

School:			School of Engineering and School of Business Management										Student's Pathway										Remarks
Program:			Dual Degree Program (BEng in Industrial Engineering and Engineering Management 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	Sub-total									
BEng in Industrial Engineering and Engineering Management																							
Engineering Fundamental Courses																							
COMP	1023	Note: COMP1023 OR COMP2011 OR COMP2012H	3-5												Students should take COMP 1023, COMP 2011 or COMP 2012H which will also be used to substitute ISOM 2010 and to waive ISOM 2020								
COMP	2011	Introduction to Python Programming	3		3									3									
COMP	2012H	Programming with C++	4																				
		Honors Object-Oriented Programming and Data Structures	5																				
CHEM	1012	Note: CHEM1012 OR PHYS1112 OR PHYS1312	3												3								
PHYS	1112	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories	3		3																		
PHYS	1312	General Physics I with Calculus	3																				
		Honors General Physics I	3																				
MATH	1013	Note: [MATH 1013 OR MATH 1023] AND [MATH 1014 OR MATH 1024] OR [MATH 1020]	4-6												6								
MATH	1014	Calculus I	3		3	3																	
MATH	1020	Calculus II	4																				
MATH	1023	Accelerated Calculus	4																				
MATH	1024	Honors Calculus I	3																				
MATH	2011	Honors Calculus II	3																				
MATH	2011	Introduction to Multivariable Calculus	3				3							3									
MATH	2111	Introduction to Multivariable Calculus	3																				
MATH	2111	Matrix Algebra and Applications	3			3								3									
Required Credits for Engineering Fundamental Courses			16-20	6	6	3	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	2020	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	4100	Integrated Production Systems	3					3						3	Substitute ISOM 2700								
IEDA	4130	System Simulation	3					3						3									
IEDA	4901	Note: IEDA 4901 OR IEDA 4902	6																				
IEDA	4901	Final Year Thesis	6									3	3	6									
IEDA	4902	Industrial Engineering and Engineering Management Final Year Project	6																				
ECON	2103	Note: ECON 2103 OR ECON 2113	3																				
ECON	2113	Principles of Microeconomics	3					3						3									
ECON	2113	Macroeconomics	3																				
IEDA	2113	Industrial Engineering Electives (Courses from the specified elective list)	21							3	6	6	6	6	21								
BEng in Industrial Engineering and Engineering Management Major Requirements			57	0	0	12	3	9	6	3	6	9	9	57									
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			(3)																	
ECON	2113	Principles of Microeconomics	3											0	This course will be counted as an IE major required course.								
ECON	2113	Macroeconomics	3																				
ECON	2123	Note: ECON 2123 OR ECON 3123	3																				
ECON	3123	Macroeconomics	3					3						3									
FINA	2303	Macroeconomic Theory I	3																				
FINA	2303	Financial Management	3			3								3									
ISOM	2010	Introduction to Information Systems	3	-	-	-	-	-	-	-	-	-	-	0	COMP 1023, COMP 2011 or COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP 1023, 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, COMP 2011 or COMP 2012H. These COMP courses are similar or more advanced coding (Python) courses as ISOM 2020.								
ISOM	2500	Business Statistics	3	-	-	-	-	-	-	-	-	-	-	0	Substituted by IECA2540								
ISOM	2600	Introduction to Business Analytics	1											1									
ISOM	2700	Operations Management	3	-	-	-	-	-	-	-	-	-	-	0	Substituted by IEDA 4100								
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									
		Note: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4																				
MATH	1003	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	1013	Calculus I	3																				
MATH	1020	Accelerated Calculus	4																				
MATH	1023	Honors Calculus I	3																				
Required Credits for School Requirements			30-40	3	0	0	0	9	3	2	2	3	0	1	23								
Major Required Courses and Electives																							
MARK	3200	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	T&M Professional Activities I	0	0	0	0								0									
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	To graduate, students should complete ALL requirements as specified for DDP.								
TEMG	1015	T&M Professional Activities V	0									0	0	0									
TEMG	3990	T&M Case Analysis and Product Innovation	3		3									3									
TEMG	4990	T&M Corporate Consulting Project	3-5						4					4									
Required Credits for Additional Requirements			7	0	3	0	0	0	4	0	0	0	0	7									
University Common Core Requirement																							
CORE	C1 - C2	U CORE - Others	21			3	3			6	3	3	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	3	3	0	0	6	3	3	3	30									
Term load (excl. free credits)																							
13 14 15 16 17 18 19 20 21 22 23 24 25 26															159								
159##																							

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.