

<< 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 Finance)			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	
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 OR COMP 2012H) AND COMP1029P]	3-6												
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	1012	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories	3	3											
CHEM	1052	Laboratory for General Chemistry B	1	1											
LIFS	1901	General Biology I	3	3											
		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7												
MATH	1012	Calculus IA	4												
MATH	1013	Calculus IB	3		3										
MATH	1014	Calculus II	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			20-27												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	2610	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 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	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
BIEN	3300	Data Science for Molecular 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							3		6		6	15
Required credits for Major Required Courses and Electives			57												57
BBA in Finance															
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	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		3										3
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
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			39-40												31
Major Requirements															
Major Required Courses and Electives															
FINA	3001	Key Skills for Finance Professionals (A)	1						1						1
FINA	3103	Intermediate Investments	3						3						3
FINA	3203	Derivative Securities	3							3					3
FINA	3303	Intermediate Corporate Finance	3								3				3
FINA	3810	Bloomberg Market Concepts Certification	0						0						0
ACCT	3010	Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6												
ACCT	3020	Financial Accounting I	3								3				3
ACCT	3030	Financial Accounting II	3												3
ACCT	3030	Intermediate Financial Accounting for Non-Accounting Majors	3												3
ISOM	3230	Note: ISOM 3230 OR ISOM 3400	3												
ISOM	3400	Business Programming in VBA	3												
ISOM	3400	Business Applications Development in Python	3												
FINA		FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9								3	3	3		9
Required credits for Major Required Courses and Electives			23-28												25
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
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	3	3		6	3			21
CORE	C1 & C2	U CORE - English Language	6	3	3										6
HMAW	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2										3
Sub-total for University CORE			30												30
Term load (excl. free credits)															
17 20 16 18 17 18 19 17 12 15															
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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):															