

SEMESTER COURSE SCHEDULE  
UIC Chemical Engineering

**FRESHMAN**

Total Hours = 15

Total Hours = 16

ENGL 160	3	English Composition I
MATH 180	4	Calculus I
CHEM 122	4	General Chemistry I Lecture
CHEM 123	1	General Chemistry I Lab
ENGR 100	0	Engineering Orientation
HUM/SOC	3	General Education Course

CS 109 (= MATH 180)	3	Programming for Eng w/ MatLab
MATH 181 (MATH 180)	4	Calculus II
CHEM 124 (CHEM 122)	4	Gen. Chemistry II Lecture
CHEM 125 (CHEM 123)	1	Gen. Chemistry II Lab
PHYS 141 (MATH 180)	4	Gen. Physics - Mech.

**SOPHOMORE**

Total Hours = 17

Total Hours = 16

MATH 210 (MATH 181)	3	Calculus III
CHEM 222 (CHEM 124/125)	4	Analytical Chemistry
PHYS 142 (MATH 181, PHYS 141)	4	Gen. Physics II-Elec. & Mag
CHE 201 (MATH 181, PHYS 141)	3	Intro to Thermodynamics
ENGL 161	3	English Composition II

MATH 220 (MATH 210)	3	Differential Equation I
CHE 205 (=CHE 210 & MATH 210)	3	Comput. Methods in ChE
CHE 210 (= CHE 205)	4	Material & Energy Balances
CHEM 232 (CHEM 124/125)	4	Organic Chemistry I
CHEM 233 (= CHEM 232)	2	Organic Chemistry Lab I

**JUNIOR**

Total Hours = 16

Total Hours = 18

CHE 311 (CHE 201, 205, CHE 210)**	3	Transport Phenomena
CHE 301 (CHE 201 & 205)	3	ChE Thermodynamics
CHEM 342	3	Physical Chemistry I
(CHEM124/125, PHYS142, =MATH 210)		
CHEM 234 (CHEM 232)	4	Organic Chemistry II
ECE 210 (PHYS 142, =MATH 220)	3	Elec. Circuit Analysis

CHE 312 (CHE 311)	3	Transport Phenomena II
CHE 313 (CHE 301)	3	Transport Phenomena III
CHE 321 (CHE 301, 210, MATH 220)	3	Chem. Reaction Eng.
HUM/SOC	3	General Education Course
CME 260	3	Property of Materials
(CHEM 122/123, MATH 181, PHYS 141)		
HUM/SOC	3	General Education Course

**SENIOR**

Total Hours = 15

Total Hours = 15

CHE 396 (CHE 312, 313, 321)	4	Senior Design I
CHE 381 (CHE 312)	2	Chemical Eng. Lab I
CHE 330	3	Polymer Science
HUM/SOC	3	General Education Course
CHE ELECTIVE	3	400 Level ChE course or Equiv.
CHE 499	0	Prof. Development Seminar

CHE 397 (CHE 396)*	4	Senior Design II
CHE 341 (CHE 312, 313, 321 & MATH 220)	3	Chemical Process Control
CHE 382 (CHE 381, 313)	2	Chemical Eng. Lab II
ELECTIVE	3	Outside Major
HUM/SOC	3	General Education Course

Total Hours in Major = 128

Legend:

- Milestone Courses: Must be taken in the specified semester to be able to graduate in 4 yrs.  
 ( ) Prerequisites                      ( = ) Concurrent registration                      ( \*\* ) Credit or concurrent registration with MATH 220

**ENGINEERING COURSES**

ENGR. 100	0	Engineering Orientation
CS 109	3	Programming for Eng w/ MatLab
ECE 210	3	Elec. Circuit Analysis
CME 260	3	Properties of Materials
<b>ENGLISH</b>		
Engl. 160	3	English Composition I
Engl. 161	3	English Composition II
<b>MATHEMATICS</b>		
Math 180	4	Calculus I
Math 181	4	Calculus II
Math 210	3	Calculus III
Math 220	3	Intro. to Advanced Math
<b>PHYSICS</b>		
Phys 141	4	General Physics I
Phys 142	4	General Physics II
<b>ELECTIVES</b>		
Individual & Society	3	
U.S. Society	3	
Creative Arts	3	
Exploring World Cultures	3	
Understanding the Past	3	
Elective Outside Major	3	

**CHEMISTRY COURSES**

CHEM 122-Lecture, CHEM123-Lab	5	General College Chemistry I
CHEM 124-Lecture, CHEM125-Lab	5	General College Chemistry II
Chem 222	4	Analytical Chemistry
Chem 232	4	Organic Chemistry I
Chem 233	2	Organic Chemistry Lab I
Chem 234	4	Organic Chemistry II
Chem 342	3	Physical Chemistry I
Chem 346 (selective with CHE 330)	3	Physical Chemistry II
<b>CHEMICAL ENGINEERING SEQUENCE</b>		
ChE 201	3	Intro to Thermodynamics
ChE 205	3	ComputMethods in ChE
ChE 210	4	Material & Energy Balances
ChE 301	3	Thermodynamics
ChE 311**	3	Transport Phenomena I
ChE 312	3	Transport Phenomena II
ChE 313	3	Transport Phenomena III
ChE 321	3	Chemical Reaction Eng.
CHE 330 (selective with CHEM 346)	3	Polymer Science
ChE 341	3	Chemical Process Control
ChE 381	2	Chemical Eng. Lab I
ChE 382	2	Chemical Eng. Lab II
ChE 396	4	Senior Design I
ChE 397	4	Senior Design II
ChE 499	0	Prof. Development Seminar