

School:		School of Science and School of Business Management		Student's Pathway												Remarks
Program:		Dual Degree Program (BSc in Biotechnology 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												
BSc in Biotechnology																
School Requirements																
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011		3-4												
COMP	1022P	Introduction to Computer Science		3												
COMP	2011	Introduction to Computing with Java Programming with C++		4												
LANG	2010	English for Science I		3												
SSCI		Science Foundation courses [8 courses from the specified elective list. Students should take (i) 7 foundation lecture courses, including at least 1 lecture course, but no more than 3 lecture courses, from each of the four disciplines: CHEM, LIFS/OCES, MATH and PHYS; and (ii) 1 laboratory course.]		22-25												
CHEM	1004	Chemistry in Everyday Life		3												
CHEM	1010	General Chemistry IA		3												
CHEM	1020	General Chemistry IB		3												
CHEM	1030	General Chemistry II		3												
CHEM	1050	Laboratory for General Chemistry I		1												
CHEM	1055	Laboratory for General Chemistry II		1												
LIFS	1901@	General Biology I @		3												
LIFS	1902@	General Biology II @		3												
LIFS	1903	Laboratory for General Biology I		3												
LIFS	1904	Laboratory for General Biology II		1												
LIFS	1930	Nature of Life Sciences		1												
LIFS	2210	Biochemistry I		3												
MATH	1012	Calculus IA		4												
MATH	1013	Calculus IB		4	10	3	6	3								
MATH	1014	Calculus II		3												
MATH	1020	Accelerated Calculus		3												
MATH	1023	Honors Calculus I		4												
MATH	1024	Honors Calculus II		3												
MATH	2023	Multivariable Calculus		3												
MATH	2121	Linear Algebra		4												
MATH	1030	Honors in Linear and Abstract Algebra I		3												
UCES	1030	Environmental Science		3												
PHY	1001	Physics and the Modern Society		3												
PHY	1111	General Physics I		3												
PHY	1112	General Physics I with Calculus		3												
PHY	1113	Laboratory for General Physics I		1												
PHY	1114	General Physics II		3												
PHY	1115	Laboratory for General Physics II		1												
PHY	1312	Honors General Physics I		3												
PHY	1314	Honors General Physics II		3												
Required credits for School / Major Pre-requisite Requirements				25-29											25	
Major Requirements																
Major Required Courses and Electives																
LIFS	1903	Laboratory for General Biology I		1	(1)										0	
LIFS	1904	Laboratory for General Biology II		1		1									1	
LIFS	2040	Cell Biology		3											3	
LIFS	2070	Introduction to Biotechnology		3			3								3	
LIFS	2080	Plant Biology		3				3							3	
LIFS	2210	Biochemistry I		3			(3)								0	
LIFS	3060	Microbiology		3					3						3	
LIFS	3110	Biotechnological Application of Recombinant DNA Techniques		3					3						3	
LIFS	3140	General Genetics		4						4					4	
LIFS	4150	Plant Biotechnology		3							3				3	
LIFS	4200	Concepts and Issues in Contemporary Biotechnology		3						3					3	
LIFS	4963	Note: LIFS4963 OR (LIFS4973 AND LIFS4983) OR (SCIE4500 AND LIFS4983) (Students following IRE Track can only use (SCIE4500 AND LIFS4983) to fulfill the requirement.)		3-7								[3]	3		3	
LIFS	4973	Biotechnology Capstone Project		3												
LIFS	4983	Biotechnology Project Research I		4												
LIFS	4983	Biotechnology Project Research II		4												
SCIE	4500	IRE Research Project II		3												
CHEM	1010	Note: CHEM1010 OR CHEM1020		3	(3)										0	
CHEM	1020	General Chemistry IA		3												
CHEM	1030	General Chemistry IB		3												
CHEM	1050	Laboratory for General Chemistry I		1	1										1	
CHEM	1055	Laboratory for General Chemistry II		1		1									1	
CHEM	2110	Note: CHEM 2110 OR CHEM 2311		3												
CHEM	2311	Organic Chemistry I		3				3							3	
CHEM	2311	Analytical Chemistry		3												
CHEM	2155	Note: CHEM2155 OR CHEM2355		1					1						1	
CHEM	2355	Fundamental Organic Chemistry Laboratory		1												
CENG	1600	Biotechnology and its Business Opportunities		3						3					3	
LANG	3024	Science Communication in English (Life Science)		3									3		3	
LIFS/ BIPH/ BTEC/ OCES/ PHYS/ BIEN/ CENG		Biotechnology Electives (Courses from the specified elective list. Students following IRE Track are required to take a minimum of 15 credits; while others a minimum of 18 credits. Courses taken as Major/Track Required Courses may not be counted towards the elective requirement.)		15-18						3		3	6	3	15	
Required credits for Major Required Courses and Electives				62-70											56	
BBA in Management																
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							3	
ECON	2123	Note: ECON 2123 OR ECON 3123		3						3					3	
ECON	3123	Macroeconomics		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		3									3	
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	
MGMT	2130	Business Ethics and Social Responsibility		2									2		2	
LABU	2040	Business Case Analyses		0											0	
LABU	2060	Effective Communication in Business		3									3		3	
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023		3-4												
MATH	1012	Calculus and Linear Algebra		3												
MATH	1013	Calculus IA		4												
MATH	1020	Calculus IB		3												
MATH	1023	Accelerated Calculus		4												
MATH	1023	Honors Calculus I		3		(3)									0	
Required credits for School Requirements				43-44											35	
Major Requirements																
Major Required Courses and Electives																
MGMT	3110	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.)		4						4					4	
MGMT	3120	Human Resources Management		4												
MGMT	3130	Note: MGMT 3130 OR MGMT 3140 (Students in the Consulting Option must take MGMT 3140 to fulfill this requirement.)		4												
MGMT	3140	Judgement and Decision Making in Organizations		4						4					4	
MGMT	4210	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.)		3-4												
MGMT	4220	Corporate Strategy		3							3				3	
MGMT		Entrepreneurship and Innovation		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	
Required credits for Major Required Courses and Electives				20-21											20	
Additional Requirements																
Requirements for Dual Degree Program																
Required Courses																
TEMG	1010	T&M Professional Activities		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	
Required credits for Additional Requirements				7											7	
University CORE																
CORE	C3 - C9	U CORE - Others		21	3						3	9	3	3	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	
Sub-total for University CORE				30											30	
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