

CHEMISTRY/BIOCHEMISTRY

Bachelor of Arts in Education (BAE) 122-123 credits total

Major: Chemistry/Biochemistry

Option: Chemistry/Biochemistry in Secondary Education

This major satisfies the endorsement for students planning to teach chemistry in grades 5-12.

DEGREE REQUIREMENTS

Option: Chemistry/Biochemistry/Secondary-76 credits

Required Courses: 51 credits

- CHEM 151 General Chemistry (5)
- CHEM 152 General Chemistry (5)
- CHEM 153 General Chemistry (5)
- CHEM 304 Quantitative Analysis (6)
- CHEM 316 Environmental Chemistry (5) See Dr. Love if substitution is needed.
- CHEM 351 Organic Chemistry (4)
- CHEM 352 Organic Chemistry (4)
- CHEM 372 Organic Chemistry Lab I (3)
- CHEM 421 Physical Chemistry (4)
- CHEM 422 Physical Chemistry (3)
- CHEM 480 Biochemistry (5)
- CHEM 390 Chemistry Methods in Secondary Schools (1)
- SCED 390 Secondary Science Teaching Methods (1)

Required Supporting Courses: 25 credits

- MATH 161 Calculus I (5)
- MATH 162 Calculus II (5)
- PHYS 131 Introductory Physics I (4) or PHYS 151 General Physics I (4)
- PHYS 132 Introductory Physics II (4) or PHYS 152 General Physics II (4)
- PHYS 133 Introductory Physics III (4) or PHYS 153 General Physics III (4)
- PHYS 161 Mechanics Lab (1)
- PHYS 162 Heat & Optics Lab (1)
- PHYS 163 Instrumentation Lab I (1)

See the Department of Education section of the catalog and seek adviser as

Must meet requirements for Computer Literacy CPLA 100(1), CPLA 101(1), CMST 200 (4), ENGL 101(5), ENGL 201(5) or equivalent, MATH 115 (5) or equivalent, and completion of the WEST-E or Praxis II test in order to take EDUC 200 (1) to complete admission to Teacher Education Program (Total of 18-22 credits)

Professional Education Requirements/Secondary

Education: 46-47 credits

Secondary Education 46-47 credits:

- EDUC 201 Intro to Education (3)
- EDUC 303 Foundations of Assessment (3)
- EDUC 341 Secondary Strategies (4)
- EDUC 413 Content Area Reading (4)
- EDUC 419 Classroom Management –Secondary (3)
- EDUC 420 Admission to Profession Candidacy (1)
- EDUC 426 Secondary Student Teaching 7-12 (15)
- EDUC 490 Department Senior Capstone
- CEDP 302 Educational Psychology (5)
- CEDP 363 Introduction to Special Education (4)

*30-hour multicultural education field requirement

One course from the following: 4-5 credits

- AAST/HUMN 214 Intro to African Amer. Culture(5)
- CHST101/ANTH 161 Intro to Chicano Culture (5)
- CMST 340 Intercultural Communication (5)
- EDUC 325 Inequalities & Impacts on Educational Equity (4)
- HIST 313 Asian American History (5)
- IDST 101 Introduction to Indian Studies (5)
- SOCI 320 Race and Ethnic Relations: global Perspectives (5)
- SOCI 321 Sex and Gender (5)

Revised 10/26/09

B.A.E. in CHEMISTRY/BIOCHEMISTRY

Chem/Biochem in Elementary or Secondary option: 76 credits of chemistry
50-52 for secondary education for total of 122-123

NOTICE: This program requires a strong preparation in high school mathematics, chemistry and physics. GEGR = General Education Core Requirement. This sample schedule is based on the 2009-2010 EWU Undergraduate Catalog. Courses are planned to be offered in the quarters shown, but scheduling is not guaranteed. This **sample schedule** is for secondary education. **Must meet requirements for Computer Literacy CPLA 100/101 and English Comp. ENGL 101 or equivalent.**

FIRST YEAR	F	W	S	
CHEM 151,152,153 - (151 = 1 GEGR)	5	5	5	
MATH 161,162 - satisfies mathematics proficiency requirement	5	5		
ENGL 201 - satisfies university writing requirement	5			
GEGR (three)		5	10	
Total Credits	15	15	15	45
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SECOND YEAR				
CEDP 363	4			
PHYS (131,132,133) or (PHYS 151, 152, 153)	4	4	4	
PHYS 161,162,163 -(131,132 or 151,152)& 161,162 = 2 GEGRs	1	1	1	
CHEM 304		6		
EDUC 200, 201	3		1	
CEDP 302		5		
CMST 200	4			
GEGR (two)			10	
Total Credits	16	16	16	48
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THIRD YEAR				
CHEM 351,352	4	4		
SCED 390, CHEM390	2			
CHEM 372			3	
EDUC 303	3			
EDUC 341		4		
EDUC 419	3			
EDUC 413			4	
*CMST 340 or EDUC 325 or *SOCI 320 or SOCI 321		3-5		
International Studies		4		
CHEM 316			5	
Total Credits	12	15-17	12	39-41
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FOURTH YEAR				
CHEM 421, 422	4	3		
CHEM 480	5			
EDUC 490 Senior Capstone		4		
Elective	6	4		
EDUC 420		1		
EDUC 426			15	
Total Credits	15	12	15	42

***Recommended** because it also meets cultural diversity requirement.

Revised 01/22/10