

<< Declaration of BEng major << Declaration of BBA major

School:		School of Engineering and School of Business Management				Student's Pathway											
Program:		Dual Degree Program (BEng in Chemical Engineering and BBA in Management)															
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	Remarks		
BEng in Chemical Engineering																	
Major Requirements																	
Engineering Fundamental Courses																	
COMP	1021	Note: COMP 1021 OR COMP 1022P OR COMP 2011	3-4														
COMP	1022P	Introduction to Computer Science	3	3										3	This course will also be used to substitute ISOM 2010		
COMP	2011	Introduction to Computing with Java Programming with C++	4														
ENGG	1010	Academic Orientation	0	0	0									0			
CHEM	1010	Note: CHEM1010 OR CHEM1020	3	3										3			
CHEM	1020	General Chemistry IA General Chemistry IB	3														
LANG	2030	Technical Communication I	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														
MATH	1013	Calculus IA	4														
MATH	1014	Calculus IB	3	3	3									6			
MATH	1020	Calculus II	3														
MATH	1023	Accelerated Calculus	4														
MATH	1024	Honors Calculus I	3														
MATH	1024	Honors Calculus II	3														
MATH	2011	Introduction to Multivariable Calculus	3			3								3			
PHYS	1112	Note: PHYS 1112 OR PHYS 1312	3	3										3			
PHYS	1312	General Physics I with Calculus Honors General Physics I	3														
Required credits for Engineering Fundamental Courses			19-23											21			
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									3			
CENG	1700	Biotechnology and Its Business Opportunities	3														
BIEN	1010	Introduction to Environmental Engineering Introduction to Biomedical Engineering	3														
CENG	1010	Academic and Professional Development I	0		0									0			
CENG	1980	Industrial Training	0			0	0	0	0	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	Process Fluid Mechanics	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			
CENG	4920	Note: CENG4920 OR CENG4930 OR CENG4940	6									3	3	6			
CENG	4930	Chemical Engineering Capstone Design	6														
CENG	4940	Chemical Engineering Thesis Research Chemical Engineering Industrial Project	6														
ENGG	2010	Engineering Seminar Series	0			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			
BIEN	2410	Note: BIEN2410 OR BIEN2610 OR LIFS1901	3				3							3			
BIEN	2610	Cellular and Systems Physiology for Engineers	3														
LIFS	1901	Chemical Biology for Engineers 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 Management																	
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 Microeconomics	3														
ECON	2123	Note: ECON 2123 OR ECON 3123	3							3				3			
ECON	3123	Macroeconomics Macroeconomic Theory I	3														
FINA	2303	Financial Management	3			3								3			
ISOM	2010	Introduction to Information Systems	3											0	Substituted by COMP 1021/1022P/COMP2011		
ISOM	2020	Coding for Business	1			1								1			
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 2110 is a major pre-requisite		
MGMT	2130	Business Ethics and Social Responsibility	2							2				2			
SBMT	1111	Business Student Induction	0											0	Waived for DDP students		
LABU	2040	Business Case Analyses	3							3				3			
LABU	2060	Effective Communication in Business	3										3	3			
MATH	1003	Note: MATH 1003 OR MATH 1012 OR MATH 1013 OR MATH 1020 OR MATH 1023	3-4														
MATH	1012	Calculus and Linear Algebra	3														
MATH	1013	Calculus IA	4														
MATH	1013	Calculus IB	3	(3)										0	DDP students should take MATH 1012 or MATH 1013 or MATH 1020 or MATH 1023 to satisfy the requirements of both BEng and BBA degrees		
MATH	1020	Accelerated Calculus	4														
MATH	1023	Honors Calculus I	3														
Required credits for School Requirements			45-46											39			
Major Requirements																	
Major Required Courses and Electives																	
MGMT	3110	Note: MGMT 3110 OR MGMT 3120 (For students in the Consulting Option, they will use MGMT 3110 to fulfill the Option Requirements and should take MGMT 3120 to fulfill this requirement.)	4						4					4	Students in the Consulting Option must take MGMT 3120		
MGMT	3120	Human Resources Management Managerial Leadership	4														
MGMT	3130	Note: MGMT 3130 OR MGMT 3140 (Students in the Consulting Option must take MGMT 3140 to fulfill this requirement.)	4						4					4	Students in the Consulting Option must take MGMT 3140		
MGMT	3140	Judgement and Decision Making in Organizations Negotiation	4														
MGMT	4210	Note: MGMT 4210 OR MGMT 4220 (Students in the Consulting Option or in the Corporate Social Responsibility and Sustainability Option must take MGMT 4210 to fulfill this requirement.)	3-4									3		3	Students in the Consulting Option must take MGMT 4210 Students in the CSR Option must take MGMT 4210		
MGMT	4220	Corporate Strategy Entrepreneurship and Innovation	3														
MGMT		MGMT 3000-level or above Electives (Any 3 courses of the subject and level as specified. Courses taken as Option Required Courses may not be counted towards the elective requirement.)	9							3	3	3		9	Students in the Consulting Option are recommended to take MGMT 4220 and a new course in Simulating Strategy to fulfill the major elective requirement		
Required credits for Major Required Courses and Electives			20-21											20			
Additional Requirements																	
Requirements for Dual Degree Program																	
Required Courses																	
TEMG	1010	Technology and Management Professional Activities	0	0	0	0	0	0	0	0	0	0	0	0			
TEMG	3950	Case-based Problem Solving	3		3									3			
Required credits for Additional Requirements			3											3			
University CORE																	
CORE	C3 - C12	U CORE - Others	30					3			3	9	6	9	30		
CORE	C1 & C2	U CORE - English Language	6	3	3									6			
Sub-total for University CORE			36											36			
Term load (excl. free credits)																	
18 19 20 19 20 19 20 19 18 15																	
187##																	
<< Declaration of BEng major << Declaration of BBA major																	

Notes:

- () indicates the reuse of the same course to fulfill more than one requirement.
- [] denotes the course is also offered in other terms as indicated and students may take the course in one of these subject to advice by the program office.
- * 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.