

School:		School of Engineering and School of Business Management			Student's Pathway											Remarks
Program:		Dual Degree Program (BEng in Bioengineering and BBA in Global Business)			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													

BEng in Bioengineering

Major Requirements

Engineering Fundamental Courses

COMP 1021	1021	Introduction to Computer Science	3-5													3	Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020
COMP 1022P	1022P	Introduction to Computing with Java	3		3												
COMP 1029P	1029P	Python Programming Bridging Course	1														
COMP 2011	2011	Programming with C++	4														
COMP 2012H	2012H	Honors Object-Oriented Programming and Data Structures	5														
ENGG 1010	1010	Academic Orientation	0	0	0										0		
CHEM 1010	1010	Note: CHEM1010 OR CHEM 1020 General Chemistry IA	3	3											3		
CHEM 1020	1020	General Chemistry IB	3														
CHEM 1050	1050	Laboratory for General Chemistry I	1	1											1		
LANG 2030	2030	Technical Communication I	3	-	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students	
LIFS 1901	1901	General Biology I	3	3											3		
MATH 1012	1012	Note: (MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024) OR (MATH 1020)	4-7												6		
MATH 1013	1013	Calculus IA	4														
MATH 1014	1014	Calculus IB	3	3	3												
MATH 1020	1020	Accelerated Calculus	4														
MATH 1023	1023	Honors Calculus I	3														
MATH 1024	1024	Honors Calculus II	3														
PHYS 1112	1112	Note: PHYS 1112 OR PHYS 1312 General Physics I with Calculus	3	3											3		
PHYS 1312	1312	Honors General Physics I	3														
SENG		Engineering Introduction course (If the students take an introduction course included in their major, this course can be counted towards their major requirement.)	3-4		(3)										0		
Required credits for Engineering Fundamental Courses			23-29												19		

Major Required Courses and Electives

BIEN 1010	1010	Note: BIEN 1010 OR CENG 1000 Introduction to Biomedical Engineering	3		3										3	
CENG 1000	1000	Introduction to Chemical and Biological Engineering	3												3	
BIEN 2310	2310	Modeling for Chemical and Biological Engineering	3			3									3	
BIEN 2410	2410	Cellular and Systems Physiology for Engineers	3					3							3	
BIEN 2610	2610	Chemical Biology for Engineers	3			3									3	
BIEN 2990	2990	Academic and Professional Development I	1			1									1	
BIEN 3310	3310	Note: BIEN 3310 OR BIEN 3320 Data Science for Neural Engineering	3				3								3	
BIEN 3320	3320	Data Science for Biology and Medicine	3												3	
BIEN 3410	3410	Introduction to Bioinstrumentation and Biomaging	3							3					3	
BIEN 3910	3910	Bioengineering Laboratory	4							4					4	
BIEN 4920	4920	Note: BIEN 4920 OR BIEN 4930 OR BIEN 4940 Bioengineering Capstone Design	6									3	3		6	
BIEN 4930	4930	Bioengineering Thesis Research	6												6	
BIEN 4940	4940	Bioengineering Industrial Project	6												6	
BIEN 4990	4990	Academic and Professional Development II	1										1		1	
CENG 2210	2210	Chemical and Biological Engineering Thermodynamics	3				3								3	
CENG 2220	2220	Transport Phenomena I	3									3			3	
CENG 3230	3230	Chemical and Biological Reaction Engineering	3								3				3	
ENGG 2010	2010	Engineering Seminar Series	0			0	0	0	0						0	
LIFS 3150	3150	Note: LIFS 3150 OR MATH 2411 OR BIEN 3300 Biostatistics	3-4												3	
MATH 2411	2411	Applied Statistics	3			3										
BIEN 3300	3300	Data Science for Molecular Engineering	3													
LANG 4035	4035	Technical Communication II for Chemical and Biological Engineering	3										3		3	
SSCI/SENG		Bioengineering Electives (5 courses from the specified elective list, of which at least 9 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)	15									6	3	6	15	
Required credits for Major Required Courses and Electives			60-61												60	

BBA in Global Business

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 Principles of Microeconomics	3			3									3	
ECON 2113	2113	Microeconomics	3												3	
ECON 2123	2123	Note: ECON 2123 OR ECON 3123 Macroeconomics	3								3				3	
ECON 3123	3123	Macroeconomic Theory I	3												3	
FINA 2303	2303	Financial Management	3				3								3	
ISOM 2010	2010	Introduction to Information Systems	3	-	-	-	-	-	-	-	-	-	-	-	0	Substituted by COMP 1021/1022P/2011/2012H. Waived for DDP students if they have taken and passed COMP1021 or COMP 1029P
ISOM 2020	2020	Coding for Business	1	-	-	-	-	-	-	-	-	-	-	-	0	Substituted by LIFS 3150/MATH 2411/BIEN 3300
ISOM 2500	2500	Business Statistics	3	-	-	-	-	-	-	-	-	-	-	-	0	Substituted by BIEN 3310/3320
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	
SBMT 1111	1111	Business Student Induction	0	-	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students
LABU 2040	2040	Business Case Analyses	3	-	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students
LABU 2060	2060	Effective Communication in Business	3						3						3	
MATH 1003	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023 Calculus and Linear Algebra	3-4												0	DDP students should take MATH 1013 OR MATH 1023 to satisfy the requirements of both BSc and BBA degrees
MATH 1012	1012	Calculus IA	3													
MATH 1013	1013	Calculus IB	4		(3)											
MATH 1020	1020	Accelerated Calculus	3													
MATH 1023	1023	Honors Calculus I	3													
Required credits for School Requirements			43-44												31	

Major Requirements

Major Required Courses and Electives

GBUS 1000	1000	Global Leadership Development	0						0	0	0	0	0	0	0	
GBUS 2010	2010	Global Business Analysis	3							3					3	
GBUS 2020	2020	Public Service Project	1							1	[1]				1	
GBUS/ISOM 3030	3030	Note: GBUS 3030 OR ISOM2040 Global Business Case Studies	3-4								4	[3]			4	
ISOM 2040	2040	Business Simulation and Strategic Decisions	4												4	
GBUS 4910	4910	Capstone Project	4										4	[4]	4	
GBUS		Global Business Electives (Courses from the specified elective list, of which at least 6 credits from each area and at least 2 courses must be offered by GBUS. Courses taken to fulfill requirements of an additional major in SBM may not be counted towards this elective requirement.)	15									9		6	15	
Required credits for Major Required Courses and Electives			26-27												27	

Additional Requirements

Requirements for Dual Degree Program

Required Courses

TEMG 1010	1010	T&M Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0	0	
TEMG 3950	3950	T&M Case Analysis and Product Innovation	3		3										3	
TEMG 4950	4950	T&M Corporate Consulting Project	3-5							4					4	
Required credits for Additional Requirements			7												7	

University CORE

CORE C3 - C12	C3 - C12	U CORE - Others	30	3	3			3	9	6			3	3	30	
CORE C1 & C2	C1 & C2	U CORE - English Language	6	3	3										6	
Sub-total for University CORE			36												36	

Term load (excl. free credits)										
19	18	18	18	18	19	17	18	19	16	
180##										

Notes: << Declaration of BEng major << Declaration of BBA major

() indicates the reuse of the same course to fulfill more than one requirement.

--- denotes the course/requirement is either waived or substituted

To graduate, students should complete all requirements 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.