

Traditional Sequence - Student enters MSU as freshman, starts COOP spring of sophomore year, CHEMICAL ENGINEERING PRACTICE CURRICULUM

COOP Sequence – Version 1 – 7 regular semesters, 1 summer semester, 3 semesters of COOP experience (Finish degree in 4.5 calendar years)

More demanding sequence (mostly 16/17 hour semesters)

FRESHMAN YEAR									
Fall Semester			Spring Semester				Summer Semester		
CHE 1101	CHE Freshman Seminar	1	CHE 2213	CHE Analysis	3				
MA 1713	Calculus I	3	MA 1723	Calculus II	3				
CH 1211	Inv. In Chemistry I	1	CH 1221	Inv. In Chemistry II	1				
CH 1213	Fund. Of Chemistry I	3	CH 1223	Fund. Of Chemistry II	3				
EN 1103	English Comp I	3	PH 2213	Physics I	3				
	Humanities Elective	3	EN 1113	English Comp II	3				
	Social Science Elective	3							
	TOTAL	17		TOTAL	16				
SOPHOMORE YEAR									
Fall Semester			Spring Semester				Summer Semester		
CHE 2114	Mass & Energy Balances	4	COOP – Semester 1				PH 2223	Physics II	3
CHE 3203	Fluid Flow Operations	3					MA 2743	Calculus IV	3
MA 2733	Calculus III	3					IE 3913	Engr. Econ	3
EM 2413	Engr. Mech I	3					CHE 3113 or ME 3513	CHE Thermo I or Thermo I	3
	Humanities Elective	3							
	TOTAL	16					TOTAL	12	

Junior Year										
Fall Semester			Spring Semester					Summer Semester		
COOP – Semester 2				CHE 3123	CHE Thermo II	3		COOP – Semester 3		
				CHE 3213	Heat Transfer Op.	3				
				CHE 3223	Mass Transfer Op	3				
				CHE xxx1	Prof. Devel. Seminar	1				
				GE 3513	Technical Writing	3				
		MA 3253	Differential Equations	3						
				TOTAL		16				
Senior Year (1)										
Fall Semester			Spring Semester					Summer Semester		
CHE 4113	Reactor Design	3	CHE 4223	Process Control	3		Internship Additional COOP REU Program			
CHE 4134	Process Design	4	CHE 4233	Plant Design	3					
CHE 3222	Op Lab I	2	CHE 3232	Op Lab II	2					
CHE 4513	Organic Chem I	3	CH 4523	Organic Chem II	3					
CHE 4511	Organic Chem Lab I	1		CHE Elective	3					
	Social Science Elective	3		Technical Elective	3					
	TOTAL	16		TOTAL	17					
Senior Year (2)										
Fall Semester										
CH 4413	Thermo and Kinetics	3								
EM 2413	Engineering Materials	3								
	Chemistry Elective	3								
	Technical Elective	3								
EE 3183	EE Systems	3								
	Fine Arts Elective	3								
	TOTAL	18								