

## CHEMISTRY MAJOR

Four Year Plan  
*for students starting in odd years*

**This is a suggested program guide. It is not to be interpreted as a contract. Changes may occur. Please see your program advisor before you register for courses.** updated 8/23

YEAR	FALL	SPRING
First Year	BENV 100 Becoming a Scholar 3 <b>CEM 121 General Inorganic Chemistry 1</b> 5 (CPS 108 Computer Programming 3) MAT 135 Calculus 1 5 Total 16	Writing Well Competency 3 Living Well Competency 2-3 <b>CEM 122 General Inorganic Chemistry 2</b> 5 (MAT 136 Calculus 2 5) Total 15-16
Second Year	BENV 200 Learning in Community 5 <b>CEM 221 Organic Chemistry 1</b> 4 PHY 211 Physics for Science/Engineering 1 5 Total 14	Creative Expression Competency 3 <b>CEM 222 Organic Chemistry 2</b> 4 <b>CEM 230 Analytical Chemistry</b> 4 PHY 212 Physics for Science/ Engineering 2 5 Total 16
Third Year	Speaking and Listening Competency 3 Reading the Bible Competency 3 Electives 3 <b>CEM 330 Advanced Inorganic Chemistry*</b> 4 <b>CEM 360 Instrumental Analysis*</b> 4 Total 17	Understanding Self and Society Competency 3 Electives 6 BENV 300 Cross-cultural Experience 3 <b>CEM 311 Advanced Organic Chemistry*</b> 2 Total 14
Fourth Year	Exploring the Past Competency 3 Religious Understanding Competency 3 Electives 3 <b>CEM 326 Physical Chemistry 1*</b> 5 Total 14	Electives 9 BENV 400 Enduring Values Capstone 2 <b>CEM 327 Physical Chemistry 2*</b> 5 Total 16

124 total hours needed to complete graduation requirements. (This includes 2 hours of arts and lecture credit.)

**Boldface** print denotes major course requirement

\*Alternate year courses

( ) Electives that are very strongly recommended

The following courses are strongly recommended as electives

- MAT 225 Multivariate Calculus 3
- MAT 230 Linear Algebra 3
- MAT 350 Differential Equations and Modeling\* 3

**Note:** The Scientific Inquiry and Critical Analysis Competencies are met by the major.