

B.S. IN FORENSIC AND TOXICOLOGICAL CHEMISTRY

College of the Sciences and Mathematics

Curriculum

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
Academic Foundations		
First Year Experience requirement		4
English Composition requirement		6-7
Mathematics requirement		3-4
Interdisciplinary requirement		3
Diverse Communities requirement		3
Ethics requirement		3
Distributed Disciplinary Foundations		
Science requirement		6-8
Behavioral & Social Science requirement		6
Humanities requirement		6
Arts requirement		3
ADDITIONAL BACCALAUREATE REQUIREMENTS (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
University Requirements		
Writing Emphasis requirement		9
Speaking Emphasis requirement		9
Degree Requirements		
Capstone requirement		1-15
MAJOR REQUIREMENTS		
Major Core Courses ¹		
CHE 103	General Chemistry I	3
CHE 104	General Chemistry II	3
CHE 231	Organic Chemistry I	4
CHE 232	Organic Chemistry II	3
CHE 321	Analytical Chemistry I	3
CHE 418	Chemical Information	1
CHE 476	Biochemistry I	3
CRL 103	General Chemistry I Lab	1
CRL 104	General Chemistry II Lab	1
CRL 231	Organic Chemistry I Lab	2
CRL 321	Analytical Chemistry I Lab	2
PHY 170	Physics I	4
PHY 180	Physics II	4
BIO 110	General Biology I	4
MAT 161	Calculus I	4
MAT 162	Calculus II	4
Other Required Courses ¹		
CHE 341	Physical Chemistry I	4
CHE 361	Forensic Chemistry I	3
CHE 371	Forensic Chemistry II	3
CHE 424	Advanced Analytical Chemistry	3
CHE 451	Internship in Forensic Chemistry	4
CHE 465	Forensic Microscopy	3
CHE 479	Chemical Toxicology	3
CHE 343	Chemistry and the Law	3

CRL 232	Organic Chemistry II Lab	2
CRL 341	Physical Chemistry I Lab	2
CRL 371	Forensic Chemistry Lab	2
CRL 476	Biochemistry I Lab	2
MAT 125	Introduction to Statistics and Probability	3

Lab safety exam must be passed before application for graduation. See advisor for more information

BIO 210	Genetics	3
BIO 210L	Genetics Lab	1
BIO 211	Cell Biology	4
CRL 477	Biochemistry II Lab	2

Capstone Requirement¹

CHE 491	Seminar in Chemistry ²	1
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Total Minimum Required Credits **122**

¹ A grade of C- or better is necessary in all required science and mathematics courses.

² This course fulfills the Capstone requirement.

Sample Course Plan

To track their individual degree progress, students are advised to access their Degree Progress Report (DPR) via myWCU regularly. For more information, visit wcupa.edu/DegreeProgressReport (<http://wcupa.edu/degreeprogressreport/>).

The following is a sample suggested course sequence for this program; course offerings and availability are not guaranteed. Students should consult their academic advisor with any questions.

Course	Title	Credits
Year One		
Fall		
CHE 103	General Chemistry I	3
CRL 103	General Chemistry I Lab	1
MAT 161	Calculus I	4
WRT 120	Effective Writing I	3
FYE 100X	First Year Experience	4
Credits		15
Spring		
CHE 104	General Chemistry II	3
CRL 104	General Chemistry II Lab	1
MAT 121	Introduction to Statistics I	3
MAT 162	Calculus II	4
BIO 110	General Biology I	4
WRT 2XX	200-Level WRT Course	3
Credits		18
Year Two		
Fall		
CHE 231	Organic Chemistry I	4
CRL 231	Organic Chemistry I Lab	2
CHE 321	Analytical Chemistry I	3
CRL 321	Analytical Chemistry I Lab	2
PHY 170	Physics I	4
Credits		15
Spring		
CHE 232	Organic Chemistry II	3
CRL 232	Organic Chemistry II Lab	2
CHE 361	Forensic Chemistry I	3

PHY 180	Physics II	4
BIO 214 or BIO 204	General Microbiology or Introductory Microbiology	4
Credits		16
Year Three		
Fall		
CHE 341	Physical Chemistry I	4
CRL 341	Physical Chemistry I Lab	2
CHE 371	Forensic Chemistry II	3
CRL 371	Forensic Chemistry Lab	2
CHE 418	Chemical Information	1
CHE 433	Advanced Topics in Chemistry ¹	3
BIO 210	Genetics	3
Credits		18
Spring		
CHE 424	Advanced Analytical Chemistry	3
CHE 465	Forensic Microscopy	3
Humanities Gen Ed ²		3
Humanities Gen Ed		3
Arts Gen Ed		3
Credits		15
Year Four		
Fall		
CHE 476	Biochemistry I	3
CRL 476	Biochemistry I Lab	2
CHE 491	Seminar in Chemistry	1
BIO 431	Molecular Genetics	3
Interdisciplinary Gen Ed		3
Behavioral & Social Science Gen Ed		3
Credits		15
Spring		
CHE 451	Internship in Forensic Chemistry	4
CHE 479	Chemical Toxicology	3
CRL 477	Biochemistry II Lab	2
Behavioral & Social Science Gen Ed		3
Credits		12
Total Credits		124

¹ CHE 433 is taken during the semester that it is offered as "Chemistry and the Law." This course is offered every other year. Students should plan accordingly.

² PHI 180 recommended. Also fulfills Diverse Communities and Ethics requirements.