medical technology, pharmacy, nursing, physical therapy, or other allied health fields
- become a professional / industrial chemist, or
- continue study in chemistry at the graduate level.

Chemistry

Students pursuing a major in Chemistry must complete Math 211-212, Physics 231-232, and meet the following requirements in Chemistry:

I. Major in Chemistry—42 hours

A. Core Requirements: CHE 111, 112, 211, 221, 314, 315, 317, 318, 324, 325, 327, 335, 498
B. Research, 3 hours from: 424 or 425
C. One of: 319, 405, 430, 435

II.Major in Medical Technology

Leading to the Bachelor of Science in Medical Technology

A. Chemistry 111, 112, 211-21, 314-15, 319, 324-25
B. Biology 112, 211, 221, 222, 315, 316, 320
C. Physics 213-214 or 231-232
D. Computer Science (3 hours) and MAT 111 or preferably MAT 211
E. A minimum of 33 hours of Medical Technology at an affiliated hospital as the fourth year of study.

III. Major in Chemical Physics*—105 semester hours

A. Chemistry 111-112, 211, 221, 314-315, 324-325, 317-318, 327, 335 34
B. Physics 231-232, 311, 313, 314; 325 or 420; 430 26
C. PHY 424 or CHE 424; PHY 498 or CHE 498; Upper level PHY or CHE 6
D. Math 211-212, 213, 314 15
E. Engl3o1T99..... 497(1.....5PHY9vy 222, 230)-.....6(916.5(Biology 1)36(12,

Bachelor of Science in Chemical Physics

This program is designed for a student seeking a broad background in the physical sciences with the intention of doing graduate work in chemistry or physics or pursuing secondary teacher licensure in chemistry and physics. It will permit the student to take full advantage of his previous experiences in the sciences and shorten the total time spent in formal education, without reducing the quality of the degree obtained.

Students admitted into this program will be selected from those entering with an above-average preparation in high school science and mathematics, or from those who after one year of college decide to enter the program and who are properly qualified.

Entrance into the program as a freshman will be permitted under the following conditions:

1. Minimum ACT mathematics score of 25
2. Four years of high school mathematics with a B average or better
3. High school chemistry and physics with a B average or better
4. Minimum ACT composite of 26
5. A successful personal interview with a committee appointed from the faculty of the science department

Entrance into the program as a sophomore or junior will be permitted under the

Student Awards

The Academic Excellence Medal is awarded to the graduating senior with the highest average in the major provided the average is not less than 3.5. Before Awards Day, the student must have completed at least 15 credit hours in the major at Union University, exclusive of pass / fail courses. If no major is eligible, the medal will be given to the minor meeting the minimum requirements.

The Chemistry Research Award is given by the faculty of the Department of Chemistry and Physics to the student who presents the best research paper of the year. The research must have been an original piece of work and must have been presented at a state, regional, or national professional chemistry meeting prior to graduation.

The C.R.C. Freshman Chemistry Award, given to encourage and sustain interest in the sciences, is awarded in recognition of outstanding scholastic achievement in Freshman Chemistry.

Whiteaker Freshman Chemistry A

211. Analytical Chemistry (3) S
Prerequisite: CHE 112; Corequisite: CHE 221.
A continuation of the study of fundamental principles including topics in statistics, gravimetric analysis, titrimetric analysis (neutralization, precipitation, complex formation, oxidation-reduction), and spectrophotometric analysis.

221. Analytical Chemistry Laboratory (2) S
Prerequisite: CHE 112; Corequisite: CHE 211.
The application of gravimetric, titrimetric and spectrophotometric quantitative analysis to the study of chemistry. Two three-hour laboratory periods per week.

300. Chemical Safety and Health (1) S
A survey of proper safety policies and procedures associated with the use of hazardous chemicals. Topics include safety awareness, routes of chemicals into the body, personal safety apparatus and its use, identification and types of chemical hazards, literature on chemical hazards, and proper ways to label, handle, store, and dispose of hazardous chemicals.

301. Perspectives in Science (4) F, W

Medical Technology
(Hospital-in-Residence Curriculum*)

411. Clinical Chemistry (6)
The chemical analysis by manual and automated methods of various body fluids (blood, urine, CSF) and the study of their relationship to disease states. Includes instruction in theory and practical laboratory methods.

412. Instrumentation (1)
A study of basic electricity and electronics and the principles, use, and care of instruments found in up-to-date laboratories.

421. Hematology and Coagulation (7)
Application of theory to technical performance in hematological procedures which aid in the classification of anemias, leukemias, and other red and white blood cell abnormalities. Identification of factors involved in bleeding disorders, patient response to