

**Chemistry - Bachelor of Science (SCH2UG)
Chemistry/Biochemistry - ACS Certified**

Total Credits Required: 128

Major Requirements

Department Core Requirements - 49 credits

Course	Credits
CH1150 University Chemistry I AND	3
CH1151 University Chemistry Lab 1 AND	1
CH1153 University Chemistry Recitation I	1
OR	
CH1112 University Chemistry - Studio Lab I	5
CH1160 University Chemistry II AND	3
CH1161 University Chemistry Lab II AND	1
CH1163 University Chemistry Recitation II	1
OR	
CH1122 University Chemistry - Studio Lab II	5
CH1130 Orientation	1
CH2212 Quantitative Analysis	5
CH2410 Organic Chemistry I	3
CH2411 Organic Chemistry Lab I	1
CH2420 Organic Chemistry II	3
CH2421 Organic Chemistry Lab II	2
CH3510 Physical Chemistry I	3
CH3511 Physical Chemistry Lab I	2
CH3520 Physical Chemistry II	3
CH3521 Physical Chemistry Lab II	2
CH4212 Instrumental Analysis	5
CH4310 Inorganic Chemistry I	3
CH4311 Inorganic Chemistry Lab I	2
CH4710 Biomolecular Chemistry I	3
CH4910 Chemistry Seminar	1

Math/Science Requirements - 24 credits

MA1160 Calculus with Technology I	4
MA2160 Calculus with Technology II	4
MA2321 Elem Linear Algebra AND	2
MA3521 Elem Differential Equations	2
OR	
MA2320 Intro to Linear Algebra AND	2
MA3520 Elem Differential Equations	2
MA3160 Multivariable Calculus with Tech	4
PH1100 Physics by Inquiry I	1
PH1200 Physics by Inquiry II	1
PH2100 Univ Physics I - Mechanics	3
PH2200 Univ Physics II - Elec and Mag	3

Concentration Requirements - 15 credits

Course	Credits
BL1040 Principles of Biology	4
BL4820 Biochem Techniques I	2
CH4720 Biomolecular Chemistry II	3
<i>Choose 1 of the following courses</i>	
BL2200 Genetics	3
BL3310 Environmental Microbiology	3
<i>Choose 1 of the following courses</i>	
BL3300 Introduction to Genomics	3
BL4030 Molecular Biology	3

General Education Requirements - 28 credits

UN1001 Perspectives on Inquiry	3
UN1002 World Cultures *	4
UN2001 Composition	3
UN2002 Institutions	3
Distribution Courses **	15

Free Electives - 12 credits

Note: CH4412 Spectroscopy of Organic Chemistry is recommended for 3 of these credits

Co-Curricular Activities - 3 Units ***

* Two semesters of a single modern language (6 credits) plus UN1003 (1 credit) may be substituted for UN1002.

** From HASS Distribution Course Lists: 6 of the 15 credits must be 3XXX or 4XXX level courses.

*** P.E. courses are taught as 0.5 unit classes. Thus, 6 of these are needed for 3 units.