

**Department of Chemistry  
Undergraduate Program Requirements  
2011-2012**

**BA (General):**

CHEM 121/123L	PHYC 151
CHEM 122/124L	PHYC 151L
CHEM 253L	PHYC 152
CHEM 301	PHYC 152L
CHEM 302	
CHEM 303L	MATH 180/162
CHEM 304L	MATH 181/163
CHEM 315	
Plus 8 hrs. of Chemistry electives CHEM 351L, 421 (or BIOC 423), 425, 431, approved CHEM 471 topics, 495-496 (2 hrs. max)	Credit (CR/NC) grade option is not allowed for PHYC & MATH

**BA (Pre-Med/Pre-Pharm/Biology):**

CHEM 121/123L	PHYC 151
CHEM 122/124L	PHYC 151L
CHEM 253L	PHYC 152
CHEM 301	PHYC 152L
CHEM 302	
CHEM 303L	
CHEM 304L	Math 180/162
CHEM 315	Math 181/163
CHEM 421 or BIOC 423	
Plus 5 hrs. of Chemistry CHEM 351L, 425, 431, approved CHEM 471 topics, 495-496 (2 hrs. max)	Credit (CR/NC) grade option is not allowed for Physics & Math

**BA Pre-Grad:**

CHEM 121/123L	PHYC 160
CHEM 122/124L	PHYC 160L
CHEM 253L	PHYC 161
CHEM 301	PHYC 161L
CHEM 302	
CHEM 303L	MATH 162
CHEM 304L	MATH 163
CHEM 311	MATH 264
CHEM 312	
Plus 6 hrs. of Chemistry from CHEM 421, 425, 431, approved CHEM 471 topics, 495-496 (2 hrs. max) <b>Or</b> 3 hrs. of CHEM 495-496	Credit (CR/NC) grade option is not allowed for PHYC & MATH

**BS Degree:**

CHEM 121/123L	PHYC 160
CHEM 122/124L	PHYC 160L
CHEM 301	PHYC 161
CHEM 302	PHYC 161L
CHEM 303L	
CHEM 304L	MATH 162
CHEM 311	MATH 163
CHEM 312	MATH 264
CHEM 351L	1 course from MATH 311-316
CHEM 352	
CHEM 411L	Credit (CR/NC) grade option is not allowed for PHYC & MATH
CHEM 431	
CHEM 432L	
6 hrs. CHEM electives: CHEM 325-498, 495-498 (3 hrs. max) <b>Or</b> 2 hrs. of CHEM 495-496 and 1 hr. of CHEM 325-326	

**A Distributed Minor:**

1 course from Math 311, 314, or 316 and English 219.

\*Students wishing to have their BS degree certified by the American Chemical Society should include CHEM 421 and 3 hours of research in their 6 hours of electives.

**Minor:**

CHEM 121/123L
CHEM 122/124L
<b>AND</b>
Must complete the course requirements in (2) of the following areas:
Analytical Chemistry: CHEM 253L and 311 or 315
Biological/Biochemistry: 2 courses from CHEM 421, 425, BIOC 423
Inorganic/Physical Chemistry: CHEM 315 (or 311) and 431
Organic Chemistry: CHEM 301, 302, 303L, 304L
Physical Chemistry: CHEM 311, 312
<b>OR</b>
CHEM 121L
CHEM 122L
<b>AND</b>
Pre-Med/Pre-Pharm/Biology: CHEM 253L or 315, plus 301, 302, 303L, 304L and BIOC 423 (or CHEM 421 or 425)

**Departmental Honors:**

The student enters the program at the beginning of the junior year. At this time, the student's GPA must be at least 3.20 overall and 3.50 in Chemistry. This minimum must be maintained throughout the junior and senior years. Course requirements for graduation with honors are as follows: 131L, 132L (or 121, 123L, 122, 124L), 301, 302, 303L, 304L, 311, 312, 351L, 352, 411L, 421, 431, 432L and 6 hours of additional courses from 325-498, including at least 3 hours of 497-498. A senior honors thesis will be written based on the senior honors research and submitted to the faculty. An oral presentation will also be made in a departmental or divisional seminar. Honors students will also take the Graduate Record Examination Advanced Test in Chemistry in their senior year and must obtain a satisfactory score.

**Degree Course Pre-reqs:**

<b>COURSE</b>	<b>PRE-REQ*</b>	<b>SEMESTER TAUGHT</b>
CHEM 121/123L	MATH 121+	SPRING, SUMMER, FALL
CHEM 122/124L	CHEM 121/123L	SPRING, SUMMER, FALL
CHEM 131L	MATH 162+	FALL
CHEM 132L	CHEM 131L	SPRING
CHEM 253L	CHEM 121/122/123L/124L	SPRING, FALL
CHEM 301	CHEM 122/124L	SPRING, SUMMER, FALL
CHEM 302	CHEM 301	SPRING, SUMMER, FALL
CHEM 303L	PRE/CO CHEM 301	SPRING, SUMMER, FALL
CHEM 304L	PRE/CO CHEM 302, 303L	SPRING, SUMMER, FALL
CHEM 311	CHEM 122/124L or 132L; MATH 163+; PHYS 152+	FALL
CHEM 312	CHEM 122/124L or 132L; MATH 163+; PHYS 152+	SPRING
CHEM 315	CHEM 122/124L or 132L; MATH 181+; PHYS 152+	SPRING, FALL
CHEM 411L	CHEM 311 and 312	FALL
CHEM 412	CHEM 311 and 312	SPRING
CHEM 421	CHEM 301 and 302	SPRING
CHEM 425	None	SPRING, FALL
CHEM 431	CHEM 311 or 315	FALL
CHEM 432L	CHEM 431	SPRING
CHEM 433	CHEM 311 or 315	FALL
CHEM 453L	CHEM 253L; MATH 180+	SPRING
CHEM 457	CHEM 253L and 302	SPRING, FALL
CHEM 471	None	SPRING, FALL

All pre-reqs must be completed with a "C" or better.