

<< 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)			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	Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H	3-5													
COMP	1022P	Introduction to Computer Science	3	3											3	Students should take COMP1021 which will also be used to substitute ISOM 2010 and to waive ISOM 2020
COMP	2011	Introduction to Computing with Java	3													
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											3	
MATH	1012	Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7													6
MATH	1013	Calculus IA	4													
MATH	1014	Calculus IB	3	3	3											
MATH	1020	Calculus II	3													
MATH	1023	Accelerated Calculus	4													
MATH	1024	Honors Calculus I	3													
MATH	2011	Honors Calculus II	3													
MATH	2011	Introduction to Multivariable Calculus	3					3							3	
PHYS	1112	Note: PHYS 1112 OR PHYS 1312	3													3
PHYS	1312	General Physics I with Calculus	3		3											
Required credits for Engineering Fundamental Courses			16-21												18	
Major Required Courses and Electives																
CENG	1000	Note: CENG1000 OR CENG1500	3	3												3
CENG	1500	Introduction to Chemical and Biological Engineering A First Course on Materials Science and Applications	3													
CENG	1600	Note: CENG1600 OR CENG1700 OR BIEN1010	3													3
CENG	1700	Biotechnology and Its Business Opportunities	3		3											
BIEN	1010	Introduction to Environmental Engineering	3													
CENG	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	3330	Data Science for Molecular Engineering	3			3									3	
CENG	3950	Chemical and Environment Engineering Laboratory	4							4					4	
CENG	4020	Academic and Professional Development II	0									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		6	
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	0					0	
CHEM	1052	Laboratory for General Chemistry B	1		1										1	
CHEM	2111	Fundamentals of Organic Chemistry	3				3								3	
CHEM	2155	Fundamental Organic Chemistry Laboratory	1				1								1	
BIEN	2410	Note: BIEN2410 OR BIEN2610 OR LIFS1901	3				3								3	
BIEN	2610	Cellular and Systems Physiology for Engineers	3				3								3	
LIFS	1901	Chemical Biology for Engineers	3				3								3	
CENG/CHEM		General Biology I	3				3								3	
CENG/CHEM		CENG Elective (9 credits from specified elective list)	9			3		3	3						9	
Required credits for Major Requirements Courses and Electives			65												65	
BBA in Global Business																
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	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
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4													0
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												32	
Major Requirements																
Major Required Courses and Electives																
GBUS	1000	Global Leadership Development	0					0	0	0	0	0	0	0	0	0
GBUS	2010	Global Business Analysis	3						3							3
GBUS/SBMT	2020	Note: GBUS 2020 OR GBUS 2040 OR SBMT 2100-2110	1-4													1
GBUS	2040	Public Service Project	1						1		[1]					
SBMT	2100-2110	Environmental, Social, and Governance (ESG) Corporate Project Community Services Project	4													
GBUS/ISOM	3030	Note: GBUS 3030 OR ISOM 4780	3-4									3		[3]		3
GBUS	4780	Global Business Case Studies	4													
ISOM	4780	Integrated Planning and Execution	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			26-30												26	
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											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		6	3		6			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)																
19 21 18 19 19 18 16 16 15 17																
178##																
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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.