Science and Mathematics Education

Bachelor of Arts, STEM Teaching Program

Four-Year Academic Road Map

Chemistry + STEM Teaching Program
Sample only—your academic advisor will help you create a plan that is right for you.
Upper-division electives will be selected in consultation with your faculty mentor.

YEAR 1	Fall Quarter		Winter Quarter		Spring Quarter	
	UNIV 101	Transition to CWU	K1 Academic Writing	(ex. ENG 111)	K4 Global Dynamics	(ex. HIST 103)
	MATH 153*	Precalculus I	MATH 154	Precalculus II	MATH 172	Calculus I
	CHEM 181	General Chemistry I	CHEM 182	General Chemistry II	CHEM 183	General Chemistry III
	CHEM 181L	General Chemistry Laboratory I	CHEM 182L	General Chemistry Laboratory II	CHEM 183L	General Chemistry Laboratory III
	ENG 101	Academic Writing I				
	Total Quarter Credits		Total Quarter Credits	15	Total Quarter Credits	15

YEAR 2	Fall Quarter		Winter Quarter		Spring Quarter	
	PHYS 111	Introductory Physics I with Laboratory	PHYS 112	Introductory Physics II with Laboratory	PHYS 113	Introductory Physics III with Laboratory
	MATH 173	Calculus II	STP 201	Inquiry Approaches to Teaching	MATH 272	Multivariable Calculus I
	CHEM 361	Organic Chemistry	CHEM 362	Organic Chemistry II	STP 202	Inquiry Based Lesson Design
	CHEM 361L	Organic Chemistry Laboratory I	K2 Community Culture and Citizenship	(ex. WGSS 201)	K3 Creative Expression	(ex. MUS 103)
	Total Quarter Credits	15	Total Quarter Credits	15	Total Quarter Credits	17

YEAR 3	Fall Quarter		Winter Quarter		Spring Quarter	
	CHEM 431	Biochemistry I	CHEM Elective	(ex. CHEM 432)	CHEM 488	Colloquium
	CHEM 431L	Biochemistry Laboratory	CHEM 492	Laboratory Experience in Teaching Chemistry	K8 Science & Technology	(ex. NUTR 101)
	CHEM 381	Physical Chemistry	K5 Humanities	(ex. PHIL 104)	STP 304	Classroom Interactions 1
	STP 303	Knowing and Learning	STP 308	Perspectives on Science, Mathematics, and STEM Education	STP 307A	Functions and Modeling for STEM Teaching
					Elective	
	Total Quarter Credits	14	Total Quarter Credits	14	Total Quarter Credits	17

YEAR 4	Fall Quarter		Winter Quarter		Spring Quarter	
	CHEM 350	Inorganic Chemistry	CHEM Elective	(ex. CHEM 495)	EFC 480	Student Teaching
	CHEM 332	Quantitative Analysis	STP 309	Research Methods	STP 465	Instructing and Assessing Inquiry Based STEM Education
	STP 405	Classroom Interactions II	STP 406	Project-Based Instruction		
			STP 450	Planning Inquiry Based STEM Education		
	Total Quarter Credits	12	Total Quarter Credits	12	Total Quarter Credits	
Total Credits						**180**

*Assumes appropriate Math placement. If your placement suggests a different starting point your advisor will design a plan that fits your needs and helps you build a strong foundation for success.

Other programs to consider: Biology

Department Webpage	CWU Degree Requirements	CWU Course Catalog