

SAMPLE 4-YEAR PLAN: CHEMISTRY B.A.

Northern Kentucky University

This is one way a student can complete this program in four years if they require no developmental courses (Mathematics ACT \geq 25, English ACT \geq 18, and Reading ACT \geq 20 or their equivalences). Should a student not meet these requirements, additional developmental courses not listed here will be necessary.

MAJOR: Chemistry

FIRST YEAR	Fall Semester		Spring Semester	
	<ul style="list-style-type: none"> Meet with your freshman specialist; map personal four-year plan that includes a minor. Make use of student support: tutoring, SI, writing center, mathematics lab. Investigate undergraduate research, coop option. Join student clubs. 	CHE 120 General Chemistry I	3	CHE 121 General Chemistry II
	CHE 120L General Chemistry I Laboratory	1	CHE 121L General Chemistry with laboratory	1
	MAT 129 Calculus I ^a	4	MAT 229 Calculus II ^a	4
	Gen Ed: Communication; Written	3	Gen Ed: Communication; Oral	3
	Gen Ed	3	Gen Ed	3
	CHE 125 Intro to Chemistry and Biochemistry	1		
	TOTAL	15	TOTAL	14
SECOND YEAR	Fall Semester		Spring Semester	
<ul style="list-style-type: none"> Meet with your new area-specific advisor – work extremely closely with your advisor if you are an education major. Investigate summer research, coop or internship opportunities. 	CHE 310 Organic Chemistry I	3	CHE 311 Organic Chemistry II	3
	CHE 310L Organic Chemistry I Laboratory	1	CHE 311L Organic Chemistry II Laboratory	1
	PHY 211 General Physics I with Laboratory ^b	5	PHY 213 General Physics with Laboratory II ^b	5
	Minor elective	3	CHE 391W Chemical Information and Writing	3
	Gen Ed	3	Gen Ed	3
	TOTAL	15	TOTAL	15
THIRD YEAR	Fall Semester		Spring Semester	
<ul style="list-style-type: none"> Work closely with advisor to fine tune career plans. Gain career experience appropriate for goals (either through coop, internship, research or volunteer work). Work with Career Services to polish resume, apply for coops. 	CHE 340 Analytical Chemistry	3	Chemistry elective 300 level or above	3
	CHE 340L Analytical Chemistry Laboratory	2	Minor elective 300 level or above	3
	Minor elective 300 level or above	3	Gen Ed	3
	Gen Ed	3	Electives	6
	Electives	5		
	TOTAL	16	TOTAL	15
FOURTH YEAR	Fall Semester		Spring Semester	
<ul style="list-style-type: none"> Attend job fairs, conduct mock interviews with Career Services. Contact professors for letters of recommendation. Celebrate your graduation! 	CHE 360 Physical Chemistry I	3	CHE 361 Physical Chemistry II	3
	CHE 400 Chemistry Seminar	1	CHE 362L Physical Chemistry Laboratory	2
	Minor elective 300 level or above	3	Minor elective 300 level or above	3
	Electives	9	Elective 300 level or above	3
			Elective	3
	TOTAL	16	TOTAL	14
GRAND TOTAL OF CREDITS				120

Notes:

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

b. 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 offered only in the fall, but PHY 220 is offered fall and spring.

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.

Secondary education majors also completing the B.A. in chemistry degree need to take the physical chemistry sequence (CHE 360, CHE 361, and CHE 362L) during their junior year in order to accommodate their student teaching responsibilities during their senior year; they need not complete a minor in addition to their education major.

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