

## A. Professional Track (Program A)

### Required Lower-Division Courses: 30 units

CHM 005, 006 General Chemistry I, II (4,4)  
MA 009, 010 Elementary Calculus I, II (4,4)  
MA 019 Multivariable Calculus (4)  
PHY 021, 023 General Physics I, II (4,4)  
PHY 022, 024 Introductory Physics Laboratory I, II (1,1)

### Recommended Lower-Division Courses:

BIO 005 General Biology I (4)  
CS 010 Introduction to Computer Science I (4)  
PHY 040 Differential Equations (4)  
GER 001, 002 Elementary German I, II (4,4)

### Required Upper-Division Courses: ~~39~~ 40 units

CHM 101, 102 Organic Chemistry I, II (4,4)  
CHM 104 Advanced Inorganic Chemistry (4)  
CHM 113 Biochemistry (4)  
CHM 121 Introductory Analytical Chemistry (4)  
CHM 122 Advanced Analytical Chemistry (~~2~~ 3)  
CHM 130, 131 Physical Chemistry I, II (3,3)  
CHM 132, 133 Physical Chemistry Laboratory I, II (1,1)  
CHM 195 Seminar (1)  
CHM 198 Chemical Research (4)  
*One of the following* (4-5)  
PHY 142/143 Circuits and Electronics/Electronics Laboratory (4,1)  
CHM 115 Advanced Biochemistry (4)  
CHM 150 Special Topics (4)  
CHM 160 Advanced Organic Chemistry (4)

All graduating majors in the professional track are required to take the Graduate Record Exam in their senior year.

## B. General Track (Program B)

### Required Lower-Division Courses: 25-26 units

CHM 005, 006 General Chemistry I, II (4,4)

MA 009, 010 Elementary Calculus I, II (4,4)

*One of the following combinations: (9-10)*

PHY 011, 013 Physics for Life Sciences I, II (4,4)

PHY 014 Physics for Life Sciences Laboratory (1)

OR

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

### Required Upper-Division Courses: ~~29~~ 30 units

CHM 101, 102 Organic Chemistry I, II (4,4)

CHM 121 Introductory Analytical Chemistry (4)

CHM 122 Advanced Analytical Chemistry (~~2~~ 3)

CHM 195 Seminar (1)

CHM 198 Research (2)

*One of the following combinations: (4)*

CHM 130 Physical Chemistry I (3)

CHM 132 Physical Chemistry Laboratory I (1)

OR

CHM 135 Introductory Physical Chemistry (3)

CHM 132 or 133 Physical Chemistry Laboratory I or II (1)

*Upper-Division CHM Electives (8)*