

<< Declaration of major

School:		School of Engineering and School of Business Management			Student's Pathway										Remarks	
Program:		Dual Degree Program (BEng in Bioengineering and BBA in General Business 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													
<b>BEng in Bioengineering</b>																
<b>Major Requirements</b>																
<b>Engineering Fundamental Courses</b>																
COMP	1021	Note: [COMP 1021] OR [(COMP 1022P OR COMP 1022Q OR COMP 2011) AND COMP1029P] Introduction to Computer Science	3-5													
COMP	1022P	Introduction to Computing with Java	3													
COMP	1022Q	Introduction to Computing with Excel VBA	3		3											3
COMP	1029P	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 General Chemistry IA	3													3
CHEM	1020	General Chemistry IB	3													3
CHEM	1050	Laboratory for General Chemistry I	1		1											1
LANG	2030	Technical Communication I	3				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) Calculus IA	4-7													
MATH	1013	Calculus IB	3													
MATH	1014	Calculus II	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 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 Introduction to Biomedical Engineering	3		3											3
CENG	1000	Introduction to Chemical and Biological Engineering	3													
BIEN	2310	Modeling for Chemical and Biological Engineering	3			3										3
BIEN	2410	Cellular and Systems Physiology for Engineers	3					3								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 Bioimaging	3							3						3
BIEN	3910	Bioengineering Laboratory	4							4						4
BIEN	4920	Note: BIEN 4920 OR BIEN 4930 OR BIEN 4940 Bioengineering Capstone Design	6										3	3		6
BIEN	4930	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 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 General Business 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 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													0
ISOM	2600	Introduction to Business Analytics	1													0
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													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 Calculus and Linear Algebra	3-4													
MATH	1012	Calculus IA	3													
MATH	1013	Calculus IB	3		(3)											0
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>																
SB&M		SB&M Electives (Any 9 courses offered by the departments under SB&M, of which at least 4 courses are of 3000-level or above.)	29							6	3	9	4	7		29
<b>Required credits for Major Required Courses and Electives</b>			29													29
<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	0	0
TEMG	3950	Case-based Problem Solving	2		2											2
<b>Required credits for Additional Requirements</b>			0													2
<b>University CORE</b>																
CORE	C3 - C12	U CORE - Others	30	3	3	3	3	3	6	3	3			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	17	18	20	18	18	19	18	17	19		
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<b>&lt;&lt; Declaration of major</b>																

Note:

( ) 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.