

B.S. Cheminformatics Degree

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

First Year

Fall

Course	Credit
CH 1150 University Chemistry I AND	3
CH 1151 University Chemistry Lab 1 AND	1
CH 1153 University Chemistry I Recitation	1
CH 1130 PFDC 1: Orientation	1
PH 1100 Physics by Inquiry I	1
MA 1160 Calculus with Technology I	4
CS 1121 Intro to Programming I	3
UN 1015 Composition (OR UN 1025 Global Issues)	3
Total	17

Spring

Course	Credit
CH 1160 University Chemistry II AND	3
CH 1161 University Chemistry Lab II. AND	1
CH 1163 University Chemistry II Recitation	1
CS 1122 Intro to Programming II	3
MA 2160 Calculus with Technology II	4
PH 2100 University Physics I – Mechanics	3
UN 1025 Global Issues (OR UN 1015 Composition)	3
Total	18

Second Year

Fall

Course	Credit
CH 2130 PDFC 2: Career Planning	2
CH 2410 Organic Chemistry I	3
CH 2411 Organic Chemistry Lab I	1
MA 2321 Elementary Linear Algebra	2
MA 3521 Elementary Differential Equations	2
PH 1200 Physics by Inquiry II	1
PH 2200 University Physics II – E&M	3
General Education: Critical & Creative Thinking	3
Total	17

Spring

Course	Credit
CH 2420 Organic Chemistry II	3
CH 2212 Quantitative Analysis	5
CS 2321 Data Structures	3
General Education: Social Responsibility & Ethical Reasoning	3
General Education HASS	3
Total	17

Third Year

Fall

Course	Credit
CH 3510 Physical Chemistry I	3
CH 4710 Biomolecular Chemistry I OR CH 4310 Inorganic Chemistry I	3
BL 1040 Principles of Biology	4
CS 2311 Discrete Structures	3
CS 1142 Programming at HW/SW Interface	3
Total	16

Spring

Course	Credit
CH 3130 PDFC 3: Communication	1
CH 3520 Physical Chemistry II	3
MA 3160 Multivariable Calculus with Technology	4
*Required Elective	3
General Education HASS	3-6
Total	14-17

Fourth Year

Fall

Course	Credit
CS 4321 Introduction to Algorithms	3
*Required Elective	3
**Free Electives	6
General Education HASS	0-3
Total	12-15

Spring

Course	Credit
CH 4130 PDFC 4: Senior Seminar	2
CS 3425 Intro to Database Systems	3
*Required Elective	3
**Free Electives	3
General Education HASS	3
Total	14

Grand Total = 128 Credits

* Required Electives must be chosen from the specified Major Approved Elective list. CH 4990 Undergraduate Research is strongly recommended.

**Free Electives – CH 4412 Spectroscopy of Organic Chemistry is recommended for 3 of these credits.

NOTE: 3 Units of co-curricular activities are required