

## B.S. Cheminformatics Degree

*This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.*

FALL	SPRING
<b>FIRST YEAR</b>	
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	UN1025 Global Issues (OR UN1015 Composition) 3
CS1121 Intro to Programming I            3	
UN1015 Composition (OR UN1025 Global Issues) 3	
<b>TOTAL</b> <b>17</b>	<b>TOTAL</b> <b>15</b>
<b>SECOND YEAR</b>	
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	General Education Core SBS (or HUFA)    3
MA3521 Elementary Differential Equations 2	General Education HASS Distribution      3
PH1200 Physics by Inquiry II               1	
PH2200 University Physics II – E&M        3	
General Education Core HUFA (or SBS)     3	
<b>TOTAL</b> <b>18</b>	<b>TOTAL</b> <b>17</b>
<b>THIRD YEAR</b>	
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 HASS Distribution      6
CS1141 C for Java Programmers            2	
<b>TOTAL</b> <b>15</b>	<b>TOTAL</b> <b>16</b>
<b>FOURTH YEAR</b>	
CS4321 Introduction to Algorithms         3	CH4910 Chemistry Seminar                1
*Required Elective                         3	CS4421 Database Systems                 3
Free Electives**                            8	*Required Elective                        3
	Free Electives**                            6
	General Education HASS Distribution      3
<b>TOTAL</b> <b>14</b>	<b>TOTAL</b> <b>16</b>
<b>GRAND TOTAL = 128 Credits</b>	

\* Required Electives must be chosen from the two specified Major Approved Electives 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.**