General CHEG Curriculum

FRESHMAN YEAR

First Semester	*Credits*	*Second Semester*	*Credits*
CHEM 1127Q General Chemistry	4	CHEM 1128Q General Chemistry	4
MATH 1131Q Calculus I	4	MATH 1132Q Calculus II	4
ENGR 1000 Orientation to Engineering	1	ENGR 1166 Foundations of Engineering	3
CSE 1010C Intro to Computing	3	Arts & Humanities (Content Area 1)[1]	3
ENGL 1010 or 1011 Academic Writing	4	Social Sciences (Content Area 2)[1]	3
	16		**17**

SOPHOMORE YEAR

First Semester	*Credits*	*Second Semester*	*Credits*
PHYS 1501Q Eng Physics I	4	PHYS 1502Q Eng Physics II	4
CHEM 2443 Organic Chemistry	3	CHEM 2446 Organic Chemistry Lab	1
MATH 2110Q Multivariable Calculus	4	CHEM 2444 Organic Chemistry	3
CHEG 2103 Intro to Chem Engineering	3	MATH 2410Q Diff Equations	3
PHIL 1104 Ethics (Content Area 1)[1]	3	CHEG 2111 Thermodynamics I	3
		Diversity and Multiculture (Content Area 4)[1]	3
	17		**17**

JUNIOR YEAR

First Semester	*Credits*	*Second Semester*	*Credits*
CHEG 3112 Thermodynamics II	3	CHEG 3124 Heat & Mass Transfer	3
CHEG 3123 Fluid Mechanics	3	CHEG 3151 Process Kinetics	3
CHEG 3145 Chemical Engineering Analysis	3	CHEG 3128 Junior Chem Engineering Lab	2
Social Science (Content Area 2)[1]	3	Engineering Requirement[3]	3
MCB/Biology/CHEM Requirement[2]	4	Diversity and Multiculture (Content Area 4)[1]	3
		Free Elective	3
	16		**17**

SENIOR YEAR

First Semester	*Credits*	*Second Semester*	*Credits*
CHEG 4139 Chem Engineering Lab	2	CHEG 4139 Chem Engineering Lab	2
OR Free Elective	or 3	**OR** Free Elective	or 3
CHEG 4140 Capstone Design 1	3	CHEG 4147 Process Dynamics & Control	3
CHEG 4142 Unit Ops & Process Simulation Lab	3	CHEG 4143W Capstone Design 2	3
Engineering Requirement[3]	3	CHEG Requirement[3]	3
CHEG Requirement[3]	3	Professional Requirement[3]	3
14 (with lab) or 15 (with elective)		**14 (with lab) or 15 (with elective)**	

Total 129 credits

[1] University General Education Requirements: Courses selected for Content Areas 1 & 2 must be in four different departments. One course in Content Area 4 must be an international course. One course in Content Area 4 may also satisfy a Content Area 1 or 2 requirement.

[2] MCB/Biology/CHEM requirement may be satisfied by the following courses: Principles of Biology (BIOL 1107/1108 – 4 credits), Introduction to Biochemistry (MCB 2000 – 4 credits), Biochemistry (MCB 3010 – 5 credits) or Fundamentals of Microbiology (MCB 2610 – 4 credits), Physical Chemistry (CHEM 3563 - 4 credits), Analytical Chemistry (CHEM 3332 - 4 credits), Physical Chemistry 2 (CHEM 3564 - 4 credits) or others by petition.

[3] CHEG Requirements are satisfied by any 2000 level chemical engineering course; Engineering Requirements are satisfied by any 2000 level engineering course; Professional Requirements are satisfied by any 2000 level engineering, science or math courses.