

School:		School of Engineering and School of Business Management		Program:		Dual Degree Program (BEng in Bioengineering and BBA in Finance)		Student's Pathway														Remarks	
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	Subtotal								
BEng in Bioengineering																							
Engineering Fundamental Courses																							
COMP 1022P	1022P	Introduction to Computing with Java		3-5																			
COMP 1023	1023	Introduction to Computing with Java		3		3									3	Students should take COMP 1022P, COMP 1023, COMP 2011 or COMP 2012H which will also be used to substitute ISOM 2010 and to waive ISOM 2020							
COMP 2011	2011	Programming with C++		4																			
COMP 2012H	2012H	Honors Object-Oriented Programming and Data Structures		5																			
CHEM 1002	1002	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories		3	3																		
CHEM 1002	1002	Laboratory for General Chemistry B		1		1																	
LIFS 1901	1901	General Biology I		3	3											Students with level 3 or above in HCODE 1a Biology are exempted from taking LIFS 1901							
MATH 1013	1013	Note: MATH 1013 OR MATH 1020 OR MATH 1023		3-4																			
MATH 1020	1020	Calculus I		4	3											DCP students should take MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees							
MATH 1023	1023	Honors Calculus I		4																			
PHYS 1112	1112	Note: PHYS 1112 OR PHYS 1312		3																			
PHYS 1112	1112	General Physics I with Calculus		3		3																	
PHYS 1312	1312	Honors General Physics I		3																			
Required Credits for Engineering Fundamental Courses				16-19	9	7	0	0	0	0	0	0	0	0	16								
Major Required Courses and Electives																							
BIEN 1400	1400	Introduction to Bioengineering		3		3																	
BIEN 2410	2410	Cellular and Systems Physiology for Engineers		3			3									Those entering the Bioengineering in Year 2 will take this course in Year 2 Spring							
BIEN 2610	2610	Chemical Biology for Engineers		3			3																
BIEN 3250	3250	Rate and Transport Processes in Biological Systems		3				3															
BIEN 3300	3300	Data Science for Molecular Engineering		3			3																
BIEN 3310	3310	Note: BIEN 3310 OR BIEN 3320		3																			
BIEN 3320	3320	Data Science for Neural Engineering		3				3								BIEN 3310/3320 which will also be used to substitute ISOM 2600							
BIEN 3410	3410	Data Science for Biology and Medicine		3					3														
BIEN 3410	3410	Introduction to Bioremediation and Bioimaging		3						3													
BIEN 3420	3420	Biosensors and Bioremediation for Healthcare		3					3	3													
BIEN 3910	3910	Bioengineering Laboratory		4				4															
BIEN 4920	4920	Note: BIEN 4920 OR BIEN 4930 OR BIEN 4940		6																			
BIEN 4940	4940	Bioengineering Capstone Design		6							3	3			6								
BIEN 4940	4940	Bioengineering Thesis Research		6																			
BIEN 4940	4940	Bioengineering Industrial Project		6																			
CENG 1000	1000	Foundations of Chemical and Biological Engineering		3	3											Those entering the Bioengineering in Year 2 will take this course in Year 2 Fall							
CENG 1010	1010	Academic and Professional Development I		0	0											Those entering the Bioengineering in Year 2 will take this course in Year 2 Fall							
CENG 2210	2210	Chemical and Biological Engineering Thermodynamics		3			3																
CENG 2310	2310	Modeling for Chemical and Biological Engineering I		3			3																
CENG 2320	2320	Modeling for Chemical and Biological Engineering II		3			3																
CENG 4020	4020	Academic and Professional Development II		0					0														
SECHENG 1515	1515	Bioengineering Electives (6 courses from the specified elective list, of which at least 3 credits should be taken from a single specialty area (Area 1 or Area 2). Out of the 15 credits taken, at least 9 credits should be at 4000-level or above). Courses taken as Major Required Courses may not be counted towards this elective requirement.		15						3	3	3	3	6	15								
BEng in Bioengineering Major Requirements				61	3	3	9	9	10	6	3	3	6	9	61								
BBA in Finance																							
School Requirements																							
ACCT 2010	2010	Principles of Accounting I		3	3											3							
ACCT 2200	2200	Principles of Accounting II		3						3						3							
ECON 2103	2103	Note: ECON 2103 OR ECON 2113		3			3									3							
ECON 2113	2113	Principles of Macroeconomics		3																			
ECON 2113	2113	Microeconomics		3																			
ECON 2123	2123	Note: ECON 2123 OR ECON 3123		3																			
ECON 3123	3123	Macroeconomics		3							3					3							
ECON 3123	3123	Macroeconomics Theory I		3																			
FINA 2303	2303	Financial Management		3				3								FINA 2303 is a major pre-requisite							
ISOM 2010	2010	Introduction to Information Systems		3	-	-	-	-	-	-	-	-	-	-	0	COMP 1022, COMP 1022P, COMP 2011 and COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP1023 or COMP2011 or COMP2012H instead of ISOM 2010.							
