

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Bachelor of Arts

Chemistry

Secondary Education Emphasis Area

FRESHMAN YEAR

	Credit
First Semester	
Chem 1-General Chemistry	4
Chem 2-General Chemistry Lab	1
Chem 4-Intro to Lab Safety	1
Math 8-Calculus with Analytic Geometry I	5
English 20-Exposition & Argumentation.....	3
Psychology 50-General Psychology	3
	17

Second Semester

Chem 3-General Chemistry	3
Chem 8-Qualitative Analysis	2
Political Sc 90-American Government	3
Math 21-Calculus w/Analytic Geometry II.....	5
English 60-Writing and Research.....	3
	16

SOPHOMORE YEAR

	Credit
First Semester	
Chem 221-Organic Chemistry I.....	4
Chem 226-Organic Chemistry I Lab	1
Physics 21-General Physics I	4
Physics 22-General Physics I Lab	1
Education 40-Perspectives in Education	2
Education 104-Teacher Field Experience	2
Bio Sc 110-General Biology	3
	17

Second Semester

Chem 223-Organic Chemistry II.....	4
Chem 228-Organic Chemistry II Lab.....	1
Physics 25-General Physics II	4
Physics 26-General Physics II Lab	1
Stat 213-Applied Engineering Statistics.....	3
Education 174-School Organization & Administration for Elementary & Secondary Teachers.....	2
Psychology 208-Psychological & Educational Development of the Adolescent.....	3
	18

JUNIOR YEAR

	Credit
First Semester	
Chem 151-Analytical Chemistry I	4
Physics 6-Environmental Physics I.....	3
Psychology 155-Educational Psychology.....	3
History 175 or 176-American History	3
Education 164-Aiding Elementary, Middle and Secondary Schools	2
Humanities Elective	3
	18

JUNIOR YEAR

	Credit
Second Semester	
Chem 241, 243, or 343-Physical Chemistry	3
Chem 242 or 244-Physical Chemistry Lab.....	1
Speech & Media Studies 85-Principles of Speech	3
History 275-History of Science	3
Education 280-Teaching Methods and Skills in the Content Areas.....	6
Humanities Elective	3
	19

SENIOR YEAR

	Credit
First Semester	
Chemistry Elective.....	4
Chem 310-Undergraduate Seminar	1
Psychology 354-Psychology of the Exceptional Child ...	3
Education 216-Teaching Reading in Content Area.....	3
Education 251-Historical Foundation of American Education.....	3
Humanities Elective	3
	17

Second Semester

Education 298-Student Teaching Seminar	1
Education 299-Student Teaching	12
	13

Students must complete a minimum of 135 credit hours for the Bachelor of Arts in Chemistry degree with a Secondary Education Emphasis Area. The degree program is intended to culminate in a Certification Recommendation for an initial Missouri teaching certification. Students should also consult the Secondary Teacher Education Program section for Teacher Certification requirements through the Education department.

For this Bachelor of Arts degree program, the minor degree and foreign language requirements of the typical program of study are waived and there are other course substitutions in lieu of education coursework and requirements. A total of nine humanities credit hours are required to be selected from Literature 105 or 106, Philosophy 5, Art 80, Music 50, or Theatre 90.

Four hours of a Chemistry Elective must be selected from one or more of the following: Chem 321, 328, 342, 346, 349, 351, 355, 361, 362, 363, 371, 375, 381, 384, 385, and 390. Chem 390 may not count for more than 3 hr credit toward the degree. All chemistry majors are encouraged to do research through Chem 390.

A grade of "C" or better is required for each Chemistry course counted towards the degree.