

<< 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																				
<b>BEng in Civil and Environmental Engineering</b>																								
<b>Major Requirements</b>																								
<b>Engineering Fundamental Courses</b>																								
COMP	1021	Introduction to Computer Science		3-5																				
COMP	1022P	Introduction to Computing with Java		3		3										3								
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								
Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR (MATH 1020)																								
MATH	1012	Calculus IA		4																				
MATH	1013	Calculus IB		3		3										6								
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								
PHYS	1112	General Physics I with Calculus		3		3										3								
PHYS	1312	Honors General Physics I		3																				
<b>Required credits for Engineering Fundamental Courses</b>																								
															22-27	21								
<b>Major Required Courses and Electives</b>																								
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								
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								
Note: CIVL3210 OR CIVL3610																								
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								
Note: CIVL 4910 OR CIVL 4920 (Students taking the Research Option must take CIVL 4920)																								
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								
Note: CIVL4450 OR CIVL 5450 OR CIVL5460																								
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 (Environmental) Electives [2 courses from the specified elective list. At least 1 course (3 credits) should be selected from the "Restricted Electives"]																								
CIVL/SENG		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								
<b>Required credits for Major Requirements Courses and Electives</b>																								
															66	66								
<b>BBA in Management</b>																								
<b>School Requirements</b>																								
ACCT	2010	Principles of Accounting I		3		3										3								
ACCT	2200	Principles of Accounting II		3						3						3								
Note: ECON 2103 OR ECON 2113																								
ECON	2103	Principles of Microeconomics		3			3									3								
ECON	2113	Microeconomics		3												3								
Note: ECON 2123 OR ECON 3123																								
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								
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						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								
LABU	2040	Business Case Analyses		3	-	-	-	-	-	-	-	-	-	-	-	0								
LABU	2060	Effective Communication in Business		3							3					3								
Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023																								
MATH	1003	Calculus and Linear Algebra		3-4																				
MATH	1012	Calculus IA		4		(3)																		
MATH	1013	Calculus IB		3																				
MATH	1020	Accelerated Calculus		4																				
MATH	1023	Honors Calculus I		3																				
<b>Required credits for School Requirements</b>																								
															43-44	32								
<b>Major Requirements</b>																								
<b>Major Required Courses and Electives</b>																								
MGMT	3110	Human Resources Management		4					4							4								
MGMT	3120	Managerial Leadership		4												4								
Note: MGMT 3130 OR MGMT 3140 (Students in the Consulting Option must take MGMT 3140 to fulfill this requirement.)																								
MGMT	3130	Judgement and Decision Making in Organizations		4						4						4								
MGMT	3140	Negotiation		4												4								
Note: MGMT 4210 OR MGMT 4220 (Students in the Consulting Option or in the Corporate Social Responsibility and Sustainability Option must take MGMT 4210 to fulfill this requirement.)																								
MGMT	4210	Corporate Strategy		3							3					3								
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								
<b>Required credits for Major Required Courses and Electives</b>																								
															20-21	20								
<b>Additional Requirements</b>																								
<b>Requirements for Dual Degree Program</b>																								
<b>Required Courses</b>																								
TEMG	1010	T&M Professional Activities		0	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								
<b>Required credits for Additional Requirements</b>																								
															7	7								
<b>University CORE</b>																								
CORE	C3 - C9	U CORE - Others		21		3					6	6		6		21								
CORE	C1 & C2	U CORE - English Language		6	3	3										6								
CORE	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness		3	0	3										3								
<b>Sub-total for University CORE</b>																								
															30	30								
Term load (excl. free credits)																								
															15	18	20	19	20	19	15	17	15	15
<b>176##</b>																								
<< Declaration of BEng major << Declaration of BBA major																								
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.																								