

School:		School of Engineering and School of Business Management		<< Declaration of BEng major														<< Declaration of BBA major														Student's Pathway									
Program:		Dual Degree Program (BEng in Civil Engineering and BBA in Marketing)																																							
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	Year 6 Fall	Year 6 Spring	Remarks																									
BEng in Civil Engineering																																									
Engineering Fundamental Courses																																									
CIVL COMP COMP COMP COMP	1121 1022P 1023 2011 2012H	Note: CIVL 1121 OR COMP 1022P OR COMP 1023 OR COMP2011 OR COMP 2012H Introduction to Computation for Civil Engineers Introduction to Computing with Java Introduction to Python Programming Programming with C++ Honors Object-Oriented Programming and Data Structures	3-5													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																									
CHEM	1012	General Chemistry II: Atomic Structure, Molecules, and Bonding Theories (MATH 1014 OR MATH 1024) AND (MATH 1014 OR MATH 1024) OR (MATH 1020)	4-6		3											3																									
MATH MATH MATH MATH MATH	1013 1014 1020 1023 1024	Calculus IB Calculus II Accelerated Calculus Honors Calculus I Honors Calculus II	3-4		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	2011	Introduction to Multivariable Calculus	3			3										3																									
MATH	2360	Applied Linear Algebra and Differential Equations	3			3										3																									
PHYS PHYS	1112 1312	Note: PHYS 1112 OR PHYS 1312 General Physics I with Calculus Honors General Physics I	3-3		3											3																									
Required Credits for Engineering Fundamental Courses				19-23	9	6	6	0	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 CIVL1000																									
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 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 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	2510	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																									
CIVL	3210	Introduction to Construction Management	3						3							3																									
CIVL	3310	Structural Analysis	3						3							3																									
CIVL	3320	Reinforced Concrete Design	3							3						3																									
CIVL	3510	Hydrosystems Engineering	3							3						3																									
CIVL	3610	Traffic and Transportation Engineering	3							3						3																									
CIVL	3730	Fundamentals of Geotechnics	3							3						3																									
CIVL	3142	Geotechnical Analysis and Design	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	4910	Civil and Environmental Engineering Final Year Project	6																																						
CIVL	4920	Civil and Environmental Engineering Final Year Thesis	6																																						
CIVL	4950	Civil Engineering Capstone Design Project	3								3						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	0	3	6	12	12	12	6	3	6	4	63																										
BBA in Marketing																																									
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																																						
ECON	2113	Principles of Microeconomics	3			3											3																								
ECON	2123	Note: ECON 2123 OR ECON 3123	3																																						
ECON	3123	Macroeconomics	3								3						3																								
FINA	2363	Macroeconomic Theory I	3																																						
FINA	2363	Financial Management	3					3									3																								
ISOM	2010	Introduction to Information Systems	3	-	-	-	-	-	-	-	-	-	-	-	-	-	COMP 1023, COMP 1022P, COMP 2011 and 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	-	-	-	-	-	-	-	-	-	-	-	-	-	ISOM 2020 is waived for DDP students who have taken and passed COMP 1023 or COMP 1022P or COMP 2011 or COMP 2012H. These COMP courses are similar or more advanced coding (Python) courses as ISOM 2020.																								
ISOM	2500	Business Statistics	3	-	-	-	-	-	-	-	-	-	-	-	-	-	Substituted by CIVL 2160																								
ISOM	2700	Operations Management	3											1			3																								
MARK	2120	Marketing Management	3					3									3 MARK 2120 is a major pre-requisite																								
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	1023	Note: MATH 1023 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	1014	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	3	2	1	2	29																										
Major Required Courses and Electives																																									
MARK	3220	Marketing Research	4						4								4																								
MARK	3420	Consumer Behavior	4							4							4																								
MARK	4210	Strategic Marketing	4								4						4																								
MARK		MARK 3000-level or above Electives (Any 3 courses of the subject and level as specified)	12									4	4	4	4	12																									
Required Credits for Major Required Courses and Electives				24	0	0	0	0	0	4	4	4	4	4	4	24																									
Additional Requirements for Dual Degree																																									
Requirements for Dual Degree Program																																									
TEMG	1011	TAM Professional Activities I	0	0	0	0	0										0																								
TEMG	1012	TAM Professional Activities II	0				0	0									0																								
TEMG	1013	TAM Professional Activities III	0						0	0							0																								
TEMG	1014	TAM Professional Activities IV	0								0	0					0																								
TEMG	1015	TAM Professional Activities V	0										0	0	0	0	0																								
TEMG	3950	TAM Case Analysis and Product Innovation	3		3												3																								
TEMG	4950	TAM Corporate Consulting Project	3-6				4										4																								
Required Credits for Additional Requirements				7	0	3	4	0	0	0	0	0	0	0	0	7																									
University Common Core Requirement																																									
CORE	C3 - C9	U CORE - Others	21								3	9	6	3			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	9	6	3			30																								
Term load (past, from credits)																																									
16 20 19 18 19 19 16 18 16 13														174																											
174###																																									

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.