

# CHEMICAL ENGINEERING General MAJ ORG SEQ

1 <sup>st</sup> Year	Session	Course	Course Name	SH	P: Prerequisite; C: Coreq; R: Recommend
	ALL	Math 1550	Engineering Math I: Single Variable Calculus	4	P: MPT Level 3 score of 9 or higher or ALEKS score of 75 or higher
	F	ENGR:1100	Introduction to Engineering Problem Solving	3	
	ALL	CHEM:1110	Principles of Chemistry I	4	
	ALL	RHET:1030	Rhetoric	4	
	F	ENGR:1000	Engr Success for First Year Students	1	First Semester Standing
<b>Total</b>				<b>16</b>	
	ALL	MATH1560	Engineering Math II: Multi-Variable Calculus	4	P: MATH 1550
	F/S	ENGR:1300	Introduction to Engineering Computing	3	C: MATH:1550
	ALL	PHYS:1611	Introductory Physics I	4	C: MATH:1550
	ALL	MATH:2550	Engineering Math III: Matrix Algebra	2	P: MATH:1550
	ALL	CHEM:1120	Principles of Chemistry II	4	P:CHEM:1100
	S	CBE:1000	CBE Departmental Seminar	1	
<b>2<sup>nd</sup> Year</b>				<b>TOTAL</b>	<b>18</b>
	ALL	MATH:2560	Engineering Math IV: Differential Equations	3	P:MATH:1560,MATH:2550
	ALL		General Education Component course	3	
	ALL	ENGR:2110	Engineering Fundamentals I:Statics	2	P:MATH:1550; C:MATH:1560,PHYS:1611
	ALL	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3	P:CHEM:1110; PHYS:1611;C:MATH:1560
	F	CHEM:2230	Organic Chemistry I For Majors	3	P:CHEM:1120
	F/S	CBE:2105	Process Calculations	3	P:MATH:1550
<b>Total</b>				<b>17</b>	
	S	CBE:3105	ChE Thermodynamics	3	P:ENGR:2130; C:CBE:2105
	S	CBE:3109	Fluid Flow	2	C:CBE:2105
	S	CHEM:2240	Organics Chemistry II for Majors	3	
	S	CHEM:2420	Organic Chemistry Lab for Majors	3	
	ALL	STAT:2020	Statistics elective	3	P:MATH:1560
	F/S	CBE:3000	CBE Professional Seminar	1	P:CBE:2105
	ALL		General Education Component course	3	
<b>3<sup>rd</sup> Year</b>				<b>Total</b>	<b>18</b>
	F	CBE:3113	Heat & Mass Transfer	3	P:MATH:2560,CBE:2105; R:CBE:3109
	F	CBE:3125	Chemical Process Safety	3	P:CBE:3105,CBE:3109; C:CBE:3113
	F	CBE:3117	Separations	3	P:CBE:2105,CBE:3105; C:CBE:3113
	ALL	ENGR:2720	Material Science	3	P:CHEM:1110;C:MATH:1550
	ALL	ENGR:2120	Engineering Fundamentals II: Electrical Circuits	3	C:MATH:2560
	F/S	CBE:3000	CBE Professional Seminar	1	P:CBE:2105
<b>Total</b>				<b>16</b>	
	F/S	CBE:3120	Chemical Reaction Engineering	3	P:MATH:2560; C:CBE:3105; R:CBE:3113
	S	CBE:3150	Thermodynamics/Transport Laboratory	3	P:CBE:3105,CBE:3113
	S	CBE:3205	Introduction to Biochemical Engineering	3	P:CBE:2105; C:CBE:3109; R:CBE:3120
	ALL		Elective focus area course	3	
	ALL		General Education Component course	3	
	F/S	CBE:3000	CBE Professional Seminar	1	P:CBE:2105
<b>4<sup>th</sup> Year</b>				<b>Total</b>	<b>16</b>
	F	CBE:4105	Process Dynamics & Control	3	P:MATH:2560,CBE:2105,CBE:3109; C:CBE:3120
	F	CBE:4109	Chemical Engineering Process Design I	2	P:CBE:3109,CBE:3113,CBE:3117; C:CBE:3120,CBE:3125
	F	CBE:3155	Chemical Reaction Engineering/Separation Lab	3	P:CBE:3117; C:CBE:3120; R:STAT:2020
	F		Advanced chemistry elective	3	
	ALL		Elective focus area course	3	
	ALL		Elective focus area course	3	
	F/S	CBE:3000	CBE :Professional Seminar	1	P:CBE:2105
<b>Total</b>				<b>18</b>	
	S	CBE:4110	Chemical Engineering Process Design II	3	P:CBE:4109; R:CBE:4105,CBE:5205
	S		Advanced science elective	3	
	S		Elective focus area course	3	
	ALL		General Education Component course	3	
	ALL		General Education Component course	3	
	S	CBE:4195	Senior Enriching Activities Seminar	0	C:CBE:4110
<b>Total</b>				<b>15</b>	