



**BACHELOR of SCIENCE in SCIENCE AND MATHEMATICS EDUCATION (#774)**

**General Chemistry Major**

School of Teacher Education

College of Education and Behavioral Sciences

Western Kentucky University

The suggested program of study shown below should be used in consultation with your advisor(s). Every student will finish with a unique plan of his/her own depending on the electives selected.

**Success Markers**

**SAMPLE - 4 year plan**

<b>FIRST YEAR</b>	<b>Fall Semester</b>		<b>Spring Semester</b>	
	Visit <a href="#">The Learning Center</a> for free tutoring	CHEM 120/121 – College Chemistry I (E-NS, LS)	5	CHEM 222/223 – College Chem II
MATH 116 – College Algebra (F-QR)		3	MATH 117 – Trigonometry	3
ENGL 100 Intro to College Writing (F-W1)		3	GEOL 111/113 – The Earth (E-NS)	4
SMED 101 – Intro to Inquiry-Based Approaches to Teaching (E-SB)		1	SMED 102 – Intro to Inquiry-Based Lesson Design (E-SB)	2
World Language (if needed) OR General Elective		3	General Elective	2
<b>TOTAL CREDIT HOURS</b>		<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>16</b>

<b>SECOND YEAR</b>	<b>Fall Semester</b>		<b>Spring Semester</b>	
	Volunteer or Join a Student Organization like <b>Green Toppers</b>	CHEM 330 – Quantitative Analysis	5	CHEM 314 – Intro to Organic Chemistry
PHYS 231/232 – Biophysics I		4	PHYS 332/233 – Biophysics II	4
SMED 310 – Knowing & Learning in Math & Science		3	SMED 340 – Perspectives on Science & Math	3
COMM 145 Human Communication (F-OC)		3	Introduction to Literature Studies (F-AH)	3
<b>TOTAL CREDIT HOURS</b>		<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>

**World Language Proficiency:** All students entering in Fall 2014 or later must demonstrate proficiency in a world language at the Novice High level before completing 60 credit hours. Novice high is the ability to communicate in writing and speaking on familiar topics in simple sentences. To meet this requirement, students may take college language courses or take a proficiency test. For more information go to [www.wku.edu/modernlanguages/placement/](http://www.wku.edu/modernlanguages/placement/).

**Colonnade Program:** All students entering in fall 2014 or later must complete 39 hours in 13 specific Colonnade areas. Colonnade areas are listed in parentheses marked in blue after the corresponding classes. Some areas may have specific course requirements while others can be chosen from selected lists of options. For more details and to see lists of options, go to [http://www.wku.edu/colonnade/documents/approved\\_colonnade\\_courses\\_website.pdf](http://www.wku.edu/colonnade/documents/approved_colonnade_courses_website.pdf)

THIRD YEAR	Fall Semester		Spring Semester	
	Visit <a href="#">Career Services</a>	CHEM 320 – Inorganic Chemistry	3	CHEM 412 – Physical Chemistry
SMED 320 – Classroom Interactions		3	SMED 360 – Research Methods for Math & Science Teachers	3
Art & Humanities (E-AH)		3	HIST 101 World History I OR HIST 102 World History II (E-SB)	3
SPED 300 – Intro to Exceptional Education: Diversity in Learning		3	Connections: Social & Cultural Studies (K-SC)	3
ENGL 300 Writing in the Disciplines (F-W2)		3		
<b>TOTAL CREDIT HOURS</b>		<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>14</b>

FOURTH YEAR	Fall Semester		Spring Semester	
	Apply for Graduation	CHEM 446/447 – Biochemistry I	5	SEC 490 – Student Teaching
SMED 470 – Project Based Instruction		3	SMED 489 – Student Teaching Seminar	3
Connections: Local to Global (K-LG)		3		
CHEM 399 – Research		3		
Connections: Systems (K-SY)		3		
<i>Celebrate!</i>		<b>TOTAL CREDIT HOURS</b>	<b>17</b>	<b>TOTAL CREDIT HOURS</b>

**Total Credit Hours:120**

- Denotes prerequisite courses before admission
- Students seeking admission to the SMED program must earn a grade of C or higher in SMED 101/102 and must meet [requirements for admission to the Teacher Education Program](#).
- The SMED program requires completion of 34 hours of professional education courses taught by SKyTeach Faculty and Master Teachers.
- All professional education courses in Science and Mathematics Education (SMED) require clinical field experiences in order to meet Kentucky Educational Professional Standards Board (EPSB) guidelines

*PLEASE NOTE: Prerequisites, Course Numbers, and Course Titles are subject to change. Consult your advisor each semester.*

**For more Information:** Department: School of Teacher Education Phone: 270-745-5414  
 Website: [www.wku.edu/stc](http://www.wku.edu/stc)  
 Course Descriptions: <http://www.wku.edu/undergraduatecatalog/>

**For more Information:** Department: Chemistry Phone: 270-745-5361  
 Website: [www.wku.edu/chemistry](http://www.wku.edu/chemistry)  
 Course Descriptions: <http://www.wku.edu/undergraduatecatalog/>