

Chemistry Education, B.S.

Requirements

The degree in chemistry education prepares a student to teach chemistry in secondary education. Students that complete this degree receive endorsements to teach chemistry. Completion of this program is dependent upon being accepted into the Secondary Education program through the School of Education. There is a great demand for teachers in chemistry and employment opportunities are excellent.

In obtaining this degree, students will learn how to:

- Use modern scientific instruments and interpret results
- Apply principles used in chemistry to solve everyday problems
- Think analytically
- Use problem solving skills
- Categorize information
- Apply learned math skills
- Develop laboratory skills

Total Program Credits: 122

Matriculation Requirements:			
1. Students are admitted directly to the Baccalaureate degree program in Chemistry Education upon acceptance to the Secondary Education Program.			
2. Students must obtain the departmental Advisor's signature on an approved program plan prior to enrollment in their second semester of study.			
Secondary Education Requirements:			
1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.			
2. GPA of 3.0 or higher with no grade lower than a C in content area courses.			
3. Completion of all General Education requirements and the majority of content area courses.			
4. Pass LiveScan Criminal Background Check.			
General Education Requirements:			39 Credits
	ENGL 1010	Introduction to Academic Writing	3
or	ENGH 1005	Literacies and Composition Across Context (5.0)	
	ENGL 2010	Intermediate Writing Academic Writing and Research	3
	MATH 1210	Calculus I	5
Complete one of the following:			3
	HIST 1700	American Civilization (3.0)	
	HIST 2700	US History to 1877 (3.0)	
and	HIST 2710	US History since 1877 (3.0)	
	HIST 1740	US Economic History (3.0)	
	POLS 1000	American Heritage (3.0)	
	POLS 1100	American National Government (3.0)	
Complete the following:			
	PHIL 2050	Ethics and Values	3
	HLTH 1100	Personal Health and Wellness (2.0)	
or	PES 1097	Fitness for Life	2
Distribution Courses:			
	Biology		3
	CHEM 1210	Principles of Chemistry I ¹	4

CHEM 1220	Principles of Chemistry II ²	4
Humanities		3
Fine Arts		3
Social/Behavioral Science		3
Discipline Core Requirements:		83 Credits
Chemistry Discipline Core Courses:		
CHEM 1215	Principles of Chemistry I Laboratory ³	1
CHEM 1225	Principles of Chemistry II Laboratory ⁴	1
CHEM 1250	Chemistry Cornerstone- Research and Careers	1
CHEM 2310	Organic Chemistry I	4
CHEM 2320	Organic Chemistry II	4
CHEM 2315	Organic Chemistry I Laboratory	1
CHEM 2325	Organic Chemistry II Laboratory	1
CHEM 3000	Analytical Chemistry	2
CHEM 3005	Analytical Chemistry Laboratory	2
CHEM 3060	Physical Chemistry I	4
CHEM 3065	Physical Chemistry I Laboratory	1
CHEM 3100	Advanced Inorganic Chemistry	4
CHEM 4200	Teaching Methods in Science	3
MATH 1220	Calculus II	5
PHYS 2210	Physics for Scientists and Engineers I	4
PHYS 2215	Physics for Scientists and Engineers I Lab	1
PHYS 2220	Physics for Scientists and Engineers II	4
PHYS 2225	Physics for Scientists and Engineers II Lab	1
CHEM 3600	Biological Chemistry	3
CHEM 4000	Instrumental Analysis WE	2
CHEM 4005	Instrumental Analysis Laboratory	2
Education Discipline Core Courses: Must be completed with a B- or higher		
EDEL 1010	Introduction to Education	2
EDSC 3000	Educational Psychology	3
EDSC 3250	Instructional Media	2
EDSC 4200	Classroom Management I	2
EDSC 4250	Classroom Management II	2
EDSC 4440	Content Area Literacies	3
EDSC 445G	Multicultural Instruction ESL	3
EDSC 455G	Secondary Curriculum Instruction and Assessment	3
EDSC 4850	Student Teaching--Secondary	8
EDSC 4990	Teacher Performance Assessment Project WE	2
EDSP 340G	Exceptional Students	2

Graduation Requirements:

1. Completion of a minimum of 122 semester credits with a minimum of 40 upper-division credits.

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2. Overall Grade of 3.0 (B) or above with no grade lower than a C or better in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. A minimum of 52 credit hours must be in the major with a minimum of 20 credits taken at UVU. A minimum of 24 chemistry and physics credits must be upper-division.
6. Complete all chemistry courses with a minimum grade of "C-" or better.
7. Successful completion of at least one Global/Intercultural course.

