

3.5.5 Sample Plan of Study

Sample Plan of Study Chemical Engineering (CHE)

Freshmen Year

Semester 1			Semester 2				
Course	Title	Cr.	Pre/ConP	Course	Title	Cr.	Pre/ConP
MA 165	Analytic Geometry and Calculus I (Math)	4	MAT 110 or MA 158 or ENG Math Placement Test	MA 166	Analytic Geometry and Calculus II (Math)	4	MA 165
CHM 115	General Chemistry I (Science)	4	ConP: MA 165	CHM 116	General Chemistry II (Science)	4	CHM 115
ENGL 100	English for Academic Studies (English Lan. & Com.)	3		ENGL 106	First-Year Composition (English Lan. & Com.)	4	ENGL 100
ENGR 131	Transforming Ideas to Innovation I (General Engineering)	2		ENGR 132	Transforming Ideas to Innovation II (General Engineering)	2	ENGR 131
GEE	General Education Elective (refer to course catalogue)	3		PHYS 172	Modern Mechanics (Science)	4	ConP: MA 165
Semester Credits = 16				Semester Credits = 18			

Sophomore Year

Semester 3			Semester 4				
Course	Title	Cr.	Pre/ConP	Course	Title	Cr.	Pre/ConP
CHE 200	Chemical Engineering Sophomore Seminar (CHE Core)	1	Sophomore	CHE 211	Introductory Chemical Engineering Thermodynamics (CHE Core)	4	CHE 205, MA 261
CHE 205	Chemical Engineering Calculations (CHE Core)	4	ENGR 131, PHYS 172, MA 165, ConP: CHM 116 <u>For CHE 205 passing grade is C</u>	CHM 262	Organic Chemistry II (CHE Science Core)	3	CHM 261
CHM 261	Organic Chemistry I (CHE Science Core)	3	CHM 116	CHM 264	Organic Chemistry Laboratory II (CHE Science Core)	1	CHM 263, ConP: CHM 262
CHM 263	Organic Chemistry Laboratory I (CHE Science Core)	1	ConP: CHM 261	MA Sel 1	Math. Sel 1, for ex: MA 265 - Linear Algebra (CHE Selectives)*	3	for MA 265: MA 166
MA 261	Multivariate Calculus (Math)	4	MA 166	COM 114	Fund. of Speech Communication (English Lan. & Com.)	3	ENGL 100
PHYS 241	Electricity and Optics (Science)	3	PHYS 172	GEE	General Education Elective (refer to course catalogue)	3	
Semester Credits = 16				Semester Credits = 17			

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Junior Year

Semester 5				Semester 6			
Course	Title	Cr.	Pre/ConP	Course	Title	Cr.	Pre/ConP
CHE 306	Design of Staged Separation Processes (CHE Core)	3	CHE 211	CHE 300	Chemical Engineering Junior Seminar (CHE Core)	1	CHE 200 , Junior
CHE 377	Momentum Transfer (CHE Core)	4	CHE 211, ConP: MA 266	CHE 378	Heat and Mass Transfer (CHE Core)	4	CHE 211, CHE 377
CHM 370	Physical Chemistry (CHE Science Core)	3	CHE 211, MA 261, PHYS 241, CHM 116	CHE 348	Chemical Reaction Engineering (CHE Core)	4	CHE 211, MA 265, MA 266, ConP: CHM 261
MA Sel 2	Math. Sel 2, for ex: MA 266 - Ordinary Diff. Equations (CHE Selectives)*	3	for MA 266: MA 261	CHE 320	Statistical Modeling and Quality Enhancement (CHE Core)	3	CHE 205, ConP: MA 265,
GEE	General Education Elective (refer to course catalogue)	3		TE	Technical Elective (CHE Selectives)*; for ex: CHM 333	3	for CHM 333: CHM 262
				GEE	General Education Elective (refer to course catalogue)	3	
Semester Credits = 16				Semester Credits = 18			

Senior Year

Semester 7				Semester 8			
Course	Title	Cr.	Pre/ConP	Course	Title	Cr.	Pre/ConP
CHE 400	Chemical Engineering Senior Seminar (CHE Core)	1	CHE 300, ConP: CHE 456, Senior	CHE 450	Design and Analysis of Processing Systems (CHE Senior Design)	4	CHE 306, CHE 378, CHE 400 ; ConP: CHE 435
CHE 456	Process Dynamics and Control (CHE Core)	3	CHE 377, ConP: CHE 348, CHE 378	CHE EL 1	Chemical Engineering Electives (CHE Selectives)*; for ex: CHE 412	3	for CHE 412: CHE 400, Senior
CHE 435	Chemical Engineering Laboratory (CHE Core)	4	CHE 306, CHE 320, CHE 348, CHE 378	CHE EL 2	Engineering Elective (General Engineering)*;	3	
CHE 420	Process Safety Management (CHE Core)	3	ConP: CHE 348, CHE 378	ENG EL	Engineering Elective (General Engineering)*; for ex: CHE 411	3	for CHE 411: CHE 400, Senior
BIO Sel	Biology Selective (CHE Selective)*; for ex: BIOL 230	3	for BIOL 230: CHM 116, MA 166	GEE	General Education Elective (refer to course catalogue)	3	
GEE	General Education Elective (refer to course catalogue)	3					
Semester Credits = 17				Semester Credits = 16			

Total Minimum Credits Required for Graduation = 134

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