



**CHEMICAL ENGINEERING
CURRICULUM
FALL 2010**

Fall Term

Spring Term

First Year

EGGG 101 Introduction to Engineering (FYE)	2	CHEM 112 General Chemistry	3
CHEM 111 General Chemistry	3	CHEG 112 Introduction to Chemical Engineering	3
MATH 242 Analytic Geometry & Calculus B	4	MATH 243 Analytic Geometry & Calculus C	4
CISC 106 General Computer Science for Engineers	3	PHYS 207 Fundamentals of Physics I	4
ENGL 110 Critical Reading and Writing	3	Breadth Requirement Elective 1	3
	15		17

Second Year

CHEG 231 Chemical Engineering Thermodynamics	3	CHEG 325 Chemical Engineering Thermodynamics	3
CHEM 220 Quantitative Analysis*	3	CHEM 444 Physical Chemistry	3
CHEM 221 Quantitative Analysis Laboratory	1	CHEM 445 Physical Chemistry Laboratory (a)	1
PHYS 208 Fundamentals of Physics II	4	MATH 305 Applied Math for Chemical Engineering	3
MSEG 302 Materials Science for Engineers	3	Technical Elective 1	3
Breadth Requirement Elective 2	3	Breadth Requirement Elective 3	3
	17		16

Third Year

CHEG 332 Chemical Engineering Kinetics	3	CHEG 320 Engineering Economics and Risk Analysis	3
CHEG 341 Fluid Mechanics	3	CHEG 342 Heat and Mass Transfer	3
CHEM 331 Organic Chemistry I	3	CHEG 345 Chemical Engineering Laboratory I	3
CHEM 333 Organic Chemistry Laboratory	1	CHEM 332 Organic Chemistry (b) or	3
Technical Elective 2	3	CHEM 527 Introduction to Biochemistry	
Technical Elective 3	3	Breadth Requirement Elective 4	3
	16		15

Fourth Year

CHEG 401 Chemical Process Dynamics and Control	3	CHEG 432 Chemical Process Analysis (DLE)	3
CHEG 443 Mass Transfer Operations	3	CHEG 474 Chemical Engineering Project	
CHEG 445 Chemical Engineering Laboratory II	3	<i>or</i>	
CHEG 473 Chemical Engineering Project (c)	3	CHEG Elective 2	3
<i>or</i>		CHEG Elective 3	3
CHEG Elective 1		Technical Elective or CHEG Elective	3
Breadth Requirement Elective 5	3	Breadth Requirement Elective 6	3
	15		15

Total Credit Hours 126

- * CHEM 119 has been discontinued and substituted by CHEM 220/221
- (a) If CHEM 333 is taken for two credits, CHEM 445 is not required.
- (b) CHEM 332 or CHEM 527 may be taken.
- (c) CHEG 473 Approval by academic advisor and course coordinator is required.