

<< Declaration of major

School:		School of Engineering and School of Business Management				Student's Pathway									
Program:		Dual Degree Program (BEng in Chemical Engineering and BBA in General Business Management)													
Course Offering Dept. (course code prefix)	Course Code	Course Title / Courses List	Credits	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	

BEng in Chemical Engineering

Major Requirements

Engineering Fundamental Courses														
COMP	1021	Introduction to Computer Science	3											
COMP	1022P	Introduction to Computing with Java	3	3										
COMP	1022Q	Introduction to Computing with Excel/VBA	3											
COMP	2011	Programming with C++	4											
ENGG	1010	Academic Orientation	0	0	0									
CHEM	1010	General Chemistry IA	3	3										
CHEM	1020	General Chemistry IB	3											
LANG	2030	Technical Communication I	3			3								
MATH	1012	Calculus IA	4											
MATH	1013	Calculus IB	3											
MATH	1014	Calculus II	3	3	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			19-23											21

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	0	0	0	0				
CENG	2110	Process and Product Design Principles	3		3									
CENG	2210	Chemical and Biological Engineering Thermodynamics	3			3								
CENG	2220	Process Fluid Mechanics	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								3	3		6
CENG	4930	Chemical Engineering Thesis Research	6											
CENG	4940	Chemical Engineering Industrial Project	6											
ENGG	2010	Engineering Seminar Series	0			0	0	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											
LIFS	1901	General Biology I	3											
SENG/SCI/ENVR		CENG Elective (12 credits from specified elective list)	12					3	3	3	3			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											
ECON	2123	Macroeconomics	3				3							
ECON	3123	Macroeconomic Theory I	3											
FINA	2303	Financial Management	3					3						
ISOM	2010	Introduction to Information Systems	3											
ISOM	2020	Coding for Business	1					1						
ISOM	2500	Business Statistics	3					3						
ISOM	2800	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					
SBMT	1111	Business Student Induction	0											
LABU	2040	Business Case Analyses	3						3					
LABU	2060	Effective Communication in Business	3						3					
MATH	1003	Calculus and Linear Algebra	3-4											
MATH	1012	Calculus IA	3											
MATH	1013	Calculus IB	4											
MATH	1020	Accelerated Calculus	4											
MATH	1023	Honors Calculus I	3											
Required credits for School Requirements			45-46											39

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							9		10	10	29
Required credits for Major Required Courses and Electives			29											29

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
TEMG	9950	Case-based Problem Solving	2		2									2
Required credits for Additional Requirements			2											2

University CORE

CORE	C3 - C12	U CORE - Others	30		6		3			12		3		6
CORE	C1 & C2	U CORE - English Language	6	3	3									6
Sub-total for University CORE			36											36

Term load (excl. free credits)									
18	18	20	19	21	22	20	19	19	19
195#									

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- 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):