

# B.S. IN FORENSIC AND TOXICOLOGICAL CHEMISTRY

## Curriculum

Code	Title	Credits
<b>GENERAL EDUCATION REQUIREMENTS</b> ( <a href="https://catalog.wcupa.edu/undergraduate/general-education-requirements/">https://catalog.wcupa.edu/undergraduate/general-education-requirements/</a> )		
<b>Academic Foundations</b>		
	First Year Experience requirement	4
	English Composition requirement	6-7
	Mathematics requirement	3-4
	Interdisciplinary requirement	3
	Diverse Communities requirement	3
	Ethics requirement	3
<b>Distributed Disciplinary Foundations</b>		
	Science requirement	6-8
	Behavioral & Social Science requirement	6
	Humanities requirement	6
	Arts requirement	3
<b>ADDITIONAL BACCALAUREATE REQUIREMENTS</b> ( <a href="https://catalog.wcupa.edu/undergraduate/general-education-requirements/">https://catalog.wcupa.edu/undergraduate/general-education-requirements/</a> )		
<b>University Requirements</b>		
	Writing Emphasis requirement	9
	Speaking Emphasis requirement	9
<b>Degree Requirements</b>		
	Capstone requirement	1-15
<b>MAJOR REQUIREMENTS</b>		
<b>Major Core Courses</b> <sup>1</sup>		
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
<b>Other Required Courses</b> <sup>1</sup>		
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 Requirement<sup>1</sup>

CHE 491	Seminar in Chemistry <sup>2</sup>	1
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**Total Minimum Required Credits** **122**

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

<sup>2</sup> This course fulfills the Capstone requirement.

## Sample Course Plan

To track their individual degree progress, students are advised to access their Degree Audit via RamPortal regularly. For more information, visit the Degree Audit FAQ webpage (<https://www.wcupa.edu/academicEnterpriseSystems/student-system-modernization/degree-audit-faqs.aspx>).

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
<b>Year One</b>		
<b>Fall</b>		
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
<b>Credits</b>		<b>15</b>

<b>Spring</b>		
CHE 104	General Chemistry II	3
CRL 104	General Chemistry II Lab	1
MAT 162	Calculus II	4
BIO 110	General Biology I	4
WRT 2XX	200-Level WRT Course	3
<b>Credits</b>		<b>15</b>

<b>Year Two</b>		
<b>Fall</b>		
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
MAT 125	Introduction to Statistics and Probability	3
PHY 170	Physics I	4
<b>Credits</b>		<b>18</b>

<b>Spring</b>		
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 210	Genetics	3
BIO 210L	Genetics Lab	1
<b>Credits</b>		<b>16</b>
<b>Year Three</b>		
<b>Fall</b>		
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 343	Chemistry and the Law	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
CHE 424	Advanced Analytical Chemistry	3
CHE 465	Forensic Microscopy	3
PHI 180	Introduction to Ethics	3
Humanities Gen Ed		3
Arts Gen Ed		3
<b>Credits</b>		<b>15</b>
<b>Year Four</b>		
<b>Fall</b>		
CHE 476	Biochemistry I	3
CRL 476	Biochemistry I Lab	2
CHE 491	Seminar in Chemistry	1
BIO 211	Cell Biology	4
Interdisciplinary Gen Ed		3
Behavioral & Social Science Gen Ed		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
CHE 451	Internship in Forensic Chemistry	4
CRL 477	Biochemistry II Lab	2
CHE 479	Chemical Toxicology	3
Behavioral & Social Science Gen Ed		3
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>122</b>