

CHEMISTRY

Mission

The Department of Chemistry at West Chester University is a first-tier, full-service department offering American Chemical Society (ACS) approved programs. All classes and laboratories are taught by highly motivated faculty with doctorates. We emphasize teaching and learning through small classes, hands-on laboratory experiences, and student-faculty research. Faculty are selected and rewarded largely on the basis of their teaching performance. Our mission is to prepare you, as a student, to understand the physical world, serve as chemical professionals (including teachers), and undertake advanced study in chemistry and other subjects where chemical insight is central to basic understanding.

Degree Programs

Bachelor of Science in Chemistry. This ACS-approved program prepares you for careers in industry or government and for graduate study. In addition, this program can serve as a platform for such diverse interests as patent law and research management. Graduates are certified to the ACS.

Bachelor of Science in Chemistry – Biology. This pre-professional major prepares you for entry into schools of medicine, dentistry, and veterinary medicine, and for careers in biomedical research. Many of those in this program are also in the pre-medical program, which has an exceptional acceptance rate over the last quarter century. It is affiliated with Drexel University College of Medicine, Penn State University College of Medicine, Philadelphia College of Osteopathic Medicine, Temple University School of Medicine, Lake Erie College of Osteopathic Medicine, Temple University School of Dentistry, Arcadia University's M.S. in physician assistant program, and University of Guelph, Ontario Veterinary College.

Bachelor of Science in Education – Chemistry. This program prepares you for secondary school teaching in chemistry. Those graduating are eligible to earn a Pennsylvania Instructional Level I Certificate. You have the option of additional certification in general science.

Bachelor of Science in Forensic and Toxicological Chemistry. This program is accredited by the Forensic Education Program Accreditation Commission

(FEPAC) and is one of the oldest in the country. It prepares you for positions in toxicological and crime laboratories and includes a one-semester internship in a working forensic or toxicology laboratory.

Facilities

The department has a variety of modern scientific instruments, all of which are used in teaching and undergraduate student research. You will learn to operate and interpret results from many state-of-the-art instruments, such as gas and liquid chromatographs including a number of chromatographs interfaced with other equipment (e.g., mass spec), Fourier-transform infrared spectrometers, 300 and 400 MHz nuclear magnetic resonance spectrometers, ultraviolet-visible spectrometers, atomic absorption spectrometers, a differential scanning calorimeter, an X-ray powder diffractometer, and a mass spectrometer.

In addition, many will have the opportunity to use the department's other specialized instruments (thermo-gravimetric analyzer, catalyst evaluation facility, cyclic voltammeter, particle size analyzer, atmospheric sampler, titration microcalorimeter, etc.), as well as instruments housed in other departments and available for student use, such as transmission and scanning electron microscopes, laser scanning confocal microscope, analytical ultracentrifuge, scintillation counter, and X-ray fluorescence spectrometer.

Computers

You will have the opportunity to become proficient with the use of computers for general and technical applications. All University buildings are connected by the fiber optic links of the Information Services Network. The network provides faculty and student computers with access to general purpose software like Word for Windows, Excel, Power Point, and Access, and to the Internet and World Wide Web. In addition, each student and faculty member is issued a personal mailbox on the network/Internet. Computers for student use are located in the computer center, the residence halls, and in the Department of Chemistry's own student computer laboratory, where computers are equipped with specialized software for chemical computations and graphics.

Learn More

UNDERGRADUATE FACT SHEET

Research/Internship Opportunities

You will have the opportunity to perform scientific research with faculty, or to take part in research as an intern, in a variety of industrial and academic laboratories. Of those students who have participated in research with faculty, 75 have been co-authors of papers published in scientific literature or presented at scientific meetings in the last ten years. Our students have performed internships at Argonne National Laboratories, the Linus Pauling Institute, Oxford University, the Philadelphia Crime Laboratory, University of Pennsylvania Veterinary School, Pennsylvania Health Laboratory, and many others. In particular, the Pennsylvania Equine Toxicology Laboratory is located nearby and has provided many students with internship opportunities.

Graduate Placement

Our graduates have an outstanding record of placement in chemistry-related fields or in graduate or professional schools at the time of graduation. WCU chemists have been successful in chemical, drug, scientific instrument, and environmental companies such as Astra-Zeneca, Atochem, Merck, Pfizer, Perkin-Elmer, P&G, Centocor Corp., Purdue Pharma, Cephalon, The PQ Corporation, E.I. DuPont, DEA, FBI, and various state and local crime labs. In addition, many have successfully completed advanced study in chemistry or medical programs at prestigious graduate schools, such as the Jefferson Medical School, John Jay University, Ohio State University, Texas A&M, University of Delaware, and University of Pennsylvania.

Related Student Activities

Our American Chemical Society student affiliate chapter, the Alchemist Club, has been awarded the Outstanding Honor by the ACS. This award is based on the club's high level of student participation in field trips, voluntary tutoring, and related activities.

Faculty

You can obtain a complete listing of chemistry faculty and their academic qualifications from the contact person listed below or from our Web site.

For More Information

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About West Chester University

A comprehensive, public institution, West Chester University of Pennsylvania offers high-quality undergraduate and graduate degree programs in more than 100 subject areas, as well as certification and certificate programs. As one of the largest members of the Pennsylvania State System of Higher Education, West Chester offers a full and rewarding educational experience as well as reasonable tuition. More than 15,400 graduate and undergraduate students, as well as 1,500 faculty and staff, study and work on the picturesque, 406-acre campus. Strategically located at the center of the mid-Atlantic corridor between New York City and Washington, D.C., West Chester University is just 25 miles west of Philadelphia and 17 miles north of Wilmington.

Information on Admission

Office of Admissions

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