

CHEMICAL ENGINEERING

Environmental Option

FRESHMAN YEAR		
FALL		
C&PE 111	Introduction to the Profession	2
CHEM 184	Foundations of Chemistry I	5
ENGL 101	Composition	3
MATH 121	Calculus I	5
Total 15 hours		
SPRING		
C&PE 121	Introduction to Computers in Engineering	3
CHEM 188	Foundations of Chemistry II	5
ENGL 102	Composition & Literature	3
MATH 122	Calculus II	5
Total 16 hours		

SOPHOMORE YEAR		
FALL		
C&PE 211	Material & Energy Balances	3
CHEM 624	Organic Chemistry I	3
CHEM 625	Organic Chemistry I Lab	2
MATH 223	Vector Calculus (Option A)	3
MATH 290	Elementary Linear Algebra (Option A)	2
or		
MATH 220	Applied Differential Equations (Option B)	3
MATH 290	Elementary Linear Algebra (Option B)	2
PHSX 211	General Physics I	4
Total 17 hours		
SPRING		
C&PE 221	Basic Engineering Thermodynamics	3
CE 477	Introduction to Environmental Engineering & Science	3
MATH 320	Elementary Differential Equations (Option A)* or	3
_____	Humanities or Social Sciences Elective (Option B)*	3
PHSX 212	General Physics II	4
CHEM ____	Advanced Chemistry Elective	3
Total 16 hours		

*Students may select one of two MATH options. Selecting Option B, MATH 220/290, gives students an additional elective in MATH, science, engineering, humanities or social sciences (MSEHS elective).

JUNIOR YEAR		
FALL		
C&PE 511	Momentum Transfer	3
C&PE 512	Proc. Engineering Thermodynamics	3
C&PE 522	Econ Appraisal of C&PE Projects	2
CHEM 646	Physical Chemistry I	3
CE 5XX/7XX	Environmental Principles Elective	3
ENGL ____	Advanced English Elective	3
Total 17 hours		
SPRING		
C&PE 521	Heat Transfer	3
C&PE 523	Mass Transfer	4
C&PE 524	Chemical Engineering Kinetics & Reactor Design	3
CHEM 648	Physical Chemistry II	4
_____	Humanities and Social Sciences Elective (Math Option A) or	3
_____	MSEHS Elective (Math Option B)	3
Total 17 hours		

SENIOR YEAR		
FALL		
C&PE 613	Chemical Engineering Design I	4
C&PE 615	Introduction to Process Dynamics and Control	3
C&PE 616	Chemical Engineering Laboratory I	3
CE 5XX/7XX	Environmental Principles Elective	3
_____	Humanities or Social Sciences Elective	3
Total 16 hours		
SPRING		
C&PE 623	Chemical Engineering Design II	2
C&PE 624	Plant & Environmental Safety	3
C&PE 626	Chemical Engineering Laboratory II	3
CE 5XX/7XX	Environ. Engineering Topical (Option A) or	3
MSEHS	Elective (Option B)	3
_____	Humanities or Social Sciences Electives	3
_____	Humanities or Social Sciences Electives	3
Total 17 hours		

131 credit hours required for graduation.
Revised March 2009 (KVC)