

<< 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 Marketing)			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 Chemical Engineering															
Major Requirements															
Engineering Fundamental Courses															
COMP	1021	Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H	3-5												
COMP	1022P	Introduction to Computer Science	3												
COMP	2011	Introduction to Computing with Java	3	3											
COMP	2012H	Programming with C++	4												
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5												
ENGG	1010	Academic Orientation	0	0	0										
CHEM	1010	Note: CHEM1010 OR CHEM1020	3	3											
CHEM	1020	General Chemistry IA	3												
CHEM	1020	General Chemistry IB	3												
LANG	2030	Technical Communication I	3	-	-	-	-	-	-	-	-	-	-	-	0
		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												
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	Note: PHYS 1112 OR PHYS 1312	3												
PHYS	1312	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	Note: CENG1000 OR CENG1500	3	3											
CENG	1500	Introduction to Chemical and Biological Engineering	3												
CENG	1500	A First Course on Materials Science and Applications	3												
CENG	1600	Note: CENG1600 OR CENG1700 OR BIEN1010	3												
CENG	1700	Biotechnology and Its Business Opportunities	3		3										
BIEN	1010	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	Note: CENG 4920 OR CENG 4930 OR CENG 4940 (Students 6 taking the Research Option must take CENG 4930)	6									3	3		
CENG	4930	Chemical Engineering Capstone Design	6												
CENG	4940	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	Note: BIEN2410 OR BIEN2610 OR LIFS1901	3												
BIEN	2610	Cellular and Systems Physiology for Engineers	3				3								
LIFS	1901	Chemical Biology for Engineers	3												
LIFS	1901	General Biology I	3												
SENG/SCIE/ENVR		CENG Elective (12 credits from specified elective list)	12					3	3	3	3				
Required credits for Major Requirements Courses and Electives			68												68
BBA in Marketing															
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				3								
ECON	2113	Principles of Microeconomics	3												
ECON	2113	Microeconomics	3												
ECON	2123	Note: ECON 2123 OR ECON 3123	3								3				
ECON	3123	Macroeconomics	3												
ECON	3123	Macroeconomic Theory I	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		
SBMT	1111	Business Student Induction	0	-	-	-	-	-	-	-	-	-	-	-	0
LABU	2040	Business Case Analyses	3	-	-	-	-	-	-	-	-	-	-	-	0
LABU	2060	Effective Communication in Business	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	(3)											
MATH	1020	Accelerated Calculus	4												
MATH	1023	Honors Calculus I	3												
Required credits for School Requirements			45-46												35
Major Requirements															
Major Required Courses and Electives															
MARK	3220	Marketing Research	4					4							
MARK	3420	Consumer Behavior	4						4						
MARK	4210	Strategic Marketing	4										4		
MARK		MARK 3000-level or above Electives (Any 3 courses of the subject and level as specified)	12							4	4	4			
Required credits for Major Required Courses and Electives			24												24
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									
TEMG	4950	T&M Corporate Consulting Project	3-5							4					
Required credits for Additional Requirements			7												7
University CORE															
CORE	C3 - C12	U CORE - Others	30	3	3					6	9	3	6		30
CORE	C1 & C2	U CORE - English Language	6	3	3										6
Sub-total for University CORE			36												36
Term load (excl. free credits)															
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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):

>> 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.