

School:			School of Engineering and School of Business Management										Student's Pathway		
Program:			Dual Degree Program (BEng in Chemical Engineering and BBA in Finance)										Remarks		
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
BEng in Chemical Engineering															
Engineering Fundamental Courses															
COMP	102P	New: COMP 102P OR COMP 102S OR COMP 2011 OR COMP 2012H	3-5												
COMP	102S	Introduction to Computing with Java	3		3								3	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	2011	Programming with C++	4												
COMP	2012H	Hours Object-Oriented Programming and Data Structures	5												
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												
MATH	1020	Calculus I	4	3									3	CCP students should take MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees	
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	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									0		
CENG	1110	Introduction to Chemical Engineering	3		3								3	NOTE: Those entering the department in Year 2 will take this course in Year 2 Fall.	
CENG	1000	A First Course in Materials Science and Applications	3			3							3		
CENG	2210	Chemical and Biological Engineering Thermodynamics	3			3							3		
CENG	2220	Transport Phenomena I	3				3						3		
CENG	2210	Modeling for Chemical and Biological Engineering	3			3							3		
CENG	2220	Modeling for Chemical and Biological Engineering II	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	Transport Phenomena II	3				3						3		
CENG	3230	Chemical and Biological Reaction Engineering	3				3						3		
CENG	3300	Data Science for Molecular Engineering	3				3						3		
CENG	3600	Chemical and Environmental Engineering Laboratory	4				4						4		
CENG	4020	Academic and Professional Development II	0	0			0						0		
		New: CENG 4020 OR CENG 4030 OR CENG 4040 (Students taking the Research Option must take CENG 4030)	6												
CENG	4020	Chemical Engineering Capstone Design	6							3	3		6		
CENG	4030	Chemical Engineering Thesis Research	6												
CENG	4040	Chemical Engineering Industrial Project	6												
		New: BIEN010 OR BIEN010 OR LFST001	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 2111 offered in Fall	
CHEM	2155	Fundamental Organic Chemistry Laboratory	1		1								1		
CENG/BEN/COMP/LEFS/CHEM		CENG Elective (Courses from the specified list)	12							3	3	3	3	12	
BEng in Chemical Engineering Major Requirements			71	3	4	13	6	12	15	3	3	6	6	71	
BBA in Finance															
School Requirements															
ACCT	2010	Principles of Accounting I	3		3								3		
ACCT	2090	Principles of Accounting II	3							3			3		
		New: ECON 2103 OR ECON 2113	3												
ECON	2103	Principles of Microeconomics	3		3								3		
ECON	2113	Microeconomics	3												
		New: ECON 2120 OR ECON 3120	3												
ECON	2120	Macroeconomics	3							3			3		
ECON	3120	Macroeconomics: Theory I	3												
FINA	2303	Financial Management	3			3							3	FINA 2303 is a major pre-requisite	
ISOM	2010	Introduction to Information Systems	3	-	-	-	-	-	-	-	-	-	0	COMP 102P, COMP 102S, COMP 2011 and COMP 2012H are more advanced computing courses as compared to ISOM 2010. Students SHOULD take COMP 102S or COMP 2011 or COMP 2012H instead of ISOM 2010.	
ISOM	2020	Coding for Business	1	-	-	-	-	-	-	-	-	-	0	ISOM 2020 is waived for CCP students who have taken and passed COMP 102S, COMP 102P, COMP 2011 or COMP 2012H. These COMP courses are similar or more advanced coding (Python) courses as ISOM 2020.	
ISOM	2050	Business Statistics	3	3									3		
ISOM	2060	Introduction to Business Analytics	1	-	-	-	-	1	-	-	-	-	-	1	
ISOM	2090	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		
		New: MATH 1003 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4												
MATH	1003	Calculus and Linear Algebra	3		3										
MATH	1013	Calculus I	3		3										
MATH	1020	Accelerated Calculus	4												
MATH	1023	Honors Calculus I	3												
Required Credits for School Requirements			39-40	3	3	3	6	1	0	3	6	5	2	32	
Major Required Courses and Electives															
FINA	3001	Key Skills for Finance Professionals (A)	1					1					1		
FINA	3103	Intermediate Investments	3										3		
FINA	3203	Derivative Securities	3						3				3		
FINA	3303	Intermediate Corporate Finance	3							3			3		
FINA	3010	Bloomberg Market Concepts Certification	0					0					0		
		New: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6												
ACCT	3010	Financial Accounting I	3							3			3		
ACCT	3020	Financial Accounting II	3								3				
ACCT	3030	Intermediate Financial Accounting for Non-Accounting Majors	3												
		New: ISOM 3030 OR ISOM 3400	3												
ISOM	3030	Business Programming in VBA	3							3			3	If EDP students took COMP 102S in BEng requirement, they are required to enroll ISOM 3230	
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	9		
Required Credits for Major Required Courses and Electives			25-29	0	0	0	0	4	6	0	3	3	3	25	
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		
TEMG	3050	T&M Case Analysis and Product Innovation	3		3								3		
TEMG	4050	T&M Corporate Consulting Project	0-5							4	0	0	0	4	
Required Credits for Additional Requirements			7	0	3	0	0	0	0	4	0	0	0	7	
University Common Core Requirements															
CORE	C1 & C2	U CORE - Others	21			3	3					6	3	6	21
CORE	C1 & C2	U CORE - English Language	6	3	3									6	
HEALTH	1005	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	30	
Term load (incl. free credits)															
16 21 19 15 17 21 16 18 17 17 177															

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.