

<< 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 Economics)			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	2011	Programming with C++	4													
ENGG	1010	Academic Orientation	0	0												
CHEM	1010	Note: CHEM1010 OR CHEM 1020	3													
CHEM	1020	General Chemistry IA	3		3											
CHEM	1020	General Chemistry IB	3													
CHEM	1050	Laboratory for General Chemistry I	1		1											
LANG	2030	Technical Communication I	3				3									
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	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 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)											
Required credits for Engineering Fundamental Courses			23-29													22
Major Required Courses and Electives																
BIEN	1010	Note: BIEN 1010 OR CENG 1000	3													
CENG	1000	Introduction to Biomedical Engineering	3		3											
BIEN	2310	Introduction to Chemical and Biological Engineering	3													
BIEN	2410	Modeling for Chemical and Biological Engineering	3			3										
BIEN	2610	Cellular and Systems Physiology for Engineers	3						3							
BIEN	2610	Chemical Biology for Engineers	3			3										
BIEN	2990	Academic and Professional Development I	1					1								
BIEN	3240	Transport Phenomena in Biological Systems	3									3				
BIEN	3320	Data Science for Biology and Medicine	3				3									
BIEN	3410	Introduction to Bioinstrumentation and Biomedicine	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									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
Required credits for Major Required Courses and Electives			60-61													60
BBA in Economics																
School Requirements																
ACCT	2010	Principles of Accounting I	3					3								
ACCT	2200	Principles of Accounting II	3							3						
ECON	2103	Note: ECON 2103 OR ECON 2113	3													
ECON	2113	Principles of Microeconomics	3		3											
ECON	2123	Note: ECON 2123 OR ECON 3123	3													
ECON	3123	Macroeconomics	3				3									
ECON	3123	Macroeconomic Theory I	3													
FINA	2303	Financial Management	3													
ISOM	2010	Introduction to Information Systems	3													
ISOM	2020	Coding for Business	1													
ISOM	2500	Business Statistics	3													
ISOM	2600	Introduction to Business Analytics	1													
ISOM	2700	Operations Management	3													
MARK	2120	Marketing Management	3							3						
MGMT	2010	Business Ethics and the Individual	2													
MGMT	2110	Organizational Behavior	3													
MGMT	2130	Business Ethics and Social Responsibility	2													
SBMT	1111	Business Student Induction	0													
LABU	2040	Business Case Analyses	3													
LABU	2060	Effective Communication in Business	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																
ECON	3014	Managerial Microeconomics	4							4						
ECON	3024	Managerial Macroeconomics	4								4					
ECON	3334	Introduction to Econometrics	4									4				
ECON	4670	Economics Research and Communication	0										0			
ECON		ECON 4000-level Electives (Any 3 courses of the subject and level as specified)	11										4	4	3	11
Required credits for Major Required Courses and Electives			23													23
Additional Requirements																
Requirements for Dual Degree Program																
Required Courses																
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	3													
Required credits for Additional Requirements			3													3
University CORE																
CORE	C3 - C12	U CORE - Others	30	3						6	6	3	6		3	30
CORE	C1 & C2	U CORE - English Language	6	3	3											6
Sub-total for University CORE			36													36
Term load (excl. free credits)																
19 18 19 20 18 19 17 16 17 15																
178##																
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Notes:
() indicates the reuse of the same course to fulfill more than one requirement.
[] denotes the course is also offered in other terms as indicated and students may take the course in one of these subject to advice by the program office.
--- 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.