

School:		School of Engineering and School of Business Management		« Declaration of BEng major		« Declaration of BBA major											
Program:		Dual Degree Program (BEng in Civil and Environmental Engineering and BBA in Global Business)		Student's Pathway													
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																	
Engineering Fundamental Courses																	
		New: CIVL 1121 OR COMP 1022P OR COMP 1023 OR COMP2011 OR COMP 2012H	3-5														
CIVL	1121	Introduction to Computation for Civil Engineers	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	1022P	Introduction to Computing with Java	3		3												
COMP	1023	Introduction to Python Programming	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			
		New: (MATH 1013 OR MATH1023) AND (MATH 1014 OR MATH 1024) OR (MATH 1020)	4-6														
MATH	1013	Calculus IB	3												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	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	2250	Applied Linear Algebra and Differential Equations	3			3								3			
		New: 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				19-23	9	6	6	0	0	0	0	0	0	21			
Major Required Courses and Electives																	
CIVL	1800	Academic and Professional Development for Civil and Environmental Engineering I	0	0	0									0	Students identified via school-based admission are exempted from taking CIVL1800		
CIVL	1100	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 BIM Training	0				0*							0			
CIVL	2110	Structures	3			3								3	Student should attend the training modules in Year 2 Winter and Spring terms		
CIVL	2120	Mechanics of Materials	3			3	3							3			
CIVL	2180	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								3	This course will also be used to substitute ISOM 2500		
CIVL	2610	Fluid Mechanics	3			3	3							3			
CIVL	2810	Construction Materials	3					3						3			
CIVL	3000	Academic and Professional Development for Civil and Environmental Engineering III	0					0	0					0			
CIVL	3020	Internship Training	0						0*					0			
		New: CIVL3210 OR CIVL3610	3														
CIVL	3210	Introduction to Construction Management	3						3					3			
CIVL	3610	Traffic and Transportation Engineering	3														
CIVL	3810	Structural Analysis	3				3							3			
CIVL	3320	Reinforced Concrete Design	3						3					3			
CIVL	3420	Water and Wastewater Engineering	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	4000	Academic and Professional Development for Civil and Environmental Engineering IV	0							0	0			0			
		New: CIVL 4910 OR CIVL 4920 (Students taking the Research Option must take CIVL 4920)	6									2	4	6	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.)		
CIVL	4910	Civil and Environmental Engineering First Year Project	6														
CIVL	4920	Civil and Environmental Engineering First Year Thesis	6														
CIVL	4950	Civil Engineering Capstone Design Project	3							3				3			
CIVL/ENG			9							3	3	3		9			
BEng in Civil and Environmental Engineering Major Requirements				63	0	9	6	12	12	12	6	3	5	4	63		
BBA in Global Business																	
School Requirements																	
ACCT	2010	Principles of Accounting I	3	3										3			
ACCT	2200	Principles of Accounting II	3							3				3			
		New: ECON 2103 OR ECON 2113	3				3							3			
ECON	2103	Principles of Microeconomics	3												COMP 1022, COMP 1022P, COMP 2011 and COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP1022 or COMP2011 or COMP2012H instead of ISOM 2010.		
ECON	3123	Macroeconomics	3														
ECON	2123	New: ECON 2123 OR ECON 3123	3														
ECON	3123	Macroeconomics	3						3					3			
ECON	1123	Macroeconomics Theory I	3												ISOM 2020 is waived for DDP students who have taken and passed COMP 1022 or COMP 1022P or COMP2011 or COMP2012H. These two COMP courses are similar or more advanced coding (Python) courses as ISOM 2020.		
FINA	2303	Financial Management	3			3								3			
ISOM	2010	Introduction to Information Systems	3	-	-	-	-	-	-	-	-	-	-	0			
ISOM	2020	Coding for Business	1	-	-	-	-	-	-	-	-	-	-	0			
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			
		New: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4												DDP students should take MATH 1013 and MATH 1023 or MATH 1020 to satisfy the requirements of both BEng and BBA degrees		
MATH	1003	Calculus and Linear Algebra	3														
MATH	1013	Calculus I	3														
MATH	1020	Accelerated Calculus	4														
MATH	1023	Honors Calculus I	3														
Required Credits for School Requirements				39-40	3	3	3	6	3	3	5	2	1	0	29		
Major Required Courses and Electives																	
GBUS	1800	Global Leadership Development	0					0	0	0	0	0	0	0			
GBUS	2010	Global Business Analysis	3						3					3			
GBUS/GBMT	2040	New: GBUS 2040 OR GBMT 2100-2110	1-4												COMP 1022, COMP 1022P, COMP 2011 and COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP1022 or COMP2011 or COMP2012H instead of ISOM 2010.		
GBUS	2100-2110	Environmental, Social, and Governance (ESG) Corporate Project	1						1	[1]				1			
GBUS/ISOM	3030	New: GBUS 3030 OR ISOM 4780	3-4														
GBUS	4780	Global Business Case Studies	4							3	[3]			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 ISOM may not be counted towards this elective requirement.)		
GBUS			15									6	3	6			
Required Credits for Major Required Courses and Electives				26-30	0	0	0	0	0	4	3	6	7	6		26	
Additional Requirement for Dual Degree																	
Requirements for Dual Degree Program																	
TEMG	1011	T&M Professional Activities I	0	0	0									0	To graduate, students should complete ALL requirements as specified for DDP.		
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			
TEMG	3060	T&M Case Analysis and Product Innovation	3		3									3			
TEMG	4050	T&M Corporate Consulting Project	3-5									4		4			
Required Credits for Additional Requirements				7	0	3	0	0	0	0	0	4	0	0	7		
University Common Core Requirement																	
CORE	C3 - C9	U CORE - Others	21			3		3		3	3	3	6	21			
CORE	C1 & C2	U CORE - English Language	6	3	3									6			
HMAN	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2									3			
Sub-total for University CORE				30	4	5	3	0	3	0	3	3	3	6	30		
Term Total (incl. free credits)																	
				176##												176	

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.