

SAMPLE 4-YEAR PLAN: CHEMISTRY-FORENSICS B.S.

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

TRACK: Forensics

FIRST YEAR	Fall Semester		Spring Semester	
	<ul style="list-style-type: none"> Meet with freshman specialist; map personal four-year plan. 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 II Laboratory	1
	MAT 129 Calculus I ^a	4	MAT 229 Calculus II ^a	5
	Gen Ed: Communication; Written	3	Gen Ed: Communication; Oral	3
	BIO 150 Introduction to Biology I	4	BIO 151 Introduction to Biology II	4
	BIO 150L Introduction to Biology I Laboratory	0	BIO 151L Introduction to Biology II Laboratory	0
	CHE 125 Intro to Chemistry and Biochemistry	1		
	TOTAL	16	TOTAL	16
SECOND YEAR	Fall Semester		Spring Semester	
<ul style="list-style-type: none"> Meet with your new forensics advisor. Join research group. Investigate forensic internship opportunities to gain experience that will be critical in obtaining later employment. 	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 with Laboratory I ^b	5	PHY 213 General Physics with Laboratory II ^b	5
	JUS 101 Introduction to Criminal Justice	3	CHE 391W Chemical Information and Writing	3
	STA 205 Introduction to Statistical Methods	3	BIO 349 Genetics	4
			BIO 349/L Genetics Lab	0
	TOTAL	15	TOTAL	16
THIRD YEAR	Fall Semester		Spring Semester	
<ul style="list-style-type: none"> Work closely with advisor to fine tune career plans. Begin to investigate graduate/professional programs. Register for entrance exams (GRE, MCAT, PCAT). Work with Career Services to polish resume, apply for coops. Continue working to gain forensic coop/internship experience. 	CHE 482 Biochemistry I	3	Gen Ed	3
	CHE 482L Biochemistry I Laboratory	1	JUS 231 Race, Gender and the Law ^c	3
	BIO 400 Advanced Molecular Biology	4	JUS 320 Advanced Crime Scene Technology and Criminalistics ^c	3
	BIO 400L Advanced Molecular Biology Laboratory	0	CHE 350 Instrumental Analysis ^d	3
	JUS 204 Criminal Investigation	3	CHE 350L Instrumental Analysis Laboratory ^d	2
	CHE 340 Analytical Chemistry	3		
	CHE 340L Analytical Chemistry Laboratory	2		
	TOTAL	16	TOTAL	14
FOURTH YEAR	Fall Semester		Spring Semester	
<ul style="list-style-type: none"> Attend job fairs, conduct mock 	CHE 360 Physical Chemistry I	3	CHE 361 Physical Chemistry II	3
	CHE 400 Chemistry Seminar	1	CHE 362L Physical Chemistry	2

<i>interviews with Career Services.</i> <ul style="list-style-type: none"> • <i>Contact professors for letters of recommendation.</i> • <i>Gather application materials, apply early to desired programs.</i> • <i>Plan and complete senior seminar, honors thesis.</i> • <i>Celebrate your graduation!</i> 			Laboratory	
	JUS 205 Criminal Evidence ^c	3	JUS 404 Evidence Preparation and Courtroom Testimony ^c	3
	Gen Ed	3	Gen Ed	3
	Gen Ed	3	JUS 303 Criminal Procedure ^c	3
	TOTAL	13	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.

c Students are strongly encouraged to obtain the minor in criminalistics to complement their B.S., chemistry-forensics track degree. In addition to JUS 101 and JUS 204, which are required for the forensics track, the following courses are needed to complete the criminalistics minor: JUS 205, JUS 231, JUS 303, JUS 320 and JUS 404. Because of the complexity of scheduling this major/minor combination, students are urged to work extremely closely with their advisors.

d Students may alternatively choose BIO 455 Scanning Electron Microscopy in place of instrumental chemistry (CHE 350 and CHE 350L); in this case, students will need to add one elective hour to their program to reach the 120 hours required to graduate.

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. In completing the requirements for the B.S. chemistry-forensics 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), mathematics (MAT 128 or MAT 129) and individual and society (JUS 101). Students choosing the criminalistics minor additionally satisfy global viewpoints (JUS 231).