DEPARTMENT OF CHEMISTRY

(See also: Pre-Medical Program (http://catalog.wcupa.edu/undergraduate/sciences-mathematics/pre-medical-program/) and Pharmaceutical Product Development Program (http://catalog.wcupa.edu/undergraduate/sciences-mathematics/pharmaceutical-product-development/))

119 The Science Complex South
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Department of Chemistry (http://www.wcupa.edu/chemistry/)
Mahrukh Azam (mazam@wcupa.edu), Chairperson
Timothy Starn (tstarn@wcupa.edu), Assistant Chairperson

The Department of Chemistry has been approved by the American Chemical Society’s Committee on Professional Training since 1972. Graduates of the B.S. in Chemistry program and the B.S. in Biochemistry program who meet the necessary standards receive ACS certification. Graduates of the B.S. in Forensic and Toxicological Chemistry receive FEPAC certification.

The Department of Chemistry offers four undergraduate degree programs:

• The B.S. in Chemistry program (approved by the American Chemical Society [ACS]) provides a rigorous scientific foundation in all major areas of chemistry. This degree prepares the graduate for a career in a wide variety of chemically related areas including the chemical, petroleum, environmental, and pharmaceutical sectors. In addition, it serves as a basis for graduate and professional study leading to higher level industrial positions, teaching at the college level, or involvement in technical aspects of related fields such as law.

• The B.S. in Biochemistry program (approved by the American Chemical Society [ACS]) provides a comprehensive background in the major areas of chemistry with an emphasis in biochemistry. Students awarded this degree will be qualified for employment opportunities in chemistry and biochemistry. The program also prepares students for graduate study in chemistry and in biochemistry.

• The B.S. in Chemistry-Biology program provides the core courses required for admission to schools of medicine, dentistry, and veterinary medicine as well as schools of optometry, podiatry, chiropractic, and physical therapy. It also enables the student to pursue a career in biochemistry, molecular biology, and medicinal chemistry.

• The B.S. in Forensic and Toxicological Chemistry program (accredited by Forensic Science Education Programs Accreditation Commission [FEPAC]) prepares students for careers in criminalistics and toxicology. The program also serves as a basis for graduate study and specialization in these fields. A one-semester internship in a toxicology or forensic-chemistry laboratory is required for this program. Only those students who successfully complete the internship interview and pass the safety exam will obtain this internship. (A background check and additional site-specific requirements may also be necessary.)

Majors in the four B.S. programs should consult the Department of Chemistry handbook and their advisor for current requirements, particularly regarding internships. A grade of C- or better is necessary in all required science and mathematics courses.

Undergraduate Research and Internship Programs

Although internships are not a mandatory part of all chemistry programs, they are available to majors on a selective basis. Students receive varying amounts of credit based on the number of hours spent in a work situation and on the nature of the academic work during the internship or research. Credit varies from one to 12 credits. The number of research or internship credits taken may be limited by the department.

Programs

Majors

• B.S. in Biochemistry (http://catalog.wcupa.edu/undergraduate/sciences-mathematics/chemistry/biochemistry-bs/)
• B.S. in Chemistry (http://catalog.wcupa.edu/undergraduate/sciences-mathematics/chemistry/chemistry-bs/)
• B.S. in Chemistry-Biology (http://catalog.wcupa.edu/undergraduate/sciences-mathematics/chemistry/chemistry-biology-bs/)
• B.S. in Forensic and Toxicological Chemistry (http://catalog.wcupa.edu/undergraduate/sciences-mathematics/chemistry/forensic-toxicological-chemistry-bs/)

Minor

• Chemistry (http://catalog.wcupa.edu/undergraduate/sciences-mathematics/chemistry/chemistry-minor/)

Graduate Opportunities

See the graduate catalog for more information on the Chemistry programs. (http://catalog.wcupa.edu/graduate/sciences-mathematics/chemistry/)

Policies

• See undergraduate admissions information. (http://catalog.wcupa.edu/general-information/admissions-enrollment/undergraduate-admissions/)
• See academic policies. (http://catalog.wcupa.edu/undergraduate/academic-policies-procedures/)

All undergraduate students are held to the academic policies and procedures outlined in the undergraduate catalog. Students are encouraged to review departmental handbooks for program tips, suggested course sequences, and explanations of procedures. When applicable, additional policies for specific department programs may be listed below.

Faculty

Professors

Mahrukh Azam (mazam@wcupa.edu) (2004)
Chairperson, Chemistry
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Roger Barth (rbarth@wcupa.edu) (1985)
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Assistant Chairperson, Chemistry
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Associate Professors

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**Instructors**

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Mark Shuman (mshuman@wcupa.edu) (2015)
B.S., Georgetown University; Ph.D., University of Pennsylvania

**Courses**