

<< Declaration of
BEng major

<< Declaration of
BBA major

School:		School of Engineering and School of Business Management			Student's Pathway										Remarks	
Program:		Dual Degree Program (BEng in Civil and Environmental Engineering and BBA in Management)			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
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List		Credits												
BEng in Civil and Environmental Engineering																
Major Requirements																
Engineering Fundamental Courses																
COMP	1021	Introduction to Computer Science		3-5												
COMP	1022P	Introduction to Computing with Java		3		3									3	Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020
COMP	2011	Programming with C++		4												
COMP	2012H	Honors Object-Oriented Programming and Data Structures		5												
CHEM	1020	General Chemistry I		3	3										3	
LANG	2030	Technical Communication I		3											0	Waived for DDP students
		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]		4-7												
MATH	1012	Calculus IA		4												
MATH	1013	Calculus IB		3												
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	2350	Applied Linear Algebra and Differential Equations		3			3								3	
PHYS	1112	General Physics I with Calculus		3	3										3	
PHYS	1312	Honors General Physics I		3												
Required credits for Engineering Fundamental Courses				22-27											21	
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 BIM 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	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	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	Introduction to Construction Management		3						3					3	
CIVL	3610	Traffic and Transportation Engineering		3											3	
CIVL	3310	Structural Analysis		3					3						3	
CIVL	3320	Reinforced Concrete Design		3						3					3	
CIVL	3420	Water and Wastewater Engineering		3						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	4910	Civil and Environmental Engineering Final Year Project		6								3	3		6	
CIVL	4920	Civil and Environmental Engineering Final Year Thesis		6											6	
CIVL	4950	Civil Engineering Capstone Design Project		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	4450	Carbon Footprint Analysis and Reduction		3								3			3	
CIVL	5450	Hazardous Waste Treatment and Site Remediation		3											3	
CIVL	5460	Landfill Engineering and Design		3											3	
CIVL/SENG		CIVL (Environmental) Electives [2 courses from the specified elective list. At least 1 course (3 credits) 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)		6									3	3	6	
Required credits for Major Requirements Courses and Electives				66											66	
BBA in Management																
School Requirements																
ACCT	2010	Principles of Accounting I		3	3										3	
ACCT	2200	Principles of Accounting II		3						3					3	
ECON	2103	Principles of Microeconomics		3			3								3	
ECON	2113	Microeconomics		3											3	
ECON	2123	Macroeconomics		3					3						3	
ECON	3123	Macroeconomic Theory I		3											3	
FINA	2303	Financial Management		3				3							3	
ISOM	2010	Introduction to Information Systems		3											0	Substituted by COMP 1021/1022P/2011/2012H
ISOM	2020	Coding for Business		1											0	Waived for DDP students if they have taken and passed COMP1021 or COMP 1029P
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 2110 is a major pre-requisite
MGMT	2130	Business Ethics and Social Responsibility		2								2			2	
LANG	2061	Professional Writing for the Workplace		3							3				3	Non DDP-ECON students take ONLY a 3-credit of SBM-specific English course, in which they can choose from one of the three LANG courses (LANG 2061, LANG 2062, or LANG 3060).
LANG	2062	Professional Speaking for the Workplace		3											3	
LANG	3060	Advanced Academic Writing		3											3	
MATH	1003	Calculus and Linear Algebra		3-4												
MATH	1012	Calculus IA		4												
MATH	1013	Calculus IB		3		(3)									0	DDP students should take MATH 1012 or MATH 1013 or MATH 1020 to satisfy the requirements of both BEng and BBA degrees
MATH	1020	Accelerated Calculus		4												
MATH	1023	Honors Calculus I		3												
Required credits for School Requirements				43-44											32	
Major Requirements																
Major Required Courses and Electives																
MGMT	3110	Human Resources Management		4						4					4	Students in the Consulting Option must take MGMT 3120
MGMT	3120	Managerial Leadership		4											4	
MGMT	3130	Judgement and Decision Making in Organizations		4							4				4	Students in the Consulting Option must take MGMT 3140
MGMT	3140	Negotiation		4											4	
MGMT	4210	Social Responsibility and Sustainability Option must take MGMT 4210 to fulfill this requirement.		3-4											3	Students in the Consulting Option must take MGMT 4210
MGMT	4220	Corporate Strategy		3											3	Students in the CSR Option must take MGMT 4210
MGMT	4220	Entrepreneurship and Innovation		4											4	
MGMT		MGMT 3000-level or above Electives (Any 3 courses of the subject and level as specified. Courses taken as Option Required Courses may not be counted towards the elective requirement.)		9								3	3	3	9	Students in the Consulting Option are recommended to take MGMT 4220 and a new course in Simulating Strategy to fulfill the major elective requirement
Required credits for Major Required Courses and Electives				20-21											20	
Additional Requirements																
Requirements for Dual Degree Program																
Required Courses																
TEMG	1010	T&M Professional Activities		0	0	0	0	0	0	0	0	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											7	
University CORE																
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											30	
Term load (excl. free credits)																
16 17 21 18 20 19 17 17 16 15																
176##																
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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.																