

<< 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 Chemical Engineering 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 Chemical Engineering																					
Major Requirements																					
Engineering Fundamental Courses																					
COMP	1021	Introduction to Computer Science		3-5																	
COMP	1022P	Introduction to Computing with Java		3	3																
COMP	2011	Programming with C++		4																	
COMP	2012H	Honors Object-Oriented Programming and Data Structures		5																	
CHEM	1020	General Chemistry I		3	3																
LANG	2030	Technical Communication I		3	-	-	-	-	-	-	-	-	-	-	-	0					
MATH	1012	Calculus IA		4																	
MATH	1013	Calculus IB		3	3	3															
MATH	1014	Calculus II		3																	
MATH	1020	Accelerated Calculus		4																	
MATH	1023	Honors Calculus I		3																	
MATH	1024	Honors Calculus II		3																	
MATH	2011	Introduction to Multivariable Calculus		3					3												
PHYS	1112	General Physics I with Calculus		3		3															
PHYS	1312	Honors General Physics I		3																	
Required credits for Engineering Fundamental Courses				19-24												18					
Major Required Courses and Electives																					
CENG	1000	Introduction to Chemical and Biological Engineering		3	3																
CENG	1500	A First Course on Materials Science and Applications		3																	
CENG	1600	Biotechnology and Its Business Opportunities		3		3															
CENG	1700	Introduction to Environmental Engineering		3																	
BIEN	1010	Introduction to Biomedical Engineering		3																	
CENG	1010	Academic and Professional Development I		0												0					
CENG	1980	Industrial Training		0												0					
CENG	2110	Process and Product Design Principles		3												3					
CENG	2210	Chemical and Biological Engineering Thermodynamics		3												3					
CENG	2220	Transport Phenomena I		3												3					
CENG	2310	Modeling for Chemical and Biological Engineering		3												3					
CENG	3110	Process Dynamics and Control		3												3					
CENG	3150	Integrated Chemical Process & Product Design		5												5					
CENG	3210	Separation Processes		3												3					
CENG	3220	Heat and Mass Transfer		3												3					
CENG	3230	Chemical and Biological Reaction Engineering		3												3					
CENG	3950	Chemical and Environment Engineering Laboratory		4												4					
CENG	4020	Academic and Professional Development II		0												0					
CENG	4920	Chemical Engineering Capstone Design		6												6					
CENG	4930	Chemical Engineering Thesis Research		6												6					
CENG	4940	Chemical Engineering Industrial Project		6												6					
ENGG	2010	Engineering Seminar Series		0												0					
CHEM	1050	Laboratory for General Chemistry I		1												1					
CHEM	2111	Fundamentals of Organic Chemistry		3												3					
CHEM	2155	Fundamental Organic Chemistry Laboratory		1												1					
LANG	4035	Technical Communication II for Chemical and Biological Engineering		3												3					
BIEN	2410	Cellular and Systems Physiology for Engineers		3												3					
BIEN	2610	Chemical Biology for Engineers		3												3					
LIFS	1901	General Biology I		3												3					
SENG/SSCI/ENVR		CENG Elective (12 credits from specified elective list)		12												12					
Required credits for Major Requirements Courses and Electives				68												68					
BBA in General Business Management																					
School Requirements																					
ACCT	2010	Principles of Accounting I		3													3				
ACCT	2200	Principles of Accounting II		3													3				
ECON	2103	Principles of Microeconomics		3													3				
ECON	2113	Microeconomics		3													3				
ECON	2123	Macroeconomics		3													3				
ECON	3123	Macroeconomic Theory I		3													3				
FINA	2303	Financial Management		3													3				
ISOM	2010	Introduction to Information Systems		3													0				
ISOM	2020	Coding for Business		1													0				
ISOM	2500	Business Statistics		3													3				
ISOM	2600	Introduction to Business Analytics		1													1				
ISOM	2700	Operations Management		3													3				
MARK	2120	Marketing Management		3													3				
MGMT	2010	Business Ethics and the Individual		2													2				
MGMT	2110	Organizational Behavior		3													3				
MGMT	2130	Business Ethics and Social Responsibility		2													2				
LABU	2040	Business Case Analyses		3													0				
LABU	2060	Effective Communication in Business		3													3				
MATH	1003	Calculus and Linear Algebra		3-4													0				
MATH	1012	Calculus IA		3	(3)																
MATH	1013	Calculus IB		4																	
MATH	1020	Accelerated Calculus		3																	
MATH	1023	Honors Calculus I		3																	
Required credits for School Requirements				45-46													35				
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													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				
TEMG	4950	T&M Corporate Consulting Project		3-5													4				
Required credits for Additional Requirements				7													7				
University CORE																					
CORE	C3 - C9	U CORE - Others		21													21				
CORE	C1 & C2	U CORE - English Language		6	3	3											6				
CORE	1905	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness		3	0	3											3				
Sub-total for University CORE				30													30				
Term load (excl. free credits)																					
15					19					18					18		20				
187##																					

Notes:

- () indicates the reuse of the same course to fulfill more than one requirement.
- * Courses offered in winter term
- ^ Courses offered in summer term
- denotes the course/requirement is either waived or substituted
- ## To graduate, students should complete all requirements as 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.