

University of the Incarnate Word[®]
Bachelor of Arts in Chemistry

School of Mathematics, Science and Engineering

PROGRAM OVERVIEW

Both the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.) in Chemistry develop the next generation of chemists, biochemists and chemically literate citizens through an integrated program of teaching and research.

The Bachelor of Arts (B.A.) in Chemistry degree is designed to give students a strong foundation in the chemical sciences providing for employment or future study in a variety of specialized areas. This degree is recommended for students pursuing a career in chemical research, industry or the health professions.

The department offers a B.A. in Chemistry and a B.S. in Chemistry. Both degree programs are 120 hours and are designed to offer a comprehensive chemistry education built on a strong foundation of chemistry principles and research. Students can expect rigorous programs with significant lab experience and research. As part of their studies, students will have the opportunity to work with high-tech instruments and in the Nuclear Magnetic Resonance (NMR) facility.

Chemistry and biochemistry majors are also encouraged to enrich their studies by participating in research under the direction of faculty as part of their courses, independently or via the Welch Summer Research Series.

They may also pursue advanced work as part of the Cardinal Chemistry Scholars, a National Science Foundation-funded scholarship program that offers professional development and support for research endeavors.

ADMISSION REQUIREMENTS

The requirements for admission to the B.A. in Chemistry program are the same as the requirements for admission to the University of the Incarnate Word.

CONTACT

UIW Admissions
(210) 829-6005
admission@uiwtx.edu

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OUR MISSION.**

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Chemistry (B.A.)

B.A. in Chemistry

FRESHMAN YEAR

Fall

CHEM 1301: Chemical Principles I (3 hours)
 CHEM 1101: Chemical Principles I Lab (1 hour)
 BIOL 1402: General Biology I for Majors and Lab
 (4 hours)
 FYES 1211: First Year Experience Seminar (2 hours)
 ENGL 1311: Composition I (3 hours)
 HIST 13XX: (3 hours)

Total Hours: 16

Spring

CHEM 1302: Chemical Principles II (3 hours)
 CHEM 1102: Chemical Principles II Lab (1 hour)
 ENGL 1312: Composition II (3 hours)
 MATH 1311: Pre-Calculus (3 hours)
 PHIL 1381: Introduction to Philosophy (3 hours)
 Elective (3 hours)

Total Hours: 16

SOPHOMORE YEAR

Fall

CHEM 2311: Organic Chemistry I (3 hours)
 CHEM 2111: Organic Chemistry I Lab (1 hour)
 MATH 2312: Calculus I (3 hours)
 ENGL 2310: World Literature Studies (3 hours)
 CHEM 3160: Intro to Research and Careers (1 hour)
 Modern Language I (3 hours)
 PEHP XXXX: Physical Education (1 hour)

Total Hours: 15

Spring

CHEM 2312: Organic Chemistry II (3 hours)
 CHEM 2112: Organic Chemistry II Lab (1 hour)
 MATH 2313: Calculus II or MATH 2303: Statistics
 (3 hours)
 RELS 13XX (3 hours)
 Modern Language II (3 hours)
 Fine Arts (3 hours)

Total Hours: 16

JUNIOR YEAR

Fall

Chemistry Elective Group I from approved list
 (3-5 hours)
 Minor course (3 hours)
 PHYS 2105: Physics I Lab (1 hour)
 PHYS 2305: Physics I (3 hours)
 RELS/PHIL 33XX (3 hours)

Total Hours: 13-15

Spring

Chemistry Elective group II from approved list
 (3-5 hours)
 Minor course (3 hours)
 PHYS 2106: Physics II Lab (1 hour)
 PHYS 2306: Physics II (3 hours)
 Social Science (3 hours)

Total Hours: 13-15

SENIOR YEAR

Fall

Chemistry Elective Group III from approved list
 (3-5 hours)
 Minor Course (3 hours)
 Minor Course (3 hours)
 Elective (3 hours)

Total Hours: 12-14

Spring

Chemistry Elective Group IV from approved list
 (3-5 hours)
 Minor Course (3 hours)
 Minor Course (3 hours)
 Electives (2-6 hours)

Total Hours: 13-17

Choose four Chemistry elective groups from this list:

- CHEM 3321 Quantitative Analysis and CHEM 3221 Quantitative Analysis Laboratory.
- CHEM 4322 Instrumental Analysis and CHEM 4222 Instrumental Analysis Laboratory.
- CHEM 4331 Physical Chemistry: Thermodynamics and CHEM 4231 Physical Chemistry: Thermodynamics Laboratory.
- CHEM 4332 Physical Chemistry: Quantum Chemistry and CHEM 4132 Physical Chemistry: Quantum Mechanics Lab.
- CHEM 3341 Inorganic Chemistry.
- CHEM 3342 Coordination and Solid State Chemistry and CHEM 3142 Experimental Methods in Inorganic Chemistry.
- CHEM 4351/BIOL 4351 Biochemistry I and CHEM 4251/BIOL 4251 Biochemistry I Laboratory.
- CHEM 4352/BIOL 4352 Biochemistry II and CHEM 4252/BIOL 4252 Biochemistry II Laboratory.

A minimum of 120 hours are needed to complete the B.A. in Chemistry.

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