

<< 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 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													
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											
COMP	2011	Python Programming Bridging Course	1													
COMP	2012H	Programming with C++	4													
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5													
CHEM	1020	General Chemistry I	3	3												
CHEM	1050	Laboratory for General Chemistry I	1	1												
LANG	2030	Technical Communication I	3	-	-	-	-	-	-	-	-	-	-	-	0	Waived for DDP students
LIFS	1901	General Biology I	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											
MATH	1020	Calculus II	3													
MATH	1023	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									
PHYS	1312	Honors General Physics	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)											
Required credits for Engineering Fundamental Courses			23-29												19	
Major Required Courses and Electives																
BIEN	1010	Note: BIEN 1010 OR CENG 1000	3		3											
CENG	1000	Introduction to Biomedical Engineering	3													
BIEN	2310	Introduction to Chemical and Biological Engineering	3				3									
BIEN	2410	Modeling for Chemical and Biological Engineering	3							3						
BIEN	2410	Cellular and Systems Physiology for Engineers	3													
BIEN	2610	Chemical Biology for Engineers	3				3									
BIEN	2990	Academic and Professional Development I	1				1									
BIEN	3310	Note: BIEN 3310 OR BIEN 3320	3													
BIEN	3320	Data Science for Neural Engineering	3				3									
BIEN	3320	Data Science for Biology and Medicine	3													
BIEN	3410	Introduction to Bioinstrumentation and Bioimaging	3							3						
BIEN	3910	Bioengineering Laboratory	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	6													
BIEN	4990	Academic and Professional Development II	1											1	1	
CENG	2210	Chemical and Biological Engineering Thermodynamics	3				3									
CENG	2220	Transport Phenomena I	3										3		3	
CENG	3230	Chemical and Biological Reaction Engineering	3							3						
ENGG	2010	Engineering Seminar Series	0			0	0	0	0							
BIEN	3300	Data Science for Molecular Engineering	3						3							
LANG	4035	Technical Communication II for Chemical and Biological Engineering	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							3		6		6	15	
Required credits for Major Required Courses and Electives			60-61												60	
BBA in General Business 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													3
ECON	2123	Note: ECON 2123 OR ECON 3123	3									3				3
ECON	3123	Macroeconomics	3													3
FINA	2303	Macroeconomic Theory I	3													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		3											3
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	2130	Business Ethics and Social Responsibility	2											2		2
LANG	2061	Note: LANG 2061 OR 2062 OR 3060	3										3			3
LANG	2062	Professional Writing for the Workplace	3													3
LANG	3060	Professional Speaking for the Workplace	3													3
LANG	3060	Advanced Academic Writing	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													
MATH	1013	Calculus IB	3													
MATH	1020	Accelerated Calculus	4													
MATH	1023	Honors Calculus I	3													
Required credits for School Requirements			43-44													34
Major Requirements																
Major Required Courses and Electives																
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							3	3	4	6	7	6	29
Required credits for Major Required Courses and Electives			29													29
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	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 - C9	U CORE - Others	21			3	3	6	6		3					21
CORE	C1 & C2	U CORE - English Language	6		3											6
HMAW	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2											3
Sub-total for University CORE			36													30
Term load (excl. free credits)																
					17	20	16	18	19	18	17	17	19	18		
179##																

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.