

CHEMISTRY AND BIOCHEMISTRY



Unique opportunities

Through the Summer Research Program in the Sciences (SuRPS), students work with faculty in the Departments of Biology, Chemistry and Physics. The program provides an opportunity for faculty mentors and students to work together on research projects for eight weeks at High Point University. This program is exclusively for HPU students and gives them personal, one-on-one access to some of the top educators in their field of study. Having this kind of experience at an undergraduate level facilitates the transition from undergraduate study to graduate study and provides exceptional prospects for acceptance into the student's top choice program.

Number of jobs for chemists: **98,400**

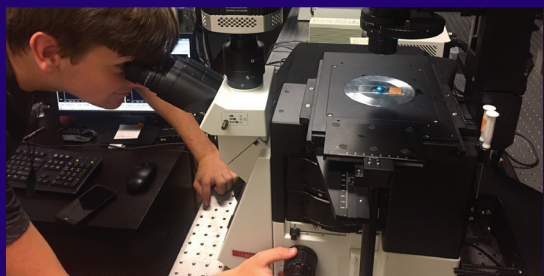
Median pay for all occupations in the U.S.:

\$34,750

Median pay for chemists:

\$72,610

According to the U.S. Bureau of Labor Statistics



What can I do with this major?

Students with degrees in chemistry or biochemistry currently have careers as:

- Chemical engineer
- Chemical health and safety manager
- Crystallography
- Drug discovery
- Environmental engineer
- Forensic chemist
- High school chemistry teacher
- Human resources
- Laboratory management
- Nanotechnologist
- Patent attorney
- Pharmaceutical sales
- Public health consultant
- Toxicologist
- University instructor

Experiential learning

All chemistry and biochemistry majors are strongly encouraged to apply for undergraduate research programs or internships. High Point University students have most recently presented research at the National ACS Meeting, SERMACS and the Big South Undergraduate Research Symposium. Students have also participated in the esteemed National Science Foundation sponsored Research Experiences for Undergraduate Summer Internships (NSF-REU) and have worked at the National Institutes of Health.

Why should I major in chemistry at HPU?

Chemistry majors will be relied upon to resolve many problems of the world such as green energy, eco-friendly food production, battery technology, biomedical devices, semiconductors and recycling.

Chemists are responsible for many of the life-saving drugs and vaccines currently available.

Chemistry connects physical, life and applied sciences, thus preparing you for a variety of career paths. Often called the central science, chemistry is essential for understanding biology, geology, physics and astrophysics.

Chemistry as an undergraduate major allows you to explore many research projects before confirming your thesis or graduate school path.

Innovative study

Breakthroughs in the field of biochemistry have energized and revolutionized the fields of medicine and biotechnology and have transformed the study of biology and chemistry over the past 30 years. The study of biochemistry requires a student to be well-versed in a variety of disciplines, including math, physics, biology and chemistry. While the curriculum prescribes a demanding level of rigor and breadth, it also affords students the opportunity to tailor their choice of upper-level courses in chemistry and biology according to their specific interests.

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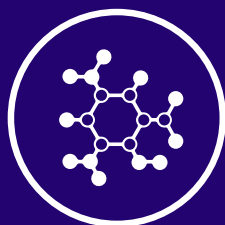
Top pre-professional tracks:

- Dental ■ Pharmacy ■ Physical Therapy
- Medical ■ Physician Assistant ■ Veterinary

What does the future hold?

HPU alumni have gone on to pursue graduate and professional studies at the following institutions:

- American University
- Brown
- California Institute of Technology
- Clemson University
- Colorado State
- Cornell
- Duke
- George Mason
- Georgetown
- Johns Hopkins
- Medical College of SC
- North Carolina State University
- Ohio State University
- Purdue
- Rutgers
- Texas A&M
- Tufts
- University of Bristol, United Kingdom
- University of Illinois Urbana-Champaign
- University of North Carolina
- University of Wisconsin Madison
- University of Virginia
- Vanderbilt
- Virginia Tech
- Wake Forest University



The Wanek School of Natural Sciences is a 128,000 square-foot facility that features four stories of innovative lab and classroom space, as well as the Culp Planetarium. The \$65 million state-of-the-art building, that houses the departments of Biology, Chemistry and Physics, opened in 2019.



Holistic learning

The Department of Chemistry at HPU believes that new knowledge in the chemical sciences is only generated in the laboratory through research. Top programs of undergraduate education in chemistry utilize undergraduate research as the vehicle for the preparation of chemistry majors who not only attend highly competitive graduate and professional programs, but also are sought by these programs. The expectation is that the majority of graduates with this degree will attend graduate or professional schools in the chemical sciences or health-related disciplines.

Meet Jenny

Hometown: Frederick, Md.

Major at HPU: Chemistry

Medical School: West Virginia University School of Medicine

Activities: Division I Women's Soccer, conducting cancer-related research alongside HPU chemistry professors

Internships & Accomplishments: National Cancer Institute, awarded first place in poster research presentation at the Central North Carolina section of the American Chemical Society

How HPU Has Helped Me Grow:

"I am very fortunate to be able to conduct undergraduate research about cancer at High Point University. The problem-solving skills I have developed at HPU, as well as the ability to communicate ideas to others are invaluable. I am confident that all of the skills I have learned through this research opportunity will help me in whatever career path I decide."



For more information about HPU's Chemistry and Biochemistry Program, contact: