

<< Declaration of  
BEng major << Declaration of  
BBA major

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												
<b>BSc in Biotechnology</b>																
<b>School Requirements</b>																
SCIE	1000	Science School Induction		0	0	0								0		
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011		3-4												
COMP	1022P	Introduction to Computer Science		3			3							3	This course will also be used to substitute ISOM 2010	
COMP	2011	Introduction to Computing with Java Programming with C++		4												
LANG	2010	English for Science I		3					3					3		
SSCI		Science education courses (7 courses from the specified elective list. Students should take 7 foundation lecture courses, including at least 1 lecture course, but no more than 3 lecture courses, from each discipline: CHEM, LIFS, MATH and PHYS; and (ii) 1 laboratory course.)		22-23												
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	1030	Laboratory for General Chemistry I		3												
CHEM	1050	Laboratory for General Chemistry II		1												
CHEM	1055			1												
LIFS	1030	Environmental Science		3												
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	1904	Nature of Life Sciences		1												
LIFS	1930	Biochemistry I		3												
LIFS	2210			3	10	3	6	3						22	LIFS1901 & LIFS1902 are Major Pre-requisite Students are recommended to take CHEM1010, CHEM1030, LIFS1903 and MATH1013 to satisfy the requirements of both SSCI School requirements and Major requirements	
MATH	1012	Calculus IA		4												
MATH	1013	Calculus IB		3												
MATH	1013	Calculus II		3												
MATH	1014	Accelerated Calculus		3												
MATH	1020	Honors Calculus I		4												
MATH	1023	Honors Calculus II		3												
MATH	1024	Multivariable Calculus		3												
MATH	2023	Linear Algebra		4												
MATH	2121	Honors in Linear and Abstract Algebra I		4												
MATH	2131			4												
PHY	1001	Physics and the Modern Society		3												
PHY	1111	General Physics I		3												
PHY	1112	General Physics I with Calculus		3												
PHY	1112	Laboratory for General Physics I		3												
PHY	1113	General Physics II		1												
PHY	1114	Laboratory for General Physics II		3												
PHY	1115	Honors General Physics I		1												
PHY	1312	Honors General Physics II		3												
<b>Required credits for School / Major Pre-requisite Requirements</b>				25-29										28		
<b>Major Requirements</b>																
<b>Major Required Courses and Electives</b>																
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							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												
LIFS	4963	Biotechnology Capstone Project		3								[3]	3	3		
LIFS	4973	Biotechnology Project Research I		3												
LIFS	4983	Biotechnology Project Research II		4												
SCIE	4500	IRE Research Project I		3												
CHEM	1010	Note: CHEM1010 OR CHEM1020		3	(3)									0		
CHEM	1020	General Chemistry IA		3												
CHEM	1030	General Chemistry IB		3			(3)							0		
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					3					3		
CHEM	2311	Organic Chemistry I		3												
CHEM	2311	Analytical Chemistry		3												
CHEM	2155	Note: CHEM2155 OR CHEM2355		1						1				1		
CHEM	2355	Fundamental Organic Chemistry Laboratory		1												
CHEM	2355	Fundamental Analytical 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/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	
<b>Required credits for Major Required Courses and Electives</b>				62-70										56		
<b>BBA in Management</b>																
<b>School Requirements</b>																
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							3		
ECON	2113	Principles of Microeconomics		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	Substituted by COMP 1021/1022P/1022Q/2011	
ISOM	2020	Coding for Business		1					1					1		
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							3	MGMT 2110 is a major pre-requisite	
MGMT	2130	Business Ethics and Social Responsibility		2									2	2		
SBMT	1111	Business Student Induction		0										0	Waived for DDP students	
LABU	2040	Business Case Analyses		3							3			3		
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	(3)									0	DDP students should take MATH 1013 OR MATH 1023 to satisfy the requirements of both BSc and BBA degrees	
MATH	1020	Calculus IB		3												
MATH	1023	Accelerated Calculus		3												
MATH	1023	Honors Calculus I		3												
<b>Required credits for School Requirements</b>				43-44										39		
<b>Major Requirements</b>																
<b>Major Required Courses and Electives</b>																
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	Students in the Consulting Option must take MGMT 3120	
MGMT	3120	Human Resources Management		4												
MGMT	3120	Managerial Leadership		4												
MGMT	3130	Note: MGMT 3130 OR MGMT 3140 (Students in the Consulting Option must take MGMT 3140 to fulfill this requirement.)		4						4				4	Students in the Consulting Option must take MGMT 3140	
MGMT	3140	Judgement and Decision Making in Organizations		4												
MGMT	3140	Negotiation		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								3		3	Students in the Consulting Option must take MGMT 4210 Students in the CSR Option must take MGMT 4210	
MGMT	4220	Corporate Strategy		3												
MGMT	4220	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	Students in the Consulting Option are recommended to take MGMT 4220 and a new course in Simulating Strategy to fulfill the major elective requirement	
<b>Required credits for Major Required Courses and Electives</b>				20-21										20</		