

<< 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	
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										3
COMP	2011	Programming with C++		4											
COMP	2012H	Honors Object-Oriented Programming and Data Structures		5											
CHEM	1020	General Chemistry I		3	3										3
LANG	2030	Technical Communication I		3											0
Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H															
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											
MATH	1014	Calculus II		3	3	3									6
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															
Required credits for Engineering Fundamental Courses				19-24											18
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
BIEN	2610	General Biology for Engineers		3				3							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											68
BBA in Global Business															
School Requirements															
ACCT	2010	Principles of Accounting I		3				3							3
ACCT	2200	Principles of Accounting II		3						3					3
Note: ECON 2103 OR ECON 2113															
ECON	2103	Principles of Microeconomics		3			3								3
ECON	2113	Microeconomics		3											
Note: ECON 2123 OR ECON 3123															
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
Substituted by COMP 1021/1022P/2011/2012H															
ISOM	2020	Coding for Business		1											0
Waived for DDP students if they have taken and passed COMP1021 or COMP 1029P															
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
LABU	2040	Business Case Analyses		3											0
Waived for DDP students															
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		3-4											
MATH	1012	Calculus IA		3											
MATH	1013	Calculus IB		3	(3)										0
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															
GBUS	1000	Global Leadership Development		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											27
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
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					6	6	6			3	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 19 19 18 18 20 19 21 17															
185##															
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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.