Chemical Engineering B.S. Degree—Typical Course of Study

Quarter:	FIRST YEAR FALL	FIRST YEAR SPRING	SECOND YEAR FALL	SECOND YEAR SPRING	THIRD YEAR SPRING	FOURTH YEAR FALL	FIFTH YEAR FALL	FIFTH YEAR SPRING
Engineering	CHME-181 Chem E Insights I (1 cr.)	CHME-182 Chem E Insights II (1 cr.)	CHME-230 Chemical Process Analysis	CHME-310 Applied Thermo-Dynamics	CHME-330 Mass Transfer Operations	CHME-350 Multiple Scale Material Science	CHME-490 Design With Constraint	CHME-492 Advanced Design Capstone
				CHME-320 Continuum Mechanics I	CHME-321 Continuum Mechanics II	CHME-340 Reaction Engineering (4 Cr)	CHME-451 Analysis of Multi-Scale Processes	Professional Technical Elective
				CHME-391 Chem E Principles Lab (2 Cr.)	CHME-301 Analytical Tech. for Chem E I	CHME-302 Analytical Tech. For Chem E II	CHME-401 System Dynamics and Control	Professional Technical Elective
						CHME-491 Chem E Processes Lab (2 Cr.) WI	Professional Technical Elective	
Mathematics/Science	CHMG-141 General & Analytical Chemistry I	CHMG-142 General & Analytical Chemistry II	CHMO-231 Organic Chemistry I		CHMA-231 Chem. Instrumental Analysis for Eng. (and Lab)			
	CHMG-145 Gen. Chem. Lab I (1 Cr.)	CHMG-146 Gen. Chem. Lab II (1 Cr.)	CHMO-235 Organic Chem. Lab I (1 Cr.)					
	MATH-181 Calculus I (4 Cr.)	MATH-182 Calculus II (4 Cr.)	MATH-231 Differential Equations	MATH-221 Multivariable and Vector Calc. (4 Cr.)			PHYS-212 University Physics II (4 Cr)	
Gen. Ed./Wellness/Co-op Prep/Year 1	General Education: Perspectives #1	PHYS-211 University Physics I (4 cr)	STAT-205 Applied Statistics					
	Writing Seminar	General Education: Perspectives #2	General Education: Perspectives #3	Open Elective	General Education: Perspectives #4	General Education: Immersion #2		Open Elective
	Year 1 (0 Cr.)	Wellness (0 Cr.)	EGEN-099 Co-Op Prep Course (0 Cr.)	Wellness (0 Cr.)	General Education: Immersion #1	General Education: Immersion #3		Open Elective
Credit Hours	15	16	16	15	18	18	16	15

Math / Science 41 (Min ABET = 30)
Engineering Topics 55 (Min. ABET = 45)
Gen Ed 65 (Min. NYS = 60)—not including electives
3 credit courses: 29 (not including Chem Labs)
4 credit courses: 9 (including chem + Labs as one 4 Cr. course)

All courses are 3 credits except where indicated
WI Chemical Engineering Writing Intensive Course
One chosen General Education course must be writing intensive

Total =129 Credits