SECONDARY EDUCATION: CHEMISTRY BA/BS

Program Requirements

Secondary certification candidates must meet the graduation requirements for their major and the Secondary Teacher Education Program and must have two advisors. (see below)

Code	Title	Credits
Chemistry Program		
CHEM-112	PRINCIPLES OF CHEMISTRY II	4.00
CHEM-300	PHYSICAL CHEMISTRY I WITH LABORATORY	4.00
CHEM-306	PHYSICAL CHEMISTRY II	3.00
CHEM-325	QUANTITATIVE ANALYSIS	3.00
CHEM-325L	QUANTITATIVE ANALYSIS LABORATORY	2.00
CHEM-371	ORGANIC CHEMISTRY I	3.00
CHEM-372	ORGANIC CHEMISTRY II	3.00
CHEM-373	ORGANIC CHEMISTRY I LAB	1.00
CHEM-376	ORGANIC CHEMISTRY II LAB	2.00
CHEM-454	INSTRUMENTAL ANALYSIS	5.00
CHEM-463	INORGANIC CHEMISTRY	4.00
CHEM-481	BIOCHEMISTRY I	4.00
MATH-170	CALCULUS I (Required if not taken as core)	
MATH-175	CALCULUS II	4.00
PHYS-112	GENERAL PHYSICS II	4.00-5.00
or PHYS-212	PHYSICS FOR SCIENTISTS AND ENGINEERS II	
Secondary Education Certificate		
See Secondary Education Certificate Requirements below		
Total Credits		**46.00-47.00**

[1] See Catalog section "Teacher Education Division: Secondary Teacher Certification" regarding certification requirements for this major. Selective course choices could be affected.

Secondary Education Certificate Requirements

Application for admission to the Teacher Education Program is required after successful completion of the first three Phase I courses.

Code	Title	Credits
Phase I - Professional Foundations of Education		
ED-214	PRINCIPLES OF EDUCATION [1]	3.00
ED-225	TECHNOLOGIES FOR TEACHING, K-12	3.00
ED-318	ASSESSMENT OF LEARNING [1]	3.00
ED-321	EDUCATIONAL PSYCHOLOGY [1]	3.00
ED-345	CULTURALLY RELEVANT TEACHING	3.00
SE-322	INCLUSION STRATEGIES K-12 (may be taken in Phase I or Phase II)	3.00
Phase II - Professional Studies in Education		
ED-445	INSTRUCTIONAL STRATEGIES AND CLASSROOM MANAGEMENT, 6-12	3.00
ED-447	TEACHING METHODS IN THE CONTENT AREA	2.00
RE-309	DISCIPLINARY LITERACY	3.00
Phase III - Instructional Methods in Education		
ED-452	INTERNSHIP SEMINAR	1.00
ED-460	PROFESSIONAL INTERNSHIP IN EDUCATION 6-12	12.00
Total Credits		**39.00**

[1] Additional requirements must be met for teacher certification. See your Teacher Education Division advisor for details.

No grade lower than a "C-" will be accepted in any General Education core, Content Major, or 200-level Professional Foundations course. No grade lower than a "B-" will be accepted in any 300- or 400-level courses for Secondary Education.

A minimum cumulative GPA of 3.0 is required for admission into the Secondary Teacher Education Program. Candidates must also maintain a 3.0 cumulative GPA in their content area classes.

Secondary Education Certificate Requirements

Course	Title	Credits
First Year		
Fall		
ED-214	PRINCIPLES OF EDUCATION	3.00
ED-225	TECHNOLOGIES FOR TEACHING, K-12	3.00
ED-318	ASSESSMENT OF LEARNING	3.00
ED-321	EDUCATIONAL PSYCHOLOGY	3.00
ED-345	CULTURALLY RELEVANT TEACHING	3.00
	Credits	**15.00**
Spring		
ED-445	INSTRUCTIONAL STRATEGIES AND CLASSROOM MANAGEMENT, 6-12	3.00
ED-447	TEACHING METHODS IN THE CONTENT AREA	2.00
RE-309	DISCIPLINARY LITERACY	3.00
SE-322	INCLUSION STRATEGIES K-12	3.00
	Credits	**11.00**
Second Year		
Fall		
ED-452	INTERNSHIP SEMINAR	1.00
ED-461	PROFESSIONAL INTERNSHIP IN EDUCATION K-12	12.00
	Credits	**13.00**
	Total Credits	**39.00**

Graduates with a BA/BS Chemistry: Secondary Education go on to obtain careers in a variety of fields:

- Secondary Chemistry Teacher (6-12)
- Adult and Continuing Education
- Research
- Lab Technician
- Training Specialist
- Business and Industry
- Instructional Coach