UNDERGRAD

CHEMISTRY

SIUe

College of Arts and Sciences • Department of Chemistry

Degrees Available at SIUE

- B.A, Chemistry
- B.S., Chemistry
- Specializations: ACS Certified Chemistry, Biochemistry, Medical Sciences
- B.S., Chemistry + Secondary Teaching Certification
- B.S./M.S., Chemistry (3 + 2 years)
- Minor
- Doctor of Dental Medecine CD.M.D/3 + 4 Program

Why Chemistry?

Chemistry is the study of matter and the interaction of chemical substances, properties and their reactions. Chemists are at the forefront of most basic research and application and are involved in the creation of new materials and processes around the globe.

Chemistry at SIUE

The hallmark of SIUE's chemistry program is flexibility and excellence. Last year we had the largest graduate enrollment for Master only institutions in the country. The Department's graduate program offers extensive research facilities open to both undergraduate and graduate students. Mindful of the diverse career opportunities available, the Department of Chemistry offers several undergraduate degree programs and active research opportunities in all the major disciplines of chemistry as well as biochemistry. For chemistry majors, there are five degree options: a bachelor's of arts degree for those pursuing general chemistry; a more structured program leading to a bachelor of science degree; and a specific course track that leads to certification by the American Chemical Society (ACS). For those seeking a career in teaching, the Department offers a B.S. degree in chemistry along with secondary teaching certification in collaboration with SIUE's School of Education. Exceptional undergraduates may apply for admission to SIUE's combined B.S./M.S. chemistry track whereby both degrees can be earned in five years (3 + 2).

Career Outlook

Those with degrees in chemistry can be found in almost any scientific field and in a variety of career settings, including manufacturing and medicine, education, environmental industries and even public policy. The degrees also serve as an excellent foundation for those interested in postgraduate career tracks, including medicine, pharmacy, environmental science, veterinary medicine, computer science, law and Master and Doctoral level study.

Admission Requirements

Students must meet all University admission requirements and the following additional Department requirements:

- At least three years of college preparatory mathematics (2 years of Algebra, 1 year of geometry) completed in high school
- Admission to a degree program in chemistry requires an application for a major and acceptance by the department

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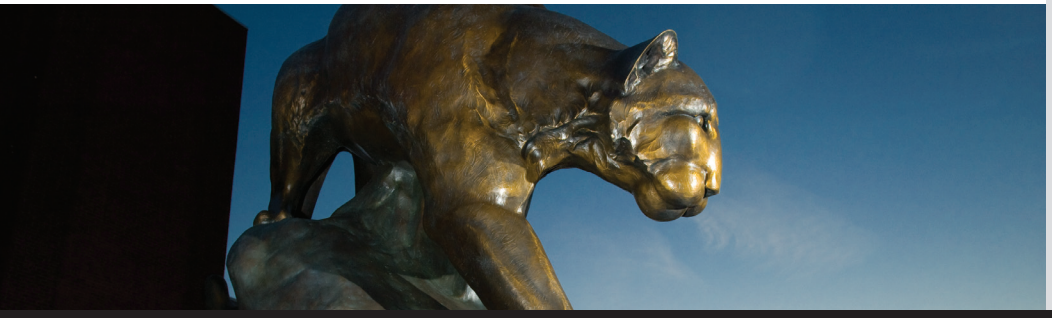

Faculty

Distinguished Research Professors

O'Brien, Leah C., Ph.D.
1987, University of Arizona, Tucson

Patrick, Timothy B., Ph.D.
1967, West Virginia University

Professors

Eilers, James E., Ph.D.
1971, Case Western Reserve University

Johnson, Kevin A., Ph.D.
1996, Clemson University

Khazaeli, Sadegh, Ph.D.
1982, Michigan State University

Shaw, Michael J., Ph.D.
1993, University of British Columbia – Vancouver

Vandegrift, Vaughn. (Chancellor), Ph.D.
1974, Ohio University

Associate Professors

Dixon, Robert P. (Chair), Ph.D.
1993, University of Pittsburgh

Lu, Yun, Ph.D.
1996, Nankai University

Shabangi, Masangu, Ph.D.
1999, University of Toledo

Shabestary, Nahid, Ph.D.
1984, Michigan State University

Voss, Eric J., Ph.D.
1992, Northwestern University

Assistant Professors

De Meo, Cristina, Ph.D.
2001, University of Georgia – Athens

Navarre, Edward, Ph.D.
2002, University of Vermont

Wei, Chin-Chuan, Ph.D.
1998, City University of New York

Wiediger, Susan D., Ph.D.
1999, Rice University

SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE
COLLEGE OF ARTS & SCIENCES

