

Curriculum for the B.S. degree in Chemistry

Introductory Chemistry Courses

(9 credits)

CHY 105 (1 cr) Majoring in Chemistry
CHY 121 (3 cr)/CHY 123 (1 cr) General Chemistry I with lab
CHY 122 (3 cr)/CHY 124 (1 cr) General Chemistry II with lab

Foundation Chemistry Course Work

(22 credits)

CHY 251 (3cr)/CHY 253 (2 cr) Organic Chemistry I with lab
CHY 252 (3 cr)/CHY 254 (2 cr) Organic Chemistry II with lab
CHY 261 (3 cr) Introduction to Inorganic Chemistry
CHY 298 (1 cr) Introduction to Research and the Chemistry Profession
CHY 342 (5 cr) Principles of Quantitative Analysis
CHY 471 (3 cr) Physical Chemistry I

In Depth Chemistry Courses

(18-19 credits)

CHY 393 (3 cr) Undergraduate Seminar in Chemistry
CHY 491 (3 cr) Advanced Integrated Lab I
CHY 492 (3 cr) Advanced Integrated Lab II
CHY 498 (3 cr) Undergraduate Research

Plus **two** chemistry electives chosen from:

CHY 423 (3 cr) Introductory Polymer Chemistry
CHY 431 (3 cr) Structure and Mechanism in Biological Chemistry
CHY 443 (3 cr) Instrumental Analysis
CHY 461 (3 cr) Advanced Inorganic Chemistry
CHY 462 (3 cr) Organometallic Chemistry
CHY 472 (3 cr) Physical Chemistry II
CHY 475 (3 cr) Physical Chemistry III
CHY 477 (3 cr) Nanoscience
CHY 483 (3 cr) Introductory Wood Chemistry
CHY 499 (3 cr) Undergraduate Thesis

(500 level courses may be taken with permission)

Cognate Courses

(16 credits)

PHY 111 or PHY 121 (4 cr) Physics I
PHY 112 or PHY 122 (4 cr) Physics II
MAT 126 (4 cr) Calculus I
MAT 127 (4 cr) Calculus II



Chemistry is an excellent major to combine with other fields such as medicine, pharmacy, environmental science, education, art, nanotechnology, law, or business. The B.S. degree allows flexibility in the schedule so that students have time for the necessary courses in another field.

The B.S. degree is recommended for students who are seeking a double major or a double degree, or who wish to pursue a 5th year M.S. degree in Chemistry. Students interested in the 5th year M.S. should talk with the chair of the Department of Chemistry by the beginning of the third year.

Electives: 44 credits (used to gain significant background in another field and to fulfill the remaining general education requirements as necessary)

Total Credits = 120

*** A grade of C or better must be earned in all required courses (exception: one passing grade of C- or below will be accepted if the overall GPA in CHY courses is at least 2.00).**