ISOM 2020	2020	Coding for Business		1	-	-	-	-	-	-	-	-	-	-	0	ISOM 2020 is waived for DCP students who have taken and passed COMP 1023, COMP 1022P, COMP 2011 or COMP 2012H. These COMP courses are similar or more advanced coding (Python) courses as ISOM 2020.							
ISOM 2600	2600	Business Statistics		3		3										Substituted by BIEN 2010/320							
ISOM 2600	2600	Introduction to Business Analytics		1	-	-	-	-	-	-	-	-	-	-	0								
ISOM 2700	2700	Operations Management		3				3								3							
MARK 2120	2120	Marketing Management		3			3									3							
MGMT 2010	2010	Business Ethics and the Individual		2							2					2							
MGMT 2110	2110	Organizational Behavior		3			3									3							
MGMT 2130	2130	Business Ethics and Social Responsibility		2										2		2							
MATH 1003	1003	Note: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023		3-4																			
MATH 1013	1013	Calculus and Linear Algebra		3																			
MATH 1020	1020	Accelerated Calculus		4												DCP students should take MATH 1013 and MATH 1023 or MATH 1020 to satisfy the requirements of both BEng and BBA degrees							
MATH 1023	1023	Honors Calculus		4																			
Required Credits for School Requirements				39-40	3	3	3	9	3	3	3	2	0	2	31								
Major Required Courses and Electives																							
FINA 3001	3001	Key Skills for Finance Professionals (A)		1					1							1							
FINA 3103	3103	Intermediate Investments		3					3							3							
FINA 3303	3303	Derivative Securities		3						3						3							
FINA 3303	3303	Intermediate Corporate Finance		3							3					3							
FINA 3810	3810	Bloomberg Market Concepts Certification		0												0							
ACCT 3010	3010	Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030		3-6																			
ACCT 3020	3020	Financial Accounting I		3							3					3							
ACCT 3030	3030	Financial Accounting II		3																			
ISOM 3030	3030	Intermediate Financial Accounting for Non-Accounting Majors		3																			
ISOM 3400	3400	Note: ISOM 3230 OR ISOM 3420		3																			
ISOM 3230	3230	Business Programming in VBA		3					3							3							
ISOM 3400	3400	Business Applications Development in Python		3																			
FINA 3000	3000	FNA 3000-level or above Electives (Any 3 courses of the subject and level as specified)		9							3	3	3	3	0								
Required Credits for Major Required Courses and Electives				25-26	0	0	0	0	4	6	6	3	3	3	25								
Additional Requirement for Dual Degree																							
Requirements for Dual Degree Program																							
TEMG 1011	1011	TEM Professional Activities I		0	0	0										0							
TEMG 1012	1012	TEM Professional Activities II		0			0	0								0							
TEMG 1013	1013	TEM Professional Activities III		0					0	0						0							
TEMG 1014	1014	TEM Professional Activities IV		0							0	0				0							
TEMG 1015	1015	TEM Professional Activities V		0								0	0	0	0	0							
TEMG 3950	3950	TEM Case Analysis and Product Innovation		3		3										3							
TEMG 4950	4950	TEM Corporate Consulting Project		3-5						4						4							
Required Credits for Additional Requirements				7	0	3	0	0	0	0	4	0	0	0	7								
University Common Core Requirements																							
CORE C3 - C9	C3 - C9	U CORE - Others		21		3	3	6				9	6			21							
CORE C1 & C2	C1 & C2	U CORE - English Language		6	3											6							
HMAW 1105	1105	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness		3	1	1	2									3							
Sub-total for University CORE				30	4	5	6	0	0	0	0	9	6	0		30							
Term total (incl. core credits)																							
															170	170##							

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.