

School:		School of Engineering and School of Business Management		Student's Pathway											
Program:		Dual Degree Program (BEng in Civil 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	Summer	Remarks
BEng in Civil Engineering															
Engineering Fundamental Courses															
CIVL	1121	Note: CIVL 1121 OR COMP 1022P OR COMP 1023 OR COMP2011 OR COMP 2012H	3-6												
COMP	1022P	Introduction to Computation for Civil Engineers	3		3									3	Students should take COMP 1022P, COMP 1023, COMP 2011 or COMP 2012H which will also be used to substitute ISOM 2010 and to waive ISOM 2020
COMP	1023	Introduction to Computing with Java	3												
COMP	2011	Introduction to Python Programming	3												
COMP	2012H	Programing with C++	4												
CHEM	1012	Honors Object-Oriented Programming and Data Structures	3												
CHEM	1012	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories	3		3									3	
MATH	1013	Note: [MATH 1013 OR MATH 1023] AND [MATH 1014 OR MATH 1024] OR [MATH 1020]	4-6												
MATH	1014	Calculus B	3		3	3								6	DDP students should take MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees
MATH	1023	Calculus II	3												
MATH	1020	Accelerated Calculus	4												
MATH	1024	Honors Calculus I	3												
MATH	2011	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												
PHYS	1312	General Physics I with Calculus	3	3										3	
PHYS	1312	Honors General Physics I	3												
Required credits for Engineering Fundamental Courses				19-23	6	9	6	0	0	0	0	0	0	0	21
Major Required Courses and Electives															
CIVL	1000	Academic and Professional Development for Civil and Environmental Engineering I	0	0	0									0	Students admitted via school-based admission are exempted from taking CIVL 1000
CIVL	1000	Discovering Civil and Environmental Engineering	3		3									3	
CIVL	2000	Academic and Professional Development for Civil and Environmental Engineering II	0			0	0							0	
CIVL	2020	Industrial and BM Training	0				0*							0	Student should attend the training modules in Year 2 Winter and Spring terms
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 2020
CIVL	2175	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	2510	Construction Materials	3			3	3							3	
CIVL	3020	Academic and Professional Development for Civil and Environmental Engineering II	0				0	0						0	
CIVL	3020	Internship Training	0				0*							0	
CIVL	3210	Introduction to Construction Management	3				3							3	
CIVL	3310	Structural Analysis	3				3							3	
CIVL	3320	Nonlinear Concrete Design	3				3							3	
CIVL	3510	Hydrosystems Engineering	3				3	3						3	
CIVL	3610	Traffic and Transportation Engineering	3				3	3						3	
CIVL	3730	Fundamentals of Geotechnics	3				3							3	
CIVL	3740	Geotechnical Analysis and Design	3				3	3						3	
CIVL	4000	Academic and Professional Development for Civil and Environmental Engineering IV	0					0	0					0	
CIVL	4910	Note: CIVL 4910 OR CIVL 4920 (Students taking the Research Option must take CIVL 4920)	6										2	4	6
CIVL	4920	Civil and Environmental Engineering Final Year Project	6												
CIVL	4920	Civil and Environmental Engineering Final Year Thesis	6							3	3	3	3	3	
CIVL	4950	Civil Engineering Capstone Design Project	3												
CIVL/BENG		CIVL Electives (3 courses from the specified elective list)	9							3	3	3	3	9	
BEng in Civil Engineering Major Requirements				63	3	0	6	12	12	12	6	3	6	4	63
BBA in Finance															
School Requirements															
ACCT	2010	Principles of Accounting I	3			3								3	
ACCT	2090	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	2113	Microeconomics	3												
ECON	2123	Note: ECON 2123 OR ECON 3123	3											3	
ECON	3123	Macroeconomics	3				3								
FINA	2303	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	COMP 1022P, COMP 1023, COMP 2011 or COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP 1022P, COMP 1023, COMP 2011 or COMP 2012H instead of ISOM 2010.
ISOM	2020	Coding for Business	1	-	-	-	-	-	-	-	-	-	-	0	ISOM 2020 is waived for DDP students who have taken and passed COMP 1022P, COMP 1023, COMP 2011 or COMP 2012H. The COMP courses are similar or more advanced coding (Python) courses as ISOM 2020.
ISOM	2500	Business Statistics	3	-	-	-	-	-	-	-	-	-	-	0	Instituted by CIVL2160
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	
MATH	1003	Note: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4												
MATH	1013	Calculus and Linear Algebra	3		(3)									0	DDP students should take MATH 1013 and MATH 1023 or MATH 1020 to satisfy the requirements of both BEng and BBA degrees
MATH	1020	Calculus B	3												
MATH	1023	Accelerated Calculus	4												
MATH	1023	Honors Calculus I	3												
Required Credits for School Requirements				39-40	3	3	6	6	3	0	1	2	3	2	29
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											3	
ISOM	3400	Business Programming in VBA	3						3						
ISOM	3400	Business Applications Development in Python	3								3	3	3	3	If DDP students took COMP 1023 in BEng requirement, they are required to enroll ISOM 3230
FINA		FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9												
Required Credits for Major Required Courses and Electives				25-28	0	0	0	0	0	4	6	6	3	3	25
Additional Requirement for Dual Degree															
Requirements for Dual Degree Program															
TEMG	1011	T&M Professional Activities I	0	0	0									0	
TEMG	1012	T&M Professional Activities II	0			0	0							0	
TEMG	1013	T&M Professional Activities III	0					0	0					0	
TEMG	1014	T&M Professional Activities IV	0							0	0			0	
TEMG	1016	T&M Professional Activities V	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	0	3	0	0	0	0	4	0	0	7	
University Common Core Requirements															
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	4	5	0	0	0	0	3	6	6	30	
Term load (excl. free credits)															
				16	20	16	16	16	16	16	16	16	16	16	175
				175##											

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.