

B.S. REQUIREMENTS FOR CHEMISTRY (ACCREDITED BY THE AMERICAN CHEMICAL SOCIETY)

To declare a B.S. 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/lab 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.

At least 45 credits in chemistry are required for the B.S. degree. Each student's course of study includes the following:

1. Required Chemistry Core Courses:

- ☐ CHE 106/107: General Chemistry Lecture/Lab **OR** CHE 109/129: General Chemistry Lecture/Lab (Majors/Honors) (4)
- ☐ CHE 116/117: General Chemistry Lecture/Lab II **OR** CHE 119/139: General Chemistry Lecture/Lab II (Majors/Honors) (4)
- ☐ CHE 275/276: Organic Chemistry Lecture/Lab (5)
- ☐ CHE 325/326: Organic Chemistry Lecture/Lab II (5)
- ☐ CHE 346/347: Physical Chemistry Lecture/Lab (5)
- ☐ CHE 356/357: Physical Chemistry Lecture/Lab II (5)
- ☐ CHE 411/422: Inorganic Chemistry Lecture/Lab (4)
- ☐ CHE 450: Introduction to Chemical Research (at least 3 credits)
- ☐ CHE 335: Chemical and Biochemical Analysis with Lab **OR** CHE/FSC 444: Forensic Chemical Analysis (4)
- ☐ BCM 475: Biochemistry (3)

2. At Least 3 Credits Chosen From:

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| <input type="checkbox"/> CHE 412: Metals in Medicine (3) | <input type="checkbox"/> CHE 474: Structural & Physical Biochemistry (3) |
| <input type="checkbox"/> CHE 414: Introduction to Medicinal Chemistry (3) | <input type="checkbox"/> CHE 546: Molecular Spectroscopy and Structure (1-9) |
| <input type="checkbox"/> CHE 427: Organic Chemistry of Biological Molecules (3) | <input type="checkbox"/> CHE 575 Organic Spectroscopy (3) |
| <input type="checkbox"/> CHE 436: Advanced Physical Chemistry (3) | <input type="checkbox"/> BCM 476: Biochemistry II (3) |

or selected graduate courses with the instructor's approval

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

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| <input type="checkbox"/> MAT 295: Calculus I (4) | <input type="checkbox"/> PHY 212: General Physics Lecture II (3) |
| <input type="checkbox"/> MAT 296: Calculus II (2-4) | <input type="checkbox"/> PHY 221: General Physics Laboratory I (1) |
| <input type="checkbox"/> PHY 211: General Physics Lecture I (3) | <input type="checkbox"/> PHY 222: General Physics Laboratory II (1) |

If taken in an appropriate area of research, additional credit in CHE 450 beyond the 3 credits required in (1) above may be substituted for up to 4 laboratory credits with the department's approval.

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.