

School:		School of Engineering and School of Business Management		1 cc Selection of BEng major		1 cc Declaration of BEng major		1 cc Selection of BBA major		Student's Pathway									
Program:		Dual Degree Program (BEng in Civil and Environmental Engineering and BBA in Global Business)																	
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		Remarks			
BEng in Civil and Environmental Engineering																			
Engineering Fundamental Courses																			
CIVL	1121	Math: CIVL 1121 OR COMP 1022P OR COMP 1022 OR COMP2011 OR COMP 2012H	3-5																
COMP	1022P	Introduction to Computation for Civil Engineers	3			3									3	Students should take COMP 1022P, COMP 1022, 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	Programming with C++	4																
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5																
CHEM	1012	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories	3			3									3				
		Note: (MATH 1013 OR MATH1022) AND (MATH 1014 OR MATH 1024) OR (MATH 1000)	4-6																
MATH	1013	Calculus IB	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	1014	Calculus II	3																
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				
		Note: PHYS 1112 OR PHYS 1312	3																
PHYS	1112	General Physics I with Calculus	3			3									3				
PHYS	1312	Honors General Physics I	3																
Required Credits for Engineering Fundamental Courses				10-21	6	6	6	0	0	0	0	0	0	0	0	21			
Major Required Courses and Electives																			
CIVL	1500	Academic and Professional Development for Civil and Environmental Engineering I	0	0	0											Students admitted via school-based admission are exempted from taking CIVL 1500			
CIVL	1505	Discovering Civil and Environmental Engineering	3			3													
CIVL	2006	Academic and Professional Development for Civil and Environmental Engineering II	0			0	0												
CIVL	2020	Industrial and BIM Training	0					0*								Student should attend the training modules in Year 2 Winter and Spring terms			
CIVL	2110	Statistics	3			3													
CIVL	2120	Mechanics of Materials	3			3													
CIVL	2160	Modeling Systems with Uncertainties	3			3										This course will also be used to substitute ISOM 2500			
CIVL	2170	Infrastructure Systems Engineering and Management	3			3													
CIVL	2410	Environmental Assessment and Management	3			3													
CIVL	2516	Fruit Mechanics	3			3													
CIVL	2810	Construction Materials	3					3	0										
CIVL	3000	Academic and Professional Development for Civil and Environmental Engineering (II)	0						0	0									
CIVL	3030	Internship Training	0							0*									
		Note: CIVL3210 OR CIVL3610	3																
CIVL	3210	Introduction to Construction Management	3							3									
CIVL	3610	Traffic and Transportation Engineering	3							3									
CIVL	3310	Structural Analysis	3					3											
CIVL	3320	Reinforced Concrete Design	3							3									
CIVL	3420	Water and Wastewater Engineering	3							3									
CIVL	3510	Hydroponics Engineering	3							3									
CIVL	3730	Fundamentals of Geotechnics	3							3									
CIVL	3740	Geotechnical Analysis and Design	3							3									
CIVL	4000	Academic and Professional Development for Civil and Environmental Engineering (IV)	0							0	0								
		Note: CIVL 4010 OR CIVL 4020 (Students taking the Research Option must take CIVL 4020)	0								0	0							
CIVL	4010	Civil and Environmental Engineering First Year Project	6											2	4	6			
CIVL	4020	Civil and Environmental Engineering First Year Thesis	6																
CIVL	4050	Civil Engineering Capstone Design Project	3							3									
CIVL/ENGG		CIVL (Environmental) Electives (3 courses from the specified elective list. At least 2 courses (6 credits) should be selected from the "Restricted Electives", of which 1 course must be taken from CIVL 4450, CIVL 5450 or CIVL 5460.)	9							3	3	3				9			
BEng in Civil and Environmental Engineering Major Requirements				63	3	0	6	12	12	12	6	3	0	4	6				
BBA in Global Business																			
School Requirements																			
ACCT	2010	Principles of Accounting I	3	3												3			
ACCT	2020	Principles of Accounting II	3								3					3			
ECON	2103	Note: ECON 2103 OR ECON 2113	3				3									3			
ECON	3115	Principles of Microeconomics	3																
ECON	3123	Note: ECON 3123 OR ECON 3125	3																
ECON	3125	Macroeconomics	3							3						3			
FINA	2203	Financial Management	3																
ISOM	2010	Introduction to Information Systems	3	-	-	-	-	-	-	-	-	-	-	-	-	0			
ISOM	2020	Coding for Business	1	-	-	-	-	-	-	-	-	-	-	-	-	0			
ISOM	2500	Business Statistics	3	-	-	-	-	-	-	-	-	-	-	-	-	0			
ISOM	2600	Introduction to Business Analytics	1												1	1			
ISOM	2700	Operations Management	3							3									
MARK	2120	Marketing Management	3					3											
MGMT	2010	Business Ethics and the Individual	3								2					2			
MGMT	2110	Organizational Behavior	3			3													
MGMT	2130	Business Ethics and Social Responsibility	2									2				2			
		Note: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4																
MATH	1003	Calculus and Linear Algebra	3			(3)									0	DDP students should take MATH 1013 and MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees			
MATH	1013	Calculus I	4																
MATH	1020	Accelerated Calculus	4																
MATH	1023	Honors Calculus I	3																
Required Credits for School Requirements				30-40	3	3	3	0	3	3	6	2	1	0	20				
Major Required Courses and Electives																			
GBUS	1500	Global Leadership Development	0						0	0	0	0	0	0	0				
GBUS	2010	Global Business Analysis	3							3						3			
GBUS/BBMT	2040	Note: GBUS 2040 OR BBMT 2100-2110	1-4								1	[1]			1				
BBMT	2100-2110	Environmental, Social, and Governance (ESG) Corporate Project	1																
GBUS/ISOM	3030	Note: GBUS 3030 OR ISOM 4780	3-4																
GBUS	3030	Global Business Case Studies	4								3	[2]			3				
ISOM	4780	Integrated Planning and Execution	3																
GBUS	4910	Capstone Project	4											4	[4]	4			
		Global Business Electives (Courses from the specified elective list, of which at least 6 credits from each area and at least 2 courses must be offered by GBUS. Courses taken to fulfill requirements of an additional major in SBM may not be counted towards this elective requirement.)	15								6	3	6	15					
Required Credits for Major Required Courses and Electives				28-30	0	0	0	0	0	0	4	3	6	7	6	28			
Additional Requirement for Dual Degree																			
Requirements for Dual Degree Program																			
TEMG	1011	T&M Professional Activities I	0	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	1015	T&M Professional Activities V	0									0	0	0		0			
TEMG	3950	T&M Case Analysis and Product Innovation	3	3		3										3			
TEMG	4910	T&M Corporate Consulting Project	3-5									4				4			
Required Credits for Additional Requirements				7	0	3	0	0	0	0	0	0	4	0	0	7			
University Common Core Requirement																			
CORE	C3 - CB	U CORE - Others	21				3			3		3	3	3	6	21			
CORE	C1 & C2	U CORE - English Language	6	3	3											6			
IBAWW	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2														
Sub-total for University CORE				30	4	6	3	0	0	3	0	0	3	3	6	30			
Term total (est. first credits)																			
16 20 18 18 18 16 17 18 18 16 16 178																			