

School: School of Engineering and School of Business Management				← Declaration of BEing major		← Declaration of BBA major		Student's Pathway									
Program:		Dual Degree Program (BEing in Industrial Engineering and Engineering Management and BBA in Finance)															
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	Remarks		
BEing in Industrial Engineering and Engineering Management																	
Engineering Fundamental Courses																	
COMP	1023	Note: COMP1023 OR COMP2011 OR COMP2012H	3-5											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		
COMP	2011	Introduction to Python Programming	3	3													
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5														
CHEM	1012	Note: CHEM1012 OR PHYS1112 OR PHYS1312	3														
PHYS	1112	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories	3	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 1025]	4-6														
MATH	1014	Calculus I	3														
MATH	1020	Accelerated Calculus	3	3	3									6	DDP students should take MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEing and BBA degrees		
MATH	1023	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	0	3	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										
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	3260	Stochastic Models	3					3						3			
IEDA	3360	Industrial Data Systems	3			3								3			
IEDA	4100	Integrated Production Systems	3						3					3	Substitute ISOM 2700		
IEDA	4130	System Simulation	3						3					3			
		Note: IEDA 4901 OR IEDA 4960	6										3	3	6		
IEDA	4901	Final Year Thesis	6														
IEDA	4960	Industrial Engineering and Engineering Management Final Year Project	6														
		Note: ECON 2103 OR ECON 2113	3												3		
ECON	2103	Principles of Microeconomics	3		3												
ECON	2113	Macroeconomics	3														
BEing in Industrial Engineering and Engineering Management Major Requirements				57	3	3	0	3	0	6	3	6	0	0	57		
BBA in Finance																	
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														
ECON	2113	Principles of Microeconomics	3			(3)								0	This course will be counted as an IE major required course.		
ECON	2113	Macroeconomics	3														
ECON	3123	Note: ECON 2123 OR ECON 3123	3														
ECON	3123	Macroeconomics	3					3						3			
ECON	3123	Macroeconomic Theory I	3														
FINA	2303	Financial Management	3				3							3	FINA 2303 is a major pre-requisite		
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) course 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	-	-	-	-	-	-	-	-	-	-	0	Substituted by IEDA 4100		
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			
		Note: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4														
MATH	1003	Calculus and Linear Algebra	3														
MATH	1013	Calculus I	3			(3)								0	DDP students should take MATH 1013 and MATH 1023 or MATH 1020 to satisfy the requirements of both BEing and BBA degrees		
MATH	1020	Accelerated Calculus	4														
MATH	1023	Honors Calculus I	3														
Required Credits for School Requirements				39-40	3	0	0	0	9	3	2	2	3	0	1	23	
Major Required Courses and Electives																	
FINA	3001	Key Skills for Finance Professionals (A)	1					1						1			
FINA	3103	Intermediate Investments	3					3						3			
FINA	3203	Derivative Securities	3						3					3			
FINA	3303	Intermediate Corporate Finance	3							3				3			
FINA	3810	Bloomberg Market Concepts Certification	0					0						0			
		Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6							3				3			
		Note: ISOM 3230 OR ISOM 3400	3							3				3	If DDP students took COMP 1023 in BEing requirement, they are required to enroll ISOM 3230		
FINA		FINA 3300-level or above Electives (Any 3 courses of the subject and level as specified)	9								3	3	3	9			
Required Credits for Major Required Courses and Electives				25-28	0	0	0	0	0	4	6	6	3	3	3	25	
Additional Requirement for Dual Degree																	
Requirements for Dual Degree Program																	
TEMS	1011	T&M Professional Activities I	0	0	0									0			
TEMS	1012	T&M Professional Activities II	0			0	0							0			
TEMS	1013	T&M Professional Activities III	0					0	0					0			
TEMS	1014	T&M Professional Activities IV	0							0	0			0	To graduate, students should complete ALL requirements as specified for DDP.		
TEMS	1015	T&M Professional Activities V	0									0	0	0			
TEMS	3950	T&M Case Analysis and Product Innovation	3		3									3			
TEMS	4950	T&M Corporate Consulting Project	3-5									4		4			
Required Credits for Additional Requirements				7	0	3	0	0	0	0	0	4	0	0	7		
University Common Core Requirements																	
CORE	C3 - C9	U CORE - Others	21					3		3	3	6	6	21			
CORE	C1 & C2	U CORE - English Language	6	3	3									6			
HMWP	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2									3			
Sub-total for University CORE				30	4	5	0	0	3	0	3	3	6	6	30		
(with total core free credits)																	
				19	14	12	15	16	14	14	19	18	19	160			