Sample Four-Year Curriculum - BS

	FALL	SPRING
YEAR 1	**CHEM 121a** General Chemistry (4) **CHEM 125a** eneral Chemistry Lab (1) ENG 101 Composition (3) **MATH 150** Calculus I (INSM) (5) SPC 103 or 105 Speech Communication (3) Total 16	**CHEM 121b** General Chemistry (4) **CHEM 125b** General Chemistry Lab (1) ENG 102 Composition (3) **MATH 152** Calculus II (5) PHIL 106 or MATH 106 (3) Total 16
YEAR 2	CHEM 331 Quantitative Analytical Chemistry (3) CHEM 335 Quantitative Analytical Chem Lab (1) **CHEM 241a** Organic Chemistry (3) **PHYS 151** University Physics (INSM) (4) **PHYS 151L** University Physics Lab (1) Introductory Fine Arts & Humanities (IFAH) (3) Total 15	**CHEM 241b** Organic Chemistry (3) **CHEM 245** Organic Chemistry Lab (2) **CS 140 or STAT 107, 244**, 380, or 480 (3-4) **PHYS 152** University Physics (DNSM) (4) **PHYS 152L** University Physics Lab (1) Introductory Fine Arts & Hum (IFAH) or Intro Soc Sci (ISS) (3) Total 16-17
YEAR 3	CHEM 361a Physical Chemistry (3) CHEM 365a Physical Chemistry Lab (2) CHEM 451a Biochemistry (3) Distribution Fine Arts & Humanities (DFAH) (3) Interdisciplinary Studies (IS) (3) Introductory Social Sciences (ISS) (3) Total 17	CHEM 361b Physical Chemistry (3) CHEM 365b Physical Chemistry Lab (1) CHEM Elective (3) Distribution Social Sciences (DSS) (3) Intergroup Relations (IGR) (3) Elective (3) Total 16
YEAR 4	CHEM 411 Inorganic Chemistry (3) CHEM 415 Inorganic Chemistry Lab (2) Elective (3) Elective (3) Elective (2) Total 13	CHEM 431 Instrumental Analysis (3) CHEM 435 Instrumental Analysis Lab (1) CHEM 499 Senior Assignment (0) CHEM Elective (2) International Issues/International Culture (II/IC) (3) Elective (3) Elective (3) Total 15

* Students pursuing a bachelor of arts degree will complete **one year of foreign language** in lieu of SPC 103/104/105 and PHIL 106/MATH 106
** **MATH 150 and PHYS 111 may be substituted for PHYS 131A and B**

TRANSFER STUDENTS Maximize your transfer experience - complete the **bolded** courses/requirements pre-transfer **AND** satisfy the Illinois Articulation Initiative (IAI) General Ed Core or receive an AA, AS, or AAT (early childhood, special ed, or math) degree from an IAI community college. If 'Minor' requirements are shown, discuss careful course selection with the academic advising contact listed. Transfer Credit Equivalency Guides are located at ***siue.edu/transfer/***

BA degree requires two semesters of same foreign language.

Exit Requirements

- Earn a minimum of 124 hours (130 for Chemistry - Secondary Education with Certification) of acceptable credit with a cumulative grade point average of 2.0 or higher.
- Complete at least 12 hours of SIUE credit in major courses numbered above 299 with a cumulative grade point average of 2.0 or above.
- Earn a GPA of 2.0 or above in all major courses numbered above 299.
- Complete at least 6 hours of SIUE credit in major courses numbered above 299 within 2 years preceding graduation.

Application Deadline

Please contact the department for all appropriate application deadlines.

Academic Advising Information

College of Arts and Sciences Undergraduate Advising
Southern Illinois University Edwardsville
Campus Box 1609
Edwardsville, IL 62026-1609
618.650.5525

Contact Info

Department of Chemistry
Science Building, Box 1652
Southern Illinois University Edwardsville
Edwardsville, Illinois - 62026-1652
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Fax: 618.650.3556
rdixon@siue.edu