

B.A. DEGREE REQUIREMENTS FOR CHEMISTRY

(CHEMISTRY TRACK)

To declare a B.A. major in Chemistry, a student must satisfy either of the following two requirements:

1) Earn a grade of C+ or better in General Chemistry lecture and laboratory courses (CHE106/107/116/117 or honors equivalents, or AP credit for CHE106/107/116/117) AND earn a grade of C or better in CHE 275;

-OR-

2) Earn a grade of A- or better in a General Chemistry lecture course (CHE106/116/109/119) taken at Syracuse University.

Requirements include 36 credits in chemistry core courses, 32 of which are taken in specific courses. Each student's course of study includes the following:

1.) Required Chemistry Core Courses

- CHE 106: General Chemistry Lecture I (3)
 - CHE 116: General Chemistry Lecture II (3)
- OR**
- CHE 109: General Chemistry Lecture I (Honors & Majors) (3)
 - CHE 119: General Chemistry Lecture II (Honors & Majors) (3)

- CHE 107: General Chemistry Lab I (1)
- CHE 117: General Chemistry Lab II (1)

OR

- CHE 129: General Chemistry Lab I (Honors & Majors) (1)
- CHE 139: General Chemistry Lab II (Honors & Majors) (1)

- CHE 275: Organic Chemistry Lecture I (3)
- CHE 276: Organic Chemistry Laboratory I (2)
- CHE 325: Organic Chemistry Lecture II (3)
- CHE 326: Organic Chemistry Laboratory II (2)

- CHE 346: Physical Chemistry Lecture I (3)
- CHE 347: Physical – Analytical Chemistry Laboratory (2)

- CHE 356: Physical Chemistry Lecture II (3)
- CHE 357: Physical Chemistry Laboratory (2)

AND

- CHE 335: Chemical and Biochemical Analysis with Laboratory (4)

OR

- CHE/FSC 444: Forensic Chemical Analysis (4)

2.) At least 4 credits chosen from:

- CHE 411: Inorganic Chemistry (3)
- CHE 412: Metals in Medicine (3)
- CHE 414: Introduction to Medicinal Chemistry (3)
- CHE 422: Inorganic Laboratory Techniques (1)
- CHE 425: Crystallography (3)
- CHE 427: Organic Chemistry of Biological Molecules (3)
- CHE 436: Advanced Physical Chemistry (3)
- CHE 474: Structural & Physical Biochemistry (3)
- CHE 546: Molecular Spectroscopy and Structure (1-9)
- CHE 575 Organic Spectroscopy (3)
- BCM 475: Biochemistry I (3)
- BCM 476: Biochemistry II (3)

or selected graduate courses with the instructor's approval

3.) Required Calculus (one year) and Physics Courses

- MAT 285: Life Sciences Calculus I (3)
- MAT 286: Life Sciences Calculus II (3)

OR

- MAT 295: Calculus I (4)
- MAT 296: Calculus II (2-4)
- PHY 211: General Physics Lecture I (3)
- PHY 212: General Physics Lecture II (3)
- PHY 221: General Physics Laboratory I (1)
- PHY 222: General Physics Laboratory II (1)

Students are encouraged to gain some research experience by enrolling in CHE 450, which may be substituted for a 3-credit course listed in (2) above by petitioning the department.

Students who receive a score of 5 on the AP chemistry exam will receive credit for CHE 106/116 and CHE 107/117 (8 credits)*

*Pre-medical students should consult with Health Professions Advising before accepting AP chemistry credit.

Last updated: August 9, 2017