

## 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	CH1163 University Chemistry II Recitation OR
CH1112 University Chem-Studio Lab I      5	CH1122 University Chem-Studio Lab II      5
CH1130 PDFC 1: Orientation      1	CS1122 Intro Programming II      3
PH1100 Physics by Inquiry I      1	MA2160 Calculus with Technology II      4
MA1160 Calculus with Technology I      4	PH2100 University Physics I-Mechanics      3
CS1121 Intro to Programming I      3	UN1025 Global Issues (OR UN1015 Composition)      3
UN1015 Composition (OR UN1025 Global Issues)      3	
<b>TOTAL</b> <b>17</b>	<b>TOTAL</b> <b>18</b>
<b>SECOND YEAR</b>	
CH2130 PDFC 2: Career Planning      2	CH2420 Organic Chemistry II      3
CH2410 Organic Chemistry I      3	CH2212 Quantitative Analysis      5
CH2411 Organic Chemistry Lab I      1	CS2321 Data Structures      3
MA2321 Elementary Linear Algebra      2	General Education Goal 8: Social Responsibility & Ethical Reasoning (or Goal 4)      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 Goal 4: Critical & Creative Thinking (or Goal 8)      3	
<b>TOTAL</b> <b>17</b>	<b>TOTAL</b> <b>17</b>
<b>THIRD YEAR</b>	
CH3510 Physical Chemistry I      3	CH3130 PDFC 3: Communication      1
CH4710 Biomolecular Chemistry I or CH4310 Inorganic Chemistry I      3	CH3520 Physical Chemistry II      3
BL1040 Principles of Biology      4	MA3160 Multivariable Calculus with Technology      4
CS2311 Discrete Structures      3	*Required Elective      3
CS1142 Programming at HW/SW Interface      3	General Education HASS Distribution      6
<b>TOTAL</b> <b>16</b>	<b>TOTAL</b> <b>17</b>
<b>FOURTH YEAR</b>	
CS4321 Introduction to Algorithms      3	CH4130 PDFC 4: Senior Seminar      1
*Required Elective      3	CS3425 Intro to Database Systems      3
Free Electives**      6	*Required Elective      3
	Free Electives**      3
	General Education HASS Distribution      3
<b>TOTAL</b> <b>12</b>	<b>TOTAL</b> <b>14</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.**