

No Declaration of
BEng major

School:			School of Engineering and School of Business Management										Student's Pathway									
Program:			Dual Degree Program (BEng in Chemical Engineering and BBA in Finance)																			
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	Remarks								
BEng in Chemical Engineering																						
Engineering Fundamental Courses																						
COMP	102P	New: COMP 102P OR COMP 102S OR COMP 2011 OR COMP 2012H	3-5											Students should take COMP 102P, COMP 102S, COMP 2011 or COMP 2012H which will also be used to substitute ISOM 2010 and to waive ISOM 2020								
COMP	102S	Introduction to Computing with Java	3		3																	
COMP	2011	Introduction to Python Programming	3																			
COMP	2012H	Programming with C++	4																			
CHEM	1012	General Chemistry B: Atomic Structure, Molecules, and Bonding Theories	3	3										3								
MATH	1013	New: MATH 1013 OR MATH 1020 OR MATH 1023	3-4											DOP students should take MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees								
MATH	1020	Calculus I	4	3																		
MATH	1023	Accelerated Calculus	3																			
MATH	1023	Honors Calculus I	4																			
PHYS	1112	New: PHYS 1112 OR PHYS 1312	3		3									3								
PHYS	1312	General Physics I with Calculus	3																			
Required Credits for Engineering Fundamental Courses				13-19	6	6	0	0	0	0	0	0	0	12								
Major Required Courses and Electives																						
CENG	1000	Foundations of Chemical and Biological Engineering	3	3										NOTE: Those entering the department in Year 2 will take this course in Year 2 Fall.								
CENG	1010	Academic and Professional Development I	0	0																		
CENG	1110	Introduction to Chemical Engineering	3		3										NOTE: Those entering the department in Year 2 will take this course in Year 2 Fall.							
CENG	1000	A First Course on Materials Science and Applications	3			3																
CENG	2210	Chemical and Biological Engineering Thermodynamics	3			3																
CENG	2220	Transport Phenomena I	3				3															
CENG	2210	Modeling for Chemical and Biological Engineering	3			3																
CENG	2220	Modeling for Chemical and Biological Engineering II	3			3																
CENG	3110	Process Dynamics and Control	3				3															
CENG	3150	Integrated Chemical Process & Product Design	5					3														
CENG	3210	Separation Processes	3				3															
CENG	3220	Transport Phenomena II	3				3															
CENG	3230	Chemical and Biological Reaction Engineering	3				3															
CENG	3300	Data Science for Molecular Engineering	3				3															
CENG	3600	Chemical and Environmental Engineering Laboratory	4				4															
CENG	4020	Academic and Professional Development II	0	0																		
CENG	4020	New: CENG 4020 OR CENG 4030 OR CENG 4040 (Students taking the Research Option must take CENG 4030)	6																			
CENG	4030	Chemical Engineering Capstone Design	6								3	3										
CENG	4030	Chemical Engineering Thesis Research	6																			
CENG	4040	Chemical Engineering Industrial Project	6																			
CENG	4040	New: BEND410 OR BEND410 OR LFST501	3																			
BIEN	2410	Cellular and Systems Physiology for Engineers	3		3									3								
BIEN	2610	Chemical Biology for Engineers	3																			
LFST	1001	General Biology I	3																			
CHEM	1002	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								
CHEM/BEN/COMP/ENG/CHEM		CENG Elective (Courses from the specified list)	12							3	3	3	3	12								
BEng in Chemical Engineering Major Requirements				71	3	4	10	6	12	10	5	3	6	6								
BBA in Finance																						
School Requirements																						
ACCT	2010	Principles of Accounting I	3		3									3								
ACCT	2090	Principles of Accounting II	3											3								
ECON	2103	New: ECON 2103 OR ECON 2113	3			3								3								
ECON	2113	Principles of Microeconomics	3																			
ECON	2113	Microeconomics	3																			
ECON	2123	New: ECON 2123 OR ECON 3123	3							3												
ECON	3123	Macroeconomics	3											3								
ECON	3123	Macroeconomics: Theory I	3																			
FINA	2303	Financial Management	3			3																
ISOM	2010	Introduction to Information Systems	3	-	-	-	-	-	-	-	-	-	-									
ISOM	2020	Coding for Business	1	-	-	-	-	-	-	-	-	-	-	0								
ISOM	2080	Business Statistics	3	3										3								
ISOM	2090	Introduction to Business Analytics	1	-	-	-	-	1	-	-	-	-	-	1								
ISOM	2700	Operations Management	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	New: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4											0								
MATH	1013	Calculus and Linear Algebra	3		3																	
MATH	1020	Calculus I	3																			
MATH	1023	Accelerated Calculus	4																			
Required Credits for School Requirements				38-40	3	3	3	6	1	0	3	6	5	2								
Major Required Courses and Electives																						
FINA	3001	Key Skills for Finance Professionals (A)	1					1						1								
FINA	3103	Intermediate Investments	3											3								
FINA	3003	Derivative Securities	3						3					3								
FINA	3003	Intermediate Corporate Finance	3							3				3								
FINA	3010	Bloomberg Market Concepts Certification	0					0						0								
FINA	3010	New: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-4											3								
ACCT	3010	Financial Accounting I	3							3												
ACCT	3020	Financial Accounting II	3																			
ACCT	3030	Intermediate Financial Accounting for Non-Accounting Majors	3																			
ISOM	3030	New: ISOM 3030 OR ISOM 3400	3											3								
ISOM	3400	Business Programming in BBA	3							3												
ISOM	3400	Business Applications Development in Python	3																			
FINA		FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9							3	3	3	3									
Required Credits for Major Required Courses and Electives				25-28	0	0	0	0	4	6	0	3	3	3								
Additional Requirement for Dual Degree																						
Requirements for Dual Degree Program																						
TEMG	1011	T&M Professional Activities I	0	0	0									0								
TEMG	1012	T&M Professional Activities II	0			0	0							0								
TEMG	1013	T&M Professional Activities III	0					0	0					0								
TEMG	1014	T&M Professional Activities IV	0							0	0			0								
TEMG	1015	T&M Professional Activities V	0									0	0	0								
TEMG	3050	T&M Case Analysis and Product Innovation	3		3									3								
TEMG	4000	T&M Corporate Consulting Project	3-6							4				4								
Required Credits for Additional Requirements				7	0	3	0	0	0	0	4	0	0	7								
University Common Core Requirements																						
CORE	C1 - C2	U CORE - Others	21			3	3					6	3	6								
CORE	C1 & C2	U CORE - English Language	6	3	3									6								
HAAR	1000	Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2									3								
Sub-total for University CORE				30	4	5	3	3	0	0	0	6	3	6								
Term load (excl. free credits)																						
177																						

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.