

B.S. Cheminformatics Degree

A Four Year Outline

FALL	SPRING
FIRST YEAR	
CH1150 University Chemistry I AND 3	CH1160 University Chemistry II AND 3
CH1151 University Chemistry Lab I AND 1	CH1161 University Chemistry Lab II AND 1
CH1153 University Chemistry I Recitation OR 1	CH1163 University Chemistry II Recitation OR 1
CH1112 University Chem-Studio Lab I 5	CH1122 University Chem-Studio Lab II 5
CH1130 Orientation 1	MA2160 Calculus with Technology II 4
PH1100 Physics by Inquiry I 1	PH2100 University Physics I-Mechanics 3
MA1160 Calculus with Technology I 4	UN1002 World Cultures 4
UN1001 Perspectives 3	
CS1121 Intro to Programming I 3	
TOTAL 17	TOTAL 16
SECOND YEAR	
CH2410 Organic Chemistry I 3	CH2420 Organic Chemistry II 3
CH2411 Organic Chemistry Lab I 1	CH2212 Quantitative Analysis 5
CS1122 Intro Programming II 3	CS2321 Data Structures 3
MA2321 Elementary Linear Algebra 2	UN2001 Composition 3
MA3521 Elementary Differential Equations 2	General Education Distribution 3
PH1200 Physics by Inquiry II 1	
PH2200 University Physics II – E&M 3	
UN2002 Institutions 3	
TOTAL 18	TOTAL 17
THIRD YEAR	
CH3510 Physical Chemistry I 3	CH3520 Physical Chemistry II 3
CH4710 Biomolecular Chemistry I or CH4310 Inorganic Chemistry I 3	MA3160 Multivariable Calculus with Technology 4
BL1040 Principles of Biology 4	*Required Elective 3
CS2311 Discrete Structures 3	General Education Distribution 6
CS1141 C for Java Programmers 2	
TOTAL 15	TOTAL 16
FOURTH YEAR	
CS4321 Introduction to Algorithms 3	CH4910 Chemistry Seminar 1
*Required Elective 3	CS4421 Database Systems 3
Free Electives** 4	*Required Elective 3
General Education Distribution 3	Free Electives** 6
	General Education Distribution 3
TOTAL 13	TOTAL 16
GRAND TOTAL = 128 Credits	

* Required Electives must be chosen from the two specified lists. If CH4990 (undergraduate research) is chosen, it must be taken for two semesters for a minimum of 6 credits.

**Free Electives – CH4412 Spectroscopy of Organic Chemistry is recommended for 3 of these credits.

NOTE: 3 Units of co-curricular activities are required (P.E. courses are taught in 0.5 unit classes. Thus, 6 of these are needed for 3 units). It is highly recommended that students take at least one P.E. class during each semester of their first year, if possible.