

<< 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 Finance)			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															
SCIE	1000	Science School Induction	0	0									0		
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011 Introduction to Computer Science	3-4										3	Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020	
COMP	1022P	Introduction to Computing with Java	3			3									
COMP	2011	Programming with C++	4												
LANG	2010	English for Science I	3	---	---	---	---	---	---	---	---	---	0	Waived for DDP students	
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											LIFS1901 & LIFS1902 are Major Pre-requisite	
LIFS	1904	Laboratory for General Biology II	1												
LIFS	1930	Nature of Life Sciences	1												
LIFS	2210	Biochemistry I	3												
MATH	1012	Calculus IA	3												
MATH	1013	Calculus IB	4	10	3	6	3						22	Students are recommended to take CHEM1010, CHEM1030, LIFS1903, LIFS2210 and MATH1013 to satisfy the requirements of both SSCI School requirements and Major requirements	
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	2131	Honors in Linear and Abstract Algebra I	4												
OCES	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							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	Biotechnology Capstone Project	3								[3]	3		3	
LIFS	4973	Biotechnology Project Research I	3												
LIFS	4983	Biotechnology Project Research II	3												
SCIE	4500	IRE Research Project II	3-7												
		Note: LIFS4983 OR (LIFS4973 AND LIFS4983) OR (SCIE4500 AND LIFS4983) (Students following IRE Track can only use (SCIE4500 AND LIFS4983) to fulfill the requirement.)													
CHEM	1010	Note: CHEM1010 OR CHEM1020 General Chemistry IA	3	(3)										0	
CHEM	1020	General Chemistry IB	3												
CHEM	1030	General Chemistry II	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 Organic Chemistry I	3					3						3	
CHEM	2311	Analytical Chemistry	3												
CHEM	2155	Note: CHEM2155 OR CHEM2355 Fundamental Organic Chemistry Laboratory	1						1					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/ BIPI/ 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	6	18	
Required credits for Major Required Courses and Electives			62-70										59		
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 Principles of Microeconomics	3				3							3	
ECON	2113	Microeconomics	3												
ECON	2123	Note: ECON 2123 OR ECON 3123 Macroeconomics	3					3						3	
ECON	3123	Macroeconomic Theory I	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								3	
MGMT	2130	Business Ethics and Social Responsibility	2									2		2	
SBMT	1111	Business Student Induction	0	---	---	---	---	---	---	---	---	---	---	0	
LABU	2040	Business Case Analyses	3	---	---	---	---	---	---	---	---	---	---	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 Calculus and Linear Algebra	3-4												
MATH	1012	Calculus IA	4												
MATH	1013	Calculus IB	3												
MATH	1020	Accelerated Calculus	4												
MATH	1023	Honors Calculus I	3												
Required credits for School Requirements			43-44										35	To satisfy the requirements of both BEng and BBA degrees, DDP students should NOT take MATH 1003.	
Major Requirements															
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	
ACCT	3010	Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030 Financial Accounting I	3-6												
ACCT	3020	Financial Accounting II	3						3					3	
ACCT	3030	Intermediate Financial Accounting for Non-Accounting Majors	3												
ISOM	3230	Note: ISOM 3230 OR ISOM 3400 Business Applications Programming	3							3				3	
ISOM	3400	Python Programming for Business Analytics	3												
FINA		FINA 3000-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										25		
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 - C12	U CORE - Others	30	3	3			3		3	9	3	6	30	
CORE	C1 & C2	U CORE - English Language	6	3	3									6	
Sub-total for University CORE			36											36	

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