

<< 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 Global Business)																
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				
<b>BEng in Chemical Engineering</b>																		
<b>Major Requirements</b>																		
Engineering Fundamental Courses																		
COMP	1021	Introduction to Computer Science	3												3			
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															
ENGG	1010	Academic Orientation	0	0	0										0			
CHEM	1010	General Chemistry IA	3	3											3			
CHEM	1020	General Chemistry IB	3															
LANG	2030	Technical Communication I	3	-	-	-	-	-	-	-	-	-	-	-	0			
Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H																		
Note: CHEM1010 OR CHEM1020																		
Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]																		
MATH	1012	Calculus IA	4															
MATH	1013	Calculus IB	3	3	3										6			
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							3			
PHYS	1112	General Physics I with Calculus	3		3										3			
PHYS	1312	Honors General Physics I	3															
Note: PHYS 1112 OR PHYS 1312																		
Note: PHYS 1112 OR PHYS 1312																		
Required credits for Engineering Fundamental Courses																		
19-24																		
Major Required Courses and Electives																		
CENG	1000	Introduction to Chemical and Biological Engineering	3	3											3			
CENG	1500	A First Course on Materials Science and Applications	3															
Note: CENG1000 OR CENG1500																		
CENG	1600	Biotechnology and Its Business Opportunities	3		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									0			
CENG	1980	Industrial Training	0										0		0			
CENG	2110	Process and Product Design Principles	3			3									3			
CENG	2210	Chemical and Biological Engineering Thermodynamics	3				3								3			
CENG	2220	Transport Phenomena I	3				3								3			
CENG	2310	Modeling for Chemical and Biological Engineering	3			3									3			
CENG	3110	Process Dynamics and Control	3							3					3			
CENG	3150	Integrated Chemical Process & Product Design	5							5					5			
CENG	3210	Separation Processes	3					3							3			
CENG	3220	Heat and Mass Transfer	3					3							3			
CENG	3230	Chemical and Biological Reaction Engineering	3					3							3			
CENG	3950	Chemical and Environment Engineering Laboratory	4								4				4			
CENG	4020	Academic and Professional Development II	0									0			0			
Note: CENG 4920 OR CENG 4930 OR CENG 4940 (Students taking the Research Option must take CENG 4930)																		
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						0			
CHEM	1050	Laboratory for General Chemistry I	1		1										1			
CHEM	2111	Fundamentals of Organic Chemistry	3				3								3			
CHEM	2155	Fundamental Organic Chemistry Laboratory	1				1								1			
LANG	4035	Technical Communication II for Chemical and Biological Engineering	3									3			3			
Note: BIEN2410 OR BIEN2610 OR LIFS1901																		
BIEN	2410	Cellular and Systems Physiology for Engineers	3				3								3			
BIEN	2610	Chemical Biology for Engineers	3															
LIFS	1901	General Biology I	3															
SENG/SSCI/ENVR		CENG Elective (12 credits from specified elective list)	12					3	3	3	3				12			
Required credits for Major Requirements Courses and Electives																		
68																		
<b>BBA in Global Business</b>																		
<b>School Requirements</b>																		
ACCT	2010	Principles of Accounting I	3												3			
ACCT	2200	Principles of Accounting II	3						3						3			
ECON	2103	Principles of Microeconomics	3		3										3			
ECON	2113	Microeconomics	3															
Note: ECON 2103 OR ECON 2113																		
ECON	2123	Macroeconomics	3							3					3			
ECON	3123	Macroeconomic Theory I	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			1									1			
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			
SBMT	1111	Business Student Induction	0	-	-	-	-	-	-	-	-	-	-	-	0			
LABU	2040	Business Case Analyses	3	-	-	-	-	-	-	-	-	-	-	-	0			
LABU	2060	Effective Communication in Business	3											3	3			
Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023																		
MATH	1003	Calculus and Linear Algebra	3															
MATH	1012	Calculus IA	4	(3)														
MATH	1013	Calculus IB	3															
MATH	1020	Accelerated Calculus	4															
MATH	1023	Honors Calculus I	3															
Required credits for School Requirements																		
45-46																		
<b>Major Requirements</b>																		
Major Required Courses and Electives																		
GBUS	1000	Global Leadership Development	0					0	0	0	0	0	0	0	0			
GBUS	2010	Global Business Analysis	3						3						3			
GBUS	2020	Public Service Project	1						1	[1]					1			
Note: GBUS 3030 OR ISOM2040																		
GBUS/ISOM	3030	Global Business Case Studies	3-4							4	[3]				4			
ISOM	2040	Business Simulation and Strategic Decisions	3															
GBUS	4910	Capstone Project	4									4	[4]		4			
GBUS		Global Business Electives (Courses from the specified elective list, of which at least 6 credits from each area and at least 2 courses must be offered by GBUS. Courses taken to fulfill requirements of an additional major in SBM may not be counted towards this elective requirement.)	15									6	3	6	15			
Required credits for Major Required Courses and Electives																		
26-27																		
<b>Additional Requirements</b>																		
<b>Requirements for Dual Degree Program</b>																		
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																		
<b>University CORE</b>																		
CORE	C3 - C12	U CORE - Others	30	3	3			3	3	6	6			6	30			
CORE	C1 & C2	U CORE - English Language	6	3	3										6			
Sub-total for University CORE																		
36																		
Term load (excl. free credits)																		
18 19 19 19 18 21 20 19 18 20																		
191##																		

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):