

<< 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	Subtotal									
Course Offering Dept (course code prefix)	Course Code	Course Title / Courses List	Credits																			
<b>BEng in Bioengineering</b>																						
<b>Major Requirements</b>																						
<b>Engineering Fundamental Courses</b>																						
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	1		3									3	This course will also be used to substitute ISOM 2010							
COMP	2011	Python Programming Bridging Course	1																			
COMP	2011	Programming with C++	4																			
ENGG	1010	Academic Orientation	0	0	0									0								
CHEM	1010	Note: CHEM1010 OR CHEM 1020	3																			
CHEM	1020	General Chemistry IA	3	3										3								
CHEM	1020	General Chemistry IB	3																			
CHEM	1050	Laboratory for General Chemistry I	1	1										1								
LANG	2030	Technical Communication I	3											3								
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																			
MATH	1020	Calculus II	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																			
PHYS	1312	General Physics I with Calculus	3	3										3								
PHYS	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								
<b>Required credits for Engineering Fundamental Courses</b>			23-29											22								
<b>Major Required Courses and Electives</b>																						
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	2610	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	3240	Transport Phenomena in Biological Systems	3									3		3								
BIEN	3320	Data Science for Biology and Medicine	3				3							3								
BIEN	3410	Introduction to Bioinstrumentation and Biomaging	3										3	3								
BIEN	3910	Bioengineering Laboratory	4											4								
BIEN	4920	Note: BIEN 4920 OR BIEN 4930 OR BIEN 4940	6																			
BIEN	4930	Bioengineering Capstone Design	6									3	3	6								
BIEN	4940	Bioengineering Thesis Research	6																			
BIEN	4940	Bioengineering Industrial Project	6																			
BIEN	4990	Academic and Professional Development II	1									1		1								
CENG	2210	Chemical and Biological Engineering Thermodynamics	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	3-4																			
MATH	2411	Biostatistics	3			3								3								
MATH	2411	Applied Statistics	4																			
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							
<b>Required credits for Major Required Courses and Electives</b>			60-61											60								
<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	Macroeconomic Theory I	3																			
FINA	2303	Financial Management	3				3							3								
ISOM	2010	Introduction to Information Systems	3																			
ISOM	2020	Coding for Business	1											0	Substituted by COMP 1021/1022P/COMP2011							
ISOM	2500	Business Statistics	3											0	Substituted by COMP 1021/1022P/1029P/2011							
ISOM	2600	Introduction to Business Analytics	1											0	Substituted by LIFS 3150/MATH 2411							
ISOM	2700	Operations Management	3											0	Substituted by BIEN3320							
ISOM	2700	Operations Management	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	Substituted by ENGG 1010							
LABU	2040	Business Case Analyses	3							3				3								
LABU	2060	Effective Communication in Business	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	4																			
MATH	1013	Calculus IA	3																			
MATH	1020	Calculus IB	3																			
MATH	1020	Accelerated Calculus	4																			
MATH	1023	Honors Calculus I	3																			
<b>Required credits for School Requirements</b>			43-44											34								
<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																			
MGMT	3120	Human Resources Management	4											4	Students in the Consulting Option must take MGMT 3120							
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																			
MGMT	3140	Judgement and Decision Making in Organizations	4											4	Students in the Consulting Option must take MGMT 3140							
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																			
MGMT	4220	Corporate Strategy	3											3	Students in the Consulting Option must take MGMT 4210							
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											9	Students in the Consulting Option must take MGMT 4210 Students in the CSR Option must take MGMT 4210 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								
<b>Additional Requirements</b>																						
<b>Requirements for Dual Degree Program</b>																						
<b>Required Courses</b>																						
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0								
TEMG	3950	Case-based Problem Solving	3		3									3								
<b>Required credits for Additional Requirements</b>			3											3								
<b>University CORE</b>																						
CORE	C3 - C12	U CORE - Others	30	3			3	9	3			9		3	30							
CORE	C1 & C2	U CORE - English Language	6	3	3									6								
<b>Sub-total for University CORE</b>			36											36								
													Term load (excl. free credits)									
													19	18	18	18	18	19	19	18	16	12
													175##									
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Notes:

- ( ) 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.