

School:			School of Engineering and School of Business Management		<< Selection of BEng major														<< Declaration of BEng major														<< Selection of BBA major														Student's Pathway													
Program:			Dual Degree Program (BEng in Decision Analytics and BBA in Economics)																																												Remarks													
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		1023	Note: COMP1023 OR COMP2011 OR COMP2012H		3-5		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		1012	Note: CHEM1012 OR PHYS1112 OR PHYS1312		3	3											3																																											
PHYS		1112	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories		3																																																							
PHYS		1312	General Physics I with Calculus Honors General Physics I		3																																																							
MATH		1013	Note: [(MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]		4-6																																																							
MATH		1014	Calculus I		3	3	3										6																																											
MATH		1020	Calculus II		3																																																							
MATH		1023	Accelerated Calculus		4																																																							
MATH		1024	Honors Calculus I		3																																																							
MATH		1024	Honors Calculus II		3																																																							
MATH		2011	Introduction to Multivariable Calculus		3				3								3																																											
MATH		2111	Matrix Algebra and Applications		3			3									3																																											
Required Credits for Engineering Fundamental Courses					16-20	6	6	3	3	0	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		3560	Predictive Analytics		3						3						3																																											
IEDA		4901	Note: IEDA4901 OR IEDA4920		6																																																							
IEDA		4920	Final Year Thesis Decision Analytics Final Year Project		6 6									3	3		6																																											
ECON		2103	Note: ECON2103 OR ECON2113		3					3							3																																											
ECON		2113	Principles of Microeconomics Microeconomics		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 Economics																																																												
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												0	ECON 2103 / 2113 / 2123 is a major pre-requisite																																										
ECON		2113	Principles of Microeconomics Microeconomics		3 3																																																							
ECON		2123	Note: ECON 2123 OR ECON 3123		3						3						3																																											
ECON		3123	Macroeconomics Macroeconomic Theory I		3 3																																																							
FINA		2303	Financial Management		3				3								3																																											
ISOM		2010	Introduction to Information Systems		3	-	-	-	-	-	-	-	-	-	-	-	0	COMP 1023, COMP 1022P, COMP 2011 and COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP1023 or COMP2011 or COMP2012H 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 1029P or COMP2011 or COMP2012H. These two COMP courses are similar or more advanced coding (Python) courses as ISOM 2020.																																										
ISOM		2500	Business Statistics		3	-	-	-	-	-	-	-	-	-	-	-	0	Substituted by IEDA 2540																																										
ISOM		2600	Introduction to Business Analytics		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																																											
MATH		1003	Note: MATH 1003 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 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees																																										
MATH		1020	Calculus IB		3																																																							
MATH		1023	Accelerated Calculus Honors Calculus I		4 3																																																							
Required Credits for School Requirements					39-40	3	3	3	6	2	3	2	3	0	1	26																																												
Major Required Courses and Electives																																																												
ECON		3014	Managerial Microeconomics		4					4							4																																											
ECON		3024	Managerial Macroeconomics		4						4						4																																											
ECON		3334	Introduction to Econometrics		4							4					4																																											
ECON			ECON 4000-level Electives (Any 3 courses of the subject and level as specified)		11								4	4	3		11																																											
Required Credits for Major Required Courses and Electives					23	0	0	0	0	4	4	4	4	4	3	23																																												
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		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	3	3	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	3	3	3	3	6	30																																												
Term load (excl. free credits)															152																																													
13																				17	18	15	19	16	15	13	13	13																																
152##																																																												

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.