

BS IN EDUCATION - CHEMISTRY 6-12 MAJOR

Additional Graduation Requirements (<https://catalog.una.edu/undergraduate/academic-procedures-requirements/graduation-requirements>)

General Education Component

Code	Title	Hours
Area I (Written Composition)		6
Area II (Humanities and Fine Arts)		12
Two literature courses in sequence (EN 211/EN 212, EN 221/EN 222, EN 231/EN 232, EN 233/EN 234)		
One Fine Arts Elective		
COM 201	Fundamentals of Speech	
Area III (Natural Sciences and Mathematics)		11
Area IV (History, Social and Behavioral Sciences)		12
ED 299	Human Growth and Development ¹	
Area V (https://www.una.edu/areav)		21-25
PH 251	Technical Physics I	
PH 252	Technical Physics II	
One course chosen from the following:		
CIS 125	Business Applications of Microcomputer Software	
CS 135	Computer Skills for Problem-Solving	
CS 155	Computer Science I	
Math sequence chosen from the following:		
MA 112 & MA 121 & MA 122	Pre-Calculus Algebra and Calculus for Business and Life Sciences I and Calculus for Business and Life Sciences II	
MA 125 & MA 126	Calculus I and Calculus II	
Total Hours		62-66

¹ The CLEP examination may be taken for this course

Professional Education Secondary (Grades 6-12)

Note: ASBI/FBI background clearance is a prerequisite for all Professional Education Courses.

Code	Title	Hours
ED 292	Preprofessional Seminar and Laboratory Experience	1
ED 381	Instructional Technology for the High School ¹	3
ED 375	Content Literacy	3
EEX 340	Introduction to Students with Exceptional Learning Needs	3
SCED 480	Teaching Science in the Secondary Schools	3
ED 333W	Learning Theories and Student Development	3
ED 382	Curriculum and Teaching I	3
ED 401	Evaluation of Teaching and Learning	3
ED 477	Curriculum and Teaching II	4

ED 482	High School Student Internship	12
Total Hours		38

ALSDE/NCATE Approved Teaching Field: Chemistry

Code	Title	Hours
CH 111	General Chemistry	3
CH 111L	General Chemistry Laboratory	1
CH 112	General Chemistry	3
CH 112L	General Chemistry Laboratory	1
CH 311	Organic Chemistry	4
CH 311L	Organic Chemistry Laboratory	1
CH 312	Organic Chemistry	4
CH 312L	Organic Chemistry Laboratory	1
CH 321	Quantitative Analysis	3
CH 321LW	Quantitative Analysis Laboratory	2
CH 322	Instrumental Analysis	3
CH 322LW	Instrumental Analysis Laboratory	2
CH 341	Applied Physical Chemistry	3
CH 341L	Applied Physical Chemistry Laboratory	1
Total Hours		32

Note:

- Candidates may take the following professional education courses prior to admission to educator preparation: Preprofessional Seminar and Laboratory Experience (ED 292), Content Literacy (ED 375), Instructional Technology for the High School (ED 381), Introduction to Students with Exceptional Learning Needs (EEX 340), and a content methods course.
- Courses that are taken to fulfill general education requirements which are also included in a teaching field may count in both areas.
- Candidates who plan to seek certification in another state should contact the State Department of Education in that state to find out whether or not a comparable certificate exists in that state.
- All requirements must be completed with a minimum of 120 credit hours.