

Department of Chemistry & Biochemistry  
Northern Kentucky University

MAJOR: Bachelor of Science in Chemistry, Pharmaceutical Sciences Track

	Fall Semester		Spring Semester	
<b>FIRST YEAR</b> <ul style="list-style-type: none"> <li>Meet with freshman specialist; map personal four-year plan.</li> <li>Make use of student support: tutoring, SI, writing center, mathematics lab.</li> <li>Join student clubs.</li> </ul>	CHE 120/L General Chemistry I with Lab	4	CHE 121/L General Chemistry II with Lab	4
	MAT 129 Calculus I <sup>a</sup>	4	MAT 229 Calculus II <sup>a</sup>	5
	Gen Ed: Written Communication	3	Gen Ed: Oral Communication	3
	BIO 150/L Introductory Biology I with Lab	4	BIO 151/L Introductory Biology II with Lab	4
	CHE 125 Intro to Chem and Biochem	1		
	<b>TOTAL</b>	16	<b>TOTAL</b>	16
<b>SECOND YEAR</b> <ul style="list-style-type: none"> <li>Meet with your new area-specific advisor.</li> <li>Investigate summer research, co-op or internship opportunities.</li> <li>Begin to gain career experience appropriate for goals.</li> </ul>	Fall Semester		Spring Semester	
	CHE 310/L Organic Chemistry I with Lab	4	CHE 311/L Organic Chemistry II with Lab	4
	PHY 211 General Physics I with Lab <sup>b</sup>	4	PHY 213 General Physics II with Lab <sup>b</sup>	4
	CHE 340/L Analytical Chemistry with Lab	5	CHE 391W Chemical Information and Writing	3
	Elective	1	Gen Ed Course	3
			Elective	1
<b>TOTAL</b>	14	<b>TOTAL</b>	15	
<b>THIRD YEAR</b> <ul style="list-style-type: none"> <li>Work closely with advisor to fine tune career plans.</li> <li>Contact professors for letters of recommendation.</li> <li>Gather application materials, apply early to desired programs.</li> </ul>	Fall Semester		Spring Semester	
	CHE 482/L Biochemistry I with lab	4	BIO 302/L Microbiology	4
	CHE 360 Physical Chemistry I	3	STA 205 Intro to Statistical Methods	3
	ECO 200 Principles of Macroeconomics	3	BIO 208/L Human Anatomy and Physiology I <sup>c</sup>	4
	Gen Ed Course (x2)	6	Gen Ed Course	3
	<b>TOTAL</b>	16	<b>TOTAL</b>	14
<b>FOURTH YEAR</b> <ul style="list-style-type: none"> <li>Attend pharmacy school!</li> <li>Transfer credits back to NKU to complete degree.</li> </ul>	Fall Semester		Spring Semester	
			Transferred Credit	29
	<b>TOTAL</b>		<b>TOTAL</b>	29
<b>GRAND TOTAL OF CREDITS</b>				<b>120</b>

**Notes:**

<sup>a</sup>Alternatively, the calculus requirement can be met by taking Calculus A, B, and C (MAT 128, 227, and 228).

<sup>b</sup>Alternatively, University Physics I and II (PHY 220 and PHY 222) may be taken. If these courses are chosen, they can be taken spring/fall or fall/fall; PHY 222 is only offered in the fall, but PHY 220 is offered fall and spring.

<sup>c</sup>Students attending Pharmacy School at the University of Cincinnati should also take BIO 209/L, Human Anatomy and Physiology II, prior to the completion of their third year (either by taking BIO 208/L earlier than indicated or in the summer before they start their fourth year).

All majors should begin their mathematics sequence in order to complete calculus II as soon as possible. All majors should also take the chemistry writing course (CHE 391W) as soon as they complete their first 300 level or above chemistry course (usually CHE 310 or CHE 340), as this course is a prerequisite for many other 300- and 400- level lab courses.

Pre-professional majors should work closely with their advisors to ensure that electives are chosen to meet the entrance requirements of their particular postbaccalaureate programs.

In completing the requirements for the B.S. chemistry-pharmaceutical track degree, students also satisfy general education requirements in communication-written II (CHE 391W), natural sciences (CHE 120 and CHE 120L, PHY 211 or PHY 220) and mathematics (MAT 128 or MAT 129).