

# CHEMICAL ENGINEERING 128-HOUR CURRICULUM WORKSHEET

Chemical Engineering Practice Concentration (Rev. August 4, 2016)

FRESHMAN YEAR							
First Semester		Credit Hours	Grade Earned	Second Semester		Credit Hours	Grade Earned
CHE 1101	Freshman Seminar	1		CHE 2213	CHE Analysis**	3	
CH 1213	Fund. of Chemistry	3		CH 1223	Fund. of Chemistry	3	
CH 1211	Inv. in Chemistry	1		CH 1221	Inv. in Chemistry	1	
MA 1713	Calculus I	3		MA 1723	Calculus II	3	
EN 1103	English Comp. I	3		PH 2213	Physics I	3	
	Social Science Elective	3		EN 1113	English Comp. II	3	
	Humanities Elective	3					
	Total	17			Total	16	

SOPHOMORE YEAR							
First Semester		Credit Hours	Grade Earned	Second Semester		Credit Hours	Grade Earned
CHE 2114	Mass and Energy Balances	4		CHE 3113	Thermo I	3	
CHE 3203	Fluid Flow Ops*	3		IE 3913	Engineering Economy I	3	
MA 2733	Calculus III	3		MA 2743	Calculus IV	3	
	Social Science Elective	3		MA 3253	Differential Equations	3	
	Humanities Elective	3			Fine Arts Elective	3	
	Total	16			Total	15	

JUNIOR YEAR							
First Semester		Credit Hours	Grade Earned	Second Semester		Credit Hours	Grade Earned
CHE 3123	CHE Thermo II	3		CH 4523	Organic Chemistry II	3	
CHE 3413	Engineering Materials*	3		CHE 3213	Heat Transfer Ops**	3	
CH 4513	Organic Chemistry I	3		CHE 3222	CHE Lab I**	2	
CH 4511	Organic Chem. Lab I	1		CHE 3223	Separations**	3	
	CH/CHE/Technical Elective	3		CHE 3331	Professional Dev. Seminar**	1	
	CH/CHE/Technical Elective	3		ECE 3413	Intro to Circuits or	3	
				or EM 2413	Engineering Mechanics I <sup>‡</sup>		
	Total	16			Total	15	

SENIOR YEAR							
First Semester		Credit Hours	Grade Earned	Second Semester		Credit Hours	Grade Earned
CHE 3232	CHE Lab II*	2		CHE 4223	Process Controls**	3	
CHE 4113	CHE Reactor Design*	3		CHE 4233	CHE Plant Design**	3	
CHE 4134	CHE Process Design*	4		CHE 4633	Process Safety**	3	
CH 4413	Thermodynamics & Kinetics*	3			CH/CHE/Technical Elective	3	
	CH/CHE/Technical Elective	3		GE 3513	Technical Writing	3	
				PH 2223	Physics II***	3	
	Total	15			Total	18	

\* Only taught during fall semester

\*\* Only taught during spring semester

\*\*\* Approved substitutes for PH 2223 Physics II are IE 4613, IE 4623, MA 4373, MA 4523, MA 4533, MA 4543, MA 4573 or CHE 4313 Transport Phenomena

<sup>‡</sup> Students may choose between EM 2413 Engineering Mechanics I or ECE 3413 Electrical Engineering Systems. Please note, however that ECE 3413 requires PH 2223 Physics II as a prerequisite.

**CH/CHE/Technical Elective** denotes that a Chemistry (CH), Chemical Engineering (CHE) or Technical Elective may be taken in the designated semester. A student following the Practice Concentration must complete ONE Chemical Engineering Elective, ONE Chemistry Elective and two Technical Electives. A list of approved Technical Electives is distributed each semester prior to registration for the next semester.