

# CHEMISTRY EDUCATION 6-12 (B.ED.) - RESIDENT

**Important:** This degree plan is effective for those starting this degree program in fall 2025 through summer 2026. This degree plan will remain in effect for students who do not break enrollment or who do not change degree programs, concentrations, or cognates.

## General Education/Foundational Skills Requirements

Code	Title	Hours
<b>Communication &amp; Information Literacy</b> <sup>1</sup>		
COMS 101	Speech Communication	3
ENGL 101	Composition and Rhetoric	3
HIUS 221	Survey of American History I	3
Information Literacy Elective		3
<b>Technological Solutions &amp; Quantitative Reasoning</b> <sup>1</sup>		
UNIV 101	Foundational Skills	1
MATH Elective		3
Technology Competency <sup>2</sup>		0-3
<b>Critical Thinking</b>		
ENGL 201	American Literature I	3
RLGN 105	Introduction to Biblical Worldview <sup>3</sup>	2
<b>Civic &amp; Global Engagement</b>		
CSTU 101	Western Culture	3
EVAN 101	Evangelism and the Christian Life <sup>3</sup>	2
<b>Social &amp; Scientific Inquiry</b> <sup>1</sup>		
PSYC 210	Developmental Psychology	3
Natural Science Elective		3
<b>Christianity &amp; Contexts</b>		
BIBL 105	Old Testament Survey	2
BIBL 110	New Testament Survey	2
THEO 201	Theology Survey I <sup>3</sup>	2
THEO 202	Theology Survey II <sup>3</sup>	2
<b>Total Hours</b>		<b>40-43</b>

<sup>1</sup> Refer to the list of approved general education electives before enrolling in foundational skills requirements

<sup>2</sup> All students must pass the Computer Assessment OR complete applicable INFT course refer to [www.liberty.edu/computerassessment](http://www.liberty.edu/computerassessment) for more information

<sup>3</sup> Students transferring in 45 or more UG credit hours will have the requirements of RLGN 105 and EVAN 101 waived; Students transferring in 60 or more UG credit hours will also have the requirements of THEO 201 and THEO 202 waived

As a requirement for completion of this program, including student teaching and passing required licensure tests, the graduate of this program, regardless of state residency, must obtain a VA state teaching license. The VA teaching license may then be used for reciprocity in another state according to the regulations of that state.

## Major Requirements

Code	Title	Hours
<b>Major Foundational Courses</b>		
ENGL 102	Composition and Literature <sup>1</sup>	3
MATH 126	Elementary Calculus for Business and Science <sup>1</sup>	3
PHYS 101	Elements of Physics <sup>1</sup>	3
<b>Total Hours</b>		<b>9</b>

<sup>1</sup> Course may fulfill select general education requirements

Code	Title	Hours
<b>Major Core</b>		
<i>Education Courses</i>		
EDSC 419	Teaching Science Content Methods for the Middle and Secondary School	3
EDUC 201	Introduction to Education and Classroom Technology	3
EDUC 221	Content Area Reading and Differentiated Teaching and Learning	3
EDUC 230	Foundations of Reading and Literacy	3
EDUC 235	Content Instructional Design	3
EDUC 350	Behavior and Individual Differences	3
EDUC 360	Foundations of Education	3
EDUC 425	Content Measurement and Evaluation	3
EDUC 435	Content Curriculum Fundamentals	3
<i>Practicum and Gate Courses</i>		
EDGT 177	School of Education Gate 1 – UG Initial Licensure – Local	0
EDGT 277	School of Education Gate 2 – UG Initial Licensure – Local	0
EDGT 377	School of Education Gate 3 – UG Initial Licensure – Local	0
EDUC 189	Practicum in Education I: Local <sup>1</sup>	0
EDUC 289	Practicum in Education II: Local <sup>1</sup>	0
EDUC 389	Practicum in Education III: Local <sup>1</sup>	0
<i>Secondary Courses</i>		
BCHM 451	Biochemistry I	4
CHEM 121	General Chemistry I	4
CHEM 122	General Chemistry II	4
CHEM 301	Organic Chemistry I	4
CHEM 302	Organic Chemistry II	4
CHEM 321	Analytical Chemistry	4
CHEM 322	Instrumental Analysis	4
CHEM 400	Chemistry Seminar	1
CHEM 461	Physical Chemistry I	3
CHEM 462	Physical Chemistry II	3
CHEM 465	Physical Chemistry I Lab	1
CHEM 466	Physical Chemistry II Lab	1
CHEM 471	Inorganic Chemistry	4
CHEM 495	Supervised Research in Chemistry	1
CHEM 497	Special Topics in Chemistry	1
<i>Student Teaching</i>		
EDST 475	The Reflective Educator: Resource Seminar	3

Code	Title	Hours
<i>Choose one of the following:</i> <sup>1,2</sup>		9
EDST 460	Student Teaching - One Placement – Distance	
EDST 461	Student Teaching - One Placement – Local	
EDST 464	Student Teaching - Own Classroom – Distance	
EDST 465	Student Teaching - Own Classroom – Local	
EDST 466	Student Teaching - Multiple Endorsement - One Placement – Distance	
EDST 467	Student Teaching - Multiple Endorsement - One Placement – Local	
<b>Total Hours</b>		<b>82</b>

<sup>1</sup> Liberty University School of Education Background check is required for all practicums and student teaching

<sup>2</sup> This course should be taken in the final semester.

