

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

School: School of Engineering and School of Business Management				Student's Pathway												Remarks
Program: Dual Degree Program (BEng in Bioengineering 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													
BEng in Bioengineering																
Major Requirements																
Engineering Fundamental Courses																
COMP	1021	Note: [COMP 1021] OR [COMP 1022P OR COMP 2011] AND COMP1029P	3-5													
COMP	1022P	Introduction to Computer Science	3													
COMP	1029P	Introduction to Computing with Java	3		3									3	Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020	
COMP	2011	Python Programming Bridging Course	1													
COMP	2011	Programming with C++	4													
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5													
ENGG	1010	Academic Orientation	0	0	0									0		
CHEM	1010	Note: CHEM1010 OR CHEM 1020	3	3										3		
CHEM	1020	General Chemistry IA	3													
CHEM	1050	Laboratory for General Chemistry I	1	1										1		
LANG	2030	Technical Communication I	3	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students	
LIFS	1901	General Biology I	3	3										3		
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7													
MATH	1013	Calculus IA	4													
MATH	1014	Calculus IB	3	3	3									6		
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
MATH	1024	Honors Calculus II	3													
PHYS	1112	Note: PHYS 1112 OR PHYS 1312	3	3										3		
PHYS	1312	General Physics I with Calculus	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	Note: BIEN 1010 OR CENG 1000	3		3									3		
CENG	1000	Introduction to Biomedical Engineering	3													
BIEN	2310	Introduction to Chemical and Biological Engineering	3			3								3		
BIEN	2410	Modeling for Chemical and Biological Engineering	3						3					3		
BIEN	2410	Cellular and Systems Physiology for Engineers	3													
BIEN	2610	Chemical Biology for Engineers	3			3								3		
BIEN	2990	Academic and Professional Development I	1			1								1		
BIEN	3310	Note: BIEN 3310 OR BIEN 3320	3					3						3		
BIEN	3320	Data Science for Neural Engineering	3													
BIEN	3410	Data Science for Biology and Medicine	3							3				3		
BIEN	3910	Introduction to Bioinstrumentation and Biomechanics	3													
BIEN	3910	Bioengineering Laboratory	4							4				4		
BIEN	4920	Note: BIEN 4920 OR BIEN 4930 OR BIEN 4940	6									3	3	6		
BIEN	4930	Bioengineering Capstone Design	6													
BIEN	4940	Bioengineering Thesis Research	6													
BIEN	4940	Bioengineering Industrial Project	1										1	1		
BIEN	4990	Academic and Professional Development II	1										1	1		
CENG	2210	Chemical and Biological Engineering Thermodynamics	3					3						3		
CENG	2220	Transport Phenomena I	3									3		3		
CENG	3230	Chemical and Biological Reaction Engineering	3							3				3		
ENGG	2010	Engineering Seminar Series	0			0	0	0	0					0		
LIFS	3150	Note: LIFS 3150 OR MATH 2411 OR BIEN 3300	3-4													
MATH	2411	Biostatistics	3			3								3		
BIEN	3300	Applied Statistics	4													
BIEN	3300	Data Science for Molecular Engineering	3													
LANG	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 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			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	Macroeconomic Theory I	3													
FINA	2303	Financial Management	3					3						3		
ISOM	2010	Introduction to Information Systems	3	-	-	-	-	-	-	-	-	-	-	0	Substituted by COMP 1021/1022P/2011/2012H	
ISOM	2020	Coding for Business	1	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students if they have taken and passed COMP1021 or COMP 1029P	
ISOM	2500	Business Statistics	3	-	-	-	-	-	-	-	-	-	-	0	Substituted by LIFS 3150/MATH 2411/BIEN 3300	
ISOM	2600	Introduction to Business Analytics	1	-	-	-	-	-	-	-	-	-	-	0	Substituted by BIEN 3310/3320	
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	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students	
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	1013	Calculus IB	3													
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
Required credits for School Requirements			43-44											31		
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	Students in the Consulting Option must take MGMT 3120	
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								4			4	Students in the Consulting Option must take MGMT 3140	
MGMT	3140	Judgement and Decision Making in Organizations	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	
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	
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 - C12	U CORE - Others	30					3	6	6			9	6	30	
CORE	C1 & C2	U CORE - English Language	6	3	3									6		
Sub-total for University CORE			36											36		
Term load (excl. free credits)																
				16	15	18	18	19	19	19	18	15	16			
173##																
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):																