
| 18 20 21 20 20 18 19 20 18 19 | | | | | | | | | | | | | | |
| 193## | | | | | | | | | | | | | | |

Notes:
 () indicates the reuse of the same course to fulfill more than one requirement.
 * Courses offered in winter term
 ^ Courses offered in summer term
 --- denotes the course/requirement is either waived or substituted
 ## To graduate, students should complete all requirements as specified for DDP.

*Remarks on course(s):

>> 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.