

School:		School of Engineering and School of Business Management		<< Selection of BEng major		<< Declaration of BEng major		<< Selection of BBA major		Student's Pathway										Remarks
Program:		Dual Degree Program (BEng in Decision Analytics and BBA in Management)																		
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					
BEng in Decision Analytics																				
Engineering Fundamental Courses																				
COMP COMP COMP	1023 2011 2012H	Note: COMP1023 OR COMP2011 OR COMP2012H Introduction to Python Programming Programming with C++ Honors Object-Oriented Programming and Data Structures		3-5 4 5		3									3	Students should take COMP 1023, COMP 2011 or COMP 2012H which will also be used to substitute ISOM 2010 and to waive ISOM 2020				
CHEM PHYS PHYS	1012 1112 1312	Note: CHEM1012 OR PHYS1112 OR PHYS1312 General Chemistry B: Atomic Structure, Molecules, and Bonding Theories General Physics I with Calculus Honors General Physics I		3 3 3	3										3					
MATH MATH MATH MATH MATH MATH	1013 1014 1020 1023 1024 2011 2111	Note: [MATH 1013 OR MATH 1023] AND [MATH 1014 OR MATH 1024] OR [MATH 1020] Calculus I Calculus II Accelerated Calculus Honors Calculus I Honors Calculus II Introduction to Multivariable Calculus Matrix Algebra and Applications		4-6 3 3 4 3 3 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				
Required credits for Engineering Fundamental Courses				16-20	6	6	3	3	0	0	0	0	0	0	18					
Major Required Courses and Electives																				
IEDA	1010	Academic and Professional Development I		0			0	0							0					
IEDA	1020	Academic and Professional Development II		0					0	0					0					
IEDA	1901	Industrial Training and Experience		0											0					
IEDA	2010	Introduction of Industrial Engineering and Decision Analytics		3			3								3					
IEDA	2520	Probability for Engineers		3			3								3					
IEDA	2540	Statistics for Engineers		3				3							3	This course will also be used to substitute ISOM2500				
IEDA	3010	Prescriptive Analytics		3					3						3					
IEDA	3230	Engineering Economics and Accounting		3			3								3					
IEDA	3250	Stochastic Models		3					3						3					
IEDA	3300	Industrial Data Systems		3			3								3					
IEDA	3550	Predictive Analytics		3						3					3					
IEDA	4901	Note: IEDA4901 OR IEDA4920 Final Year Thesis		6 6									3	3	6					
IEDA	4920	Decision Analytics Final Year Project		6																
ECON ECON	2103 2113	Note: ECON2103 OR ECON2113 Principles of Microeconomics Microeconomics		3 3					3						3					
IEDA/ISOM		Area Electives (5 courses from the specified elective list, of which all 5 courses should be taken from the same area)		15						3	6	3	3		15					
BEng in Decision Analytics Major Requirements				48	0	0	12	3	9	6	6	3	6	3	48					
BBA in Management																				
School Requirements																				
ACCT	2010	Principles of Accounting I		3	3										3					
ACCT	2200	Principles of Accounting II		3			3								3					
ECON ECON	2103 2113	Note: ECON 2103 OR ECON 2113 Principles of Microeconomics Microeconomics		3 3			(3)								0					
ECON ECON	2123 3123	Note: ECON 2123 OR ECON 3123 Macroeconomics Macroeconomic Theory I		3 3						3					3					
FINA	2303	Financial Management		3			3								3					
ISOM	2010	Introduction to Information Systems		3	-	-	-	-	-	-	-	-	-	-	0	COMP 1023, COMP 1023P, COMP 2011 and COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP 1023 or COMP 2011 or COMP 2012H instead of ISOM 2010.				
ISOM	2020	Coding for Business		1	-	-	-	-	-	-	-	-	-	-	0	ISOM 2020 is waived for DDP students who have taken and passed COMP 1023 or COMP 1023P or COMP 2011 or COMP 2012H. These two COMP courses are similar or more advanced coding (Python) courses as ISOM 2020.				
ISOM	2500	Business Statistics		3	-	-	-	-	-	-	-	-	-	-	0	Substituted by IEDA2540				
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					
MATH MATH MATH MATH	1003 1013 1020 1023	Note: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023 Calculus and Linear Algebra Calculus I Accelerated Calculus Honors Calculus I		3-4 3 3 4 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				
Required Credits for School Requirements				39-40	3	3	3	6	0	6	2	2	0	1	26					
Major Required Courses and Electives																				
MGMT MGMT	3110 3120	Note: MGMT 3110 OR MGMT 3120 (For students in the Consulting Option, they will use MGMT 3110 to fulfill the Option Requirements and should take MGMT 3120 to fulfill this requirement.) Human Resources Management Managerial Leadership		4 4					4						4	Students in the Consulting Option must take MGMT 3120				
MGMT MGMT	3130 3140	Note: MGMT 3130 OR MGMT 3140 (Students in the Consulting Option must take MGMT 3140 to fulfill this requirement.) Judgement and Decision Making in Organizations Negotiation		4 4						4					4	Students in the Consulting Option must take MGMT 3140				
MGMT MGMT	4210 4220	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.) Corporate Strategy Entrepreneurship and Innovation		3-4 3 4							3				3	Students in the Consulting Option must take MGMT 4210 Students in the CSR Option must take MGMT 4210				
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	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				26-27	0	0	0	0	4	4	3	3	3	3	20					
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				
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	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	0	3	0	0	4	0	0	0	0	0	7					
University Common Core Requirement																				
CORE	C3 - C9	U CORE - Others		21				3			3	6	3	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	4	5	0	3	0	0	3	6	3	6	30					
Term load (excl. free credits)																				
				13	17	18	15	17	16	14	14	12	13	149						
149##																				