

CHEMICAL ENGINEERING - MA 113 & MA 123 14-15 EIGHT SEMESTER PLAN

YEAR 1

FRESHMAN FALL		STATUS	PREREQ	NOTES
ENG 103	English Composition 1	3	ACT/SAT	
GE 101	Introduction to Engineering	1		
MA 113	College Algebra	3	ACT/SAT	
MA 123	Trigonometry	3	ACT/SAT	
ECO 213/223	Micro or Macroeconomics	3		
	Humanities/SS Elective (3)	3		
Total		16		

FRESHMAN SPRING		STATUS	PREREQ	NOTES
CH 104	General Chemistry I & Lab	4	MA 113	
ENG 133	Technical Communication	3	ENG 103	
ChE 122	Biology for ChE	2	GE 101	
MA134	Calculus I	4	MA 124	
	Humanities/SS Elective (3)	3		
Total		16		

YEAR 2

SOPHOMORE FALL		STATUS	PREREQ	NOTES
CH 114	General Chemistry II & Lab	4	CH 104	
ChE 203	Material Balances	3	CH 104/114	
ChE 252	Stats and Comp Methods	2		
MA164	Calculus II	4	MA 134	
PH 224	Physics I	4	MA 134	
Total		17		

SOPHOMORE SPRING		STATUS	PREREQ	NOTES
CH 203	Organic Chemistry I	3	CH 114	
CH 211	Organic Chemistry I Lab	1	CH 114	
ChE 212	Energy Balances	2	ChE 203	
ChE 222	Process Meas Lab & Sustain	2		
MA 213	Calculus III	3	MA 164	
PH 234	Physics II	4	PH 224/MA 164	
SP 203	Speech	3	ENG 133	
Total		18		

YEAR 3

JUNIOR FALL		STATUS	PREREQ	NOTES
ChE 303	ChE Fluid Dynamics	3	ChE 203/212	
ChE 313	ChE Thermodynamics I	3	ChE 212/MA 213	
ChE 373	ChE Heat Transfer	3	ChE 203/212	
MA 233	Differential Equations	3	MA 213	
	Chemistry Elective (4)	4		
Total		16		

JUNIOR SPRING		STATUS	PREREQ	NOTES
ChE 333	Unit Operations Lab I	3	ChE 222/252/303/373	
ChE 372	ChE Thermodynamics II	2	ChE 313	
ChE 383	Mass Transfer	3	ChE 313/373	
ChE 393	Stagewise Separations	3	ChE 303/373	
ES 233	Material Science	3		
	Chemistry Elective (4)	4		
Total		18		

YEAR 4

SENIOR FALL		STATUS	PREREQ	NOTES
ChE 433	Unit Operations Lab II	3	ChE 333/393	
ChE 453	Chemical Engineering Kinetics	3	ChE 373/383	
ChE 473	Chemical Process Design I	3	ChE 373/383/393	
ES 382	Engineering Economics	2		
	Chemistry Elective (4)	4		
	ChE Elective (3)	3		
Total		18		

SENIOR SPRING		STATUS	PREREQ	NOTES
ChE 412	Numerical Methods	2	ChE 453	
ChE 463	ChE Dynamics & Control	3	MA 233	
ChE 483	Chemical Process Design II	3	ChE453/473/ES 382	
GE 401	Professional Practice	1		
	Humanities/SS Elective (3)	3		
	ChE Elective (3)	3		
Total		15		

Concentration Electives Fall		STATUS	PREREQ	NOTES
ChE 4083	Plant Management	3	Jr Standing	
ChE 4173	Bioseparation Processes	3	ChE 303/373	
CH 213/221	Organic Chemistry II & Lab	4	CH 203/211	
CH 234	Quantitative Chemical Analysis	4	CH 114	
CH 324	Chemical Instrumental Analysis	4	CH 213/234	
CH 353/351	Physical Chemistry I & Lab	4	CH 114/232/MA 213	
BIO 434	Biochemistry	4	CH 211/213	

Concentration Electives Spring		STATUS	PREREQ	NOTES
ChE 4073	Biochemical Engineering	3	MA 233	
ChE 4193	High Polymer Processes	3	CH 203	
CH 213/221	Organic Chemistry II & Lab	4	CH 203/211	
CH 234	Quantitative Chemical Analysis	4	CH 114	
CH 324	Chemical Instrumental Analysis	4	CH 213/234	
CH 363/361	Physical Chemistry II & Lab	4	CH 353	