#### Note:

- All practicum courses should be completed before student teaching, and candidate should not plan to take those courses in summer terms.

All applicable prerequisites must be met

## Graduation Requirements

- 122 total hours
- 3.0 Overall grade point average
- 30.5 Hours must be upper-level courses (300-400 level)
- Grade of 'C' Minimum required for all courses in the major
- 25% Of major taken through Liberty University
- 30.5 Hours must be completed through Liberty University
- Grad App Submission of Degree Completion Application must be completed within the last semester of a student's anticipated graduation date
- CSER All requirements must be satisfied before a degree will be awarded

## Course Sequence

Course	Title	Hours
<b>First Year</b>		
<b>First Semester</b>		
ENGL 101	Composition and Rhetoric	3
INQR 101	Inquiry	1
MATH Elective (MATH 126) <sup>1</sup>		3
Technology Competency <sup>2</sup>		0-3
UNIV 101	Foundational Skills	1
EDGT 177	School of Education Gate 1 – UG Initial Licensure – Local	0
EDUC 201	Introduction to Education and Classroom Technology	3
CHEM 121	General Chemistry I	4
CSER		0
<b>Hours</b>		<b>15-18</b>
<b>Second Semester</b>		
Information Literacy Elective (ENGL 102) <sup>1</sup>		
EVAN 101	Evangelism and the Christian Life	2

Course	Title	Hours
Natural Science Elective (PHYS 101) <sup>1</sup>		4
RLGN 105	Introduction to Biblical Worldview	2
CHEM 122	General Chemistry II	4
EDGT 277	School of Education Gate 2 – UG Initial Licensure – Local	0
EDUC 221	Content Area Reading and Differentiated Teaching and Learning	3
CSER		0
<b>Hours</b>		<b>18</b>

### Second Year

#### First Semester

BIBL 105	Old Testament Survey	2
PSYC 210	Developmental Psychology	3
RSCH 201	Research	3
CHEM 461	Physical Chemistry I	3
CHEM 465	Physical Chemistry I Lab	1
EDUC 189	Practicum in Education I: Local <sup>3</sup>	0
EDUC 235	Content Instructional Design	3
CSER		0
<b>Hours</b>		<b>15</b>

#### Second Semester

BIBL 110	New Testament Survey	2
COMS 101	Speech Communication	3
CSTU 101	Western Culture	3
ENGL 201	American Literature I	3
EDUC 350	Behavior and Individual Differences	3
CSER		0
<b>Hours</b>		<b>14</b>

### Third Year

#### First Semester

THEO 201	Theology Survey I	2
CHEM 301	Organic Chemistry I	4
CHEM 321	Analytical Chemistry	4
EDUC 289	Practicum in Education II: Local <sup>3</sup>	0
EDUC 360	Foundations of Education	3
EDSC 419	Teaching Science Content Methods for the Middle and Secondary School	3
CSER		0
<b>Hours</b>		<b>16</b>

#### Second Semester

HIUS 221	Survey of American History I	3
THEO 202	Theology Survey II	2
CHEM 302	Organic Chemistry II	4
CHEM 322	Instrumental Analysis	4
CHEM 462	Physical Chemistry II	3
CHEM 466	Physical Chemistry II Lab	1
CHEM 497	Special Topics in Chemistry	1
CSER		0
<b>Hours</b>		<b>18</b>

Course	Title	Hours
<b>Fourth Year</b>		
<b>First Semester</b>		
EDGT 377	School of Education Gate 3 – UG Initial Licensure – Local	0
BCHM 451	Biochemistry I	4
CHEM 400	Chemistry Seminar	1
CHEM 471	Inorganic Chemistry	4
CHEM 495	Supervised Research in Chemistry	1
EDUC 389	Practicum in Education III: Local <sup>3</sup>	0
EDUC 425	Content Measurement and Evaluation	3
EDUC 435	Content Curriculum Fundamentals	3
CSER		0
<b>Hours</b>		<b>16</b>
<b>Second Semester</b>		
EDST 475	The Reflective Educator: Resource Seminar	3
Student Teaching Option <sup>3,4</sup>		9
CSER		0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>124-127</b>

<sup>1</sup> Refer to the list of approved general education electives at [www.liberty.edu/gened](http://www.liberty.edu/gened) before enrolling in foundational skills requirements

<sup>2</sup> All students must pass the Computer Assessment OR complete applicable INFT course; refer to [www.liberty.edu/computerassessment](http://www.liberty.edu/computerassessment) for more information

<sup>3</sup> Liberty University School of Education Background check is required for all practicums and student teaching

<sup>4</sup> Choose one of the following Student Teaching options: EDST 460, 461, 464, 465, 466, or 467