

B.S. IN 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		
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	3-4
or CSC 141	Computer Science I	
MAT 161	Calculus I	4
MAT 162	Calculus II	4
Other Required Courses ¹		
CHE 341	Physical Chemistry I	4
CHE 342	Physical Chemistry II	3
CHE 411	Advanced Inorganic Chemistry	3
CHE 424	Advanced Analytical Chemistry	3
CRL 232	Organic Chemistry II Lab	2
CRL 341	Physical Chemistry I Lab	2
CRL 342	Physical Chemistry II Lab	2
CRL 411	Inorganic Syntheses Lab	2
CRL 424	Analytical Chemistry II Lab	2

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

Chemistry Electives

Group A Electives:		3
CHE 333	Advanced Organic Chemistry	
or CHE 477	Biochemistry II	
Group B Electives:		6
Select 6 semester hours from upper-division chemistry courses		
Capstone Requirement		
CHE 491	Seminar in Chemistry ^{1,2}	1
Total Minimum Credits Required		120

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 & CRL 103	General Chemistry I and General Chemistry I Lab	4
MAT 161	Calculus I	4
WRT 120	Effective Writing I	3
FYE 100X	First Year Experience	4
Credits		15
Spring		
CHE 104 & CRL 104	General Chemistry II and General Chemistry II Lab	4
MAT 162	Calculus II	4
WRT 2XX	200-Level WRT Course	3
Behavioral & Social Science Gen Ed		3
Credits		14
Year Two		
Fall		
CHE 231 & CRL 231	Organic Chemistry I and Organic Chemistry I Lab	6
CHE 321 & CRL 321	Analytical Chemistry I and Analytical Chemistry I Lab	5
PHY 170	Physics I	4
Credits		15
Spring		
CHE 232 & CRL 232	Organic Chemistry II and Organic Chemistry II Lab	5
CSC 141	Computer Science I	3
PHY 180	Physics II	4
Arts Gen Ed		3
Department Safety Examination		
Credits		15

Year Three		
Fall		
CHE 341	Physical Chemistry I	6
& CRL 341	and Physical Chemistry I Lab	
CHE 409	Descriptive Inorganic Chemistry	3
CHE 418	Chemical Information	1
Humanities Gen Ed		3
Behavioral & Social Science Gen Ed		3
Credits		16
Spring		
CHE 342	Physical Chemistry II	5
& CRL 342	and Physical Chemistry II Lab	
CHE 424	Advanced Analytical Chemistry	5
& CRL 424	and Analytical Chemistry II Lab	
CHE XXX	Chemistry Elective (Group A) ¹	3
Humanities Gen Ed		3
Credits		16
Year Four		
Fall		
CHE 476	Biochemistry I	3
CHE 491	Seminar in Chemistry	1
CHE XXX	Chemistry Elective (Group B) ²	3
Student Electives		6
Credits		13
Spring		
CHE 411	Advanced Inorganic Chemistry	5
& CRL 411	and Inorganic Syntheses Lab	
CHE XXX	Chemistry Elective (Group B) ²	3
Interdisciplinary Gen Ed		3
Student Electives		5
Credits		16
Total Credits		120

¹ Group A chemistry electives include CHE 333 and CHE 477.

² Group B chemistry electives include any approved 300/400-level elective in chemistry.