Footnote:
1-To be taken with CHEM 1215 Principles of Chemistry I Laboratory
2-To be taken with CHEM 1225 Principles of Chemistry II Laboratory
3-To be taken with CHEM 1210 Principles of Chemistry I
4-To be taken with CHEM 1220 Principles of Chemistry II

Chemistry Education, B.S.**Graduation Plan**

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in [Wolverine Track](#).

Milestone courses (pre-requisites for a course in one of the subsequent semesters) are marked in red and italicized.

Semester 1	Course Title	Credit Hours
<i>MATH 1210*</i>	Calculus I	5
<i>CHEM 1210*</i>	Principles of Chemistry I	4
<i>CHEM 1215</i>	Principles of Chemistry I Lab	1
<i>CHEM 1250</i>	Chemistry Cornerstone- Research and Careers	1
<i>ENGL 1010</i>	Introduction to Academic Writing	3
HLTH 1100 or PES 1097	Personal Health and Wellness or Fitness for Life	2
	Semester total:	16
Note: *Pre-requisites need to be taken. Please see the advisor.		
Semester 2	Course Title	Credit Hours
<i>MATH 1220</i>	Calculus II	5
<i>CHEM 1220</i>	Principles of Chemistry II	4
<i>CHEM 1225</i>	Principles of Chemistry II Lab	1
ENGL 2010	Intermediate Writing Academic Writing and Research	3
Social/ Behavioral Sci. Distribution	See General Education List	3
	Semester total:	16
Semester 3	Course Title	Credit Hours
<i>CHEM 2310</i>	Organic Chemistry I	4
<i>CHEM 2315</i>	Organic Chemistry I Lab	1
<i>PHYS 2210</i>	Physics for Scientists & Engineers I	4
PHYS 2215	Physics for Scientists & Engineers I Lab	1
Biology Distribution	See general education list	3
American Institutions	See general education list	3
	Semester total:	16
Semester 4	Course Title	Credit Hours
<i>CHEM 2320</i>	Organic Chemistry II	4
<i>CHEM 2325</i>	Organic Chemistry II Lab	1
<i>CHEM 3000</i>	Analytical Chemistry	2
<i>CHEM 3005</i>	Analytical Chemistry Lab	2
<i>PHYS 2220</i>	Physics for Scientists & Engineers II	4
PHYS 2225	Physics for Scientists & Engineers II Lab	1
Humanities Distribution	See general education list	3

	Semester total:	17
Semester 5	Course Title	Credit Hours
<i>CHEM 3060*</i>	Physical Chemistry I	4
<i>CHEM 3065</i>	Physical Chemistry I Lab	1
<i>CHEM 3100</i>	Advanced Inorganic Chemistry	4
<i>CHEM 3600</i>	Biological Chemistry	3
PHIL 2050 or PHIL 205G	Ethics and Values	3
Fine Arts Distribution	See general education list	3
	Semester total:	18
Note: *Pre-requisites need to be taken. Please see the advisor.		
Semester 6	Course Title	Credit Hours
<i>CHEM 4000*</i>	Instrumental Analysis WE	2
<i>CHEM 4005</i>	Instrumental Analysis Lab	2
<i>EDSC 3000</i>	Educational Psychology	3
<i>EDSC 455G</i>	Secondary Curriculum Instruction and Assessment	3
<i>EDSP 340G</i>	Exceptional Students	2
	Semester total:	12
Note: *Pre-requisite and Co-Requisite must be taken. Please see the advisor. **Instructor approval needed.		
Semester 7	Course Title	Credit Hours
<i>CHEM 4200</i>	Teaching Methods in Science	3
<i>EDSC 4200</i>	Classroom Management I	2
<i>EDEL 1010</i>	Introduction to Education	2
<i>EDSC 4440</i>	Content Area Literacies	3
<i>EDSC 445G</i>	Multicultural Instruction ESL	3
<i>EDSC 3250</i>	Instructional Media	2
	Semester total:	15
Semester 8	Course Title	Credit Hours
<i>EDSC 4850</i>	Student Teaching -- Secondary	8
<i>EDSC 4250</i>	Classroom Management II	2
<i>EDSC 4990</i>	Teacher Performance Assessment Project WE	2
	Semester total:	12
	Degree total:	122