

<< Declaration of  
BEng major

<< Declaration of  
BBA major

School:				Student's Pathway												Remarks
School of Engineering and School of Business Management		Dual Degree Program (BEng in Chemical Engineering and BBA in Finance)														
Program:	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	
<b>BEng in Chemical Engineering</b>																
<b>Major Requirements</b>																
<b>Engineering Fundamental Courses</b>																
COMP	1021		Note: COMP1021 OR COMP1022P OR COMP2011 OR COMP2012H	3-5												
COMP	1022P		Introduction to Computer Science	3												
COMP	2011		Introduction to Computing with Java	3	3										3	
COMP	2012H		Programming with C++	4												
COMP	2012H		Honors Object-Oriented Programming and Data Structures	5												
CHEM	1020		General Chemistry I	3												
CHEM	1020		General Chemistry I	3												
LANG	2030		Technical Communication I	3												
MATH	1012		Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020]	4-7												
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		Note: PHYS 1112 OR PHYS 1312	3												
PHYS	1312		General Physics I with Calculus	3			3								3	
PHYS	1312		Honors General Physics I	3												
<b>Required credits for Engineering Fundamental Courses</b>				19-24											18	
<b>Major Required Courses and Electives</b>																
CENG	1000		Note: CENG1000 OR CENG1500	3												
CENG	1000		Introduction to Chemical and Biological Engineering	3												
CENG	1500		A First Course on Materials Science and Applications	3	3										3	
CENG	1600		Note: CENG1600 OR CENG1700 OR BIEN1010	3												
CENG	1700		Biotechnology and Its Business Opportunities	3												
BIEN	1010		Introduction to Environmental Engineering	3			3								3	
BIEN	1010		Introduction to Biomedical Engineering	3												
CENG	1010		Academic and Professional Development I	0											0	
CENG	1980		Industrial Training	0										0	0	
CENG	2110		Process and Product Design Principles	3											3	
CENG	2210		Chemical and Biological Engineering Thermodynamics	3											3	
CENG	2220		Transport Phenomena I	3											3	
CENG	2310		Modeling for Chemical and Biological Engineering	3											3	
CENG	3110		Process Dynamics and Control	3											3	
CENG	3150		Integrated Chemical Process & Product Design	5											5	
CENG	3210		Separation Processes	3											3	
CENG	3220		Heat and Mass Transfer	3											3	
CENG	3230		Chemical and Biological Reaction Engineering	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 taking the Research Option must take CENG 4930)	6										3	3	
CENG	4930		Chemical Engineering Capstone Design	6											6	
CENG	4940		Chemical Engineering Thesis Research	6											6	
CENG	4940		Chemical Engineering Industrial Project	6											6	
ENGG	2010		Engineering Seminar Series	0											0	
CHEM	1050		Laboratory for General Chemistry I	1											1	
CHEM	2111		Fundamentals of Organic Chemistry	3											3	
CHEM	2155		Fundamental Organic Chemistry Laboratory	1											1	
LANG	4035		Technical Communication II for Chemical and Biological Engineering	3											3	
BIEN	2410		Note: BIEN2410 OR BIEN2610 OR LIFS1901	3											3	
BIEN	2610		Cellular and Systems Physiology for Engineers	3											3	
LIFS	1901		Chemical Biology for Engineers	3											3	
LIFS	1901		General Biology I	3											3	
SENG/SSCI/ENVR			CENG Elective (12 credits from specified elective list)	12											12	
<b>Required credits for Major Requirements Courses and Electives</b>				68											68	
<b>BBA in Finance</b>																
<b>School Requirements</b>																
ACCT	2010		Principles of Accounting I	3	3										3	
ACCT	2200		Principles of Accounting II	3											3	
ECON	2103		Note: ECON 2103 OR ECON 2113	3											3	
ECON	2113		Principles of Microeconomics	3											3	
ECON	2123		Note: ECON 2123 OR ECON 3123	3											3	
ECON	3123		Macroeconomics	3											3	
FINA	2303		Macroeconomic Theory I	3											3	
FINA	2303		Financial Management	3											3	
ISOM	2010		Introduction to Information Systems	3											0	
ISOM	2020		Coding for Business	1											0	
ISOM	2500		Business Statistics	3											3	
ISOM	2600		Introduction to Business Analytics	1											1	
ISOM	2700		Operations Management	3											3	
MARK	2120		Marketing Management	3											3	
MGMT	2010		Business Ethics and the Individual	2											2	
MGMT	2110		Organizational Behavior	3											3	
MGMT	2130		Business Ethics and Social Responsibility	2											2	
LABU	2040		Business Case Analyses	3											0	
LABU	2060		Effective Communication in Business	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)											
MATH	1020		Accelerated Calculus	4												
MATH	1023		Honors Calculus I	3												
<b>Required credits for School Requirements</b>				45-46											35	
<b>Major Requirements</b>																
<b>Major Required Courses and Electives</b>																
FINA	3001		Key Skills for Finance Professionals (A)	1											1	
FINA	3103		Intermediate Investments	3											3	
FINA	3203		Derivative Securities	3											3	
FINA	3303		Intermediate Corporate Finance	3											3	
FINA	3810		Bloomberg Market Concepts Certification	0											0	
ACCT	3010		Note: (ACCT 3010 AND ACCT 3020) OR ACCT 3030	3-6												
ACCT	3020		Financial Accounting I	3											3	
ACCT	3020		Financial Accounting II	3											3	
ACCT	3030		Intermediate Financial Accounting for Non-Accounting Majors	3											3	
ISOM	3230		Note: ISOM 3230 OR ISOM 3400	3												
ISOM	3400		Business Applications Programming	3											3	
ISOM	3400		Python Programming for Business Analytics	3											3	
FINA			FINA 3000-level or above Electives (Any 3 courses of the subject and level as specified)	9											9	
<b>Required credits for Major Required Courses and Electives</b>				25-28											25	
<b>Additional Requirements</b>																
<b>Requirements for Dual Degree Program</b>																
<b>Required Courses</b>																
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	
TEMG	4950		T&M Corporate Consulting Project	3-5											4	
<b>Required credits for Additional Requirements</b>				7											7	
<b>University CORE</b>																
CORE	C3 - C9		U CORE - Others	21											21	
CORE	C1 & C2		U CORE - English Language	6											6	
CORE	1905		Behavioral Foundations of University Education: Habits, Mindsets, and Wellness	3	1	2									3	
<b>Sub-total for University CORE</b>				30											30	
Term load (excl. free credits)																
19 18 18 19 20 20 18 19 17 15																
183##																

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.