CHEMICAL ENGINEERING 128-HOUR CURRICULUM WORKSHEET

Biomolecular Engineering Concentration

FRESHMAN YEAR

First Semester		Credit Hours	Grade Earned	Second Semester		Credit Hours	Grade Earned
CH 1211	Inv. in Chemistry	1		CH 1221	Inv. in Chemistry	1	
CH 1213	Fund. of Chemistry	3		CH 1223	Fund. of Chemistry	3	
CHE 1101	CHE Freshman Seminar	1		CHE 2213	CHE Analysis	3	
EN 1103	English Comp. I	3		EN 1113	English Comp. II	3	
MA 1713	Calculus I	3		MA 1723	Calculus II	3	
BIO 1134	Biological Sciences I	4		PH 2213	Physics I	3	
	Total	15			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	CHE Thermo I	3	
CHE 3203	Fluid Flow Ops*	3		MA 2743	Calculus IV	3	
MA 2733	Calculus III	3		BIO 1144	Biological Sciences II	4	
PH 2223	Physics II	3		CH 4521	Organic Chem Lab II	1	
CH 4511	Organic Chem. Lab I	1		CH 4523	Organic Chemistry II	3	
CH 4513	Organic Chemistry I	3			Social Science Elective	3	
	Total	17			Total	17	

JUNIOR YEAR

First Semester		Credit Hours	Grade Earned	Second Semester		Credit Hours	Grade Earned
CHE 3123	CHE Thermo II	3		CHE 3213	Heat Transfer Ops**	3	
MA 3253	Differential Equations	3		CHE 3223	Mass Transfer Ops**	3	
IE 3913	Engineering Economy I	3		BIO 3304	General Microbiology	4	
	Adv. Science Elective	3		GE 3513	Technical Writing	3	
	Humanities Elective	3			Humanities Elective	3	
	Total	15			Total	16	

SENIOR YEAR

First Semester		Credit Hours	Grade Earned	Second Semester		Credit Hours	Grade Earned
CHE 4113	CHE Reactor Design*****	3		CHE 4223	Process Controls******	3	
CHE 4134	CHE Process Design*****	4		CHE 4233	CHE Plant Design******	3	
CHE 3222	CHE Lab I*	2		CHE 3232	CHE Lab II**	2	
CHE 3413	Engineering Materials*****	3			Engineering Topics Elective	3	
BCH 4603	General Biochemistry I	3			Social Science Elective	3	
					Fine Arts Elective	3	
	Total	15			Total	17	

* Taught during fall semester only

** Taught during spring semester only

Engineering Topics Elective: Choose 1 of the following: CHE 4313, Transport Phenomena: EM 2413, Engineering Mechanics I; ECE 3183, Electrical Engineering Systems; ISE 4613, Engineering Statistics I

Advanced Science Elective: Choose PH 2233 (premedical students); 3 hour advanced biology course (pre-veterinary students); or 3 hour biotechnology course from an engineering department (Biomolecular engineering students)