

# Environmental Sciences

## Degrees Available at SIUE

- Master of Science in Environmental Sciences

## Emphasis Options

- Environmental Biology
- Environmental Chemistry and Toxicology
- Environmental Education
- Environmental Policy and Public Administration
- Environmental Technology and Assessment

## Program Format

The program can be completed through a mix of traditional daytime courses, evening courses, and online courses.

## Environmental Sciences at SIUE

The mission of the environmental sciences graduate program is to cultivate students' perspectives of environmental issues and provide students with refined knowledge of environmental issues at the local, regional and global scale. The program will increase the student's technical competence in addressing and analyzing these issues, their origins, ramifications and resolutions. The environmental sciences graduate program at SIUE is designed to enhance and promote professional education and career opportunities in a wide area of interests.

Faculty from several departments in the College of Arts and Sciences provide mentoring, direction and instruction. Practicing professionals also lend their expertise to this program. A close relationship is maintained with industries and environmental agencies so that both students and faculty members can incorporate real-world issues in their studies and research.

The program offers challenging environmental research opportunities, which may be related to the campus, home, municipality, business and industry, state or federal government, consulting firms, and various advocacy groups. The department has access to a variety of instrumentation, such as an atomic absorption spectrometer, an Inductively-Coupled Plasma-Mass Spectrometer, computer access to Geographical Information System, several gas and liquid chromatographs, a mass spectrometer, nanoparticle analyzer, carbon-nitrogen-sulfur analyzer, a variety of sampling equipment (automated water samplers, low and high volume air samplers, several soil and sediment coring devices) and real-time PCR. In addition, the program has several field sites for long-term environmental monitoring studies, including recently developed experimental filter strips and restored Oak Savannah Prairie.

## Career Opportunities

Students completing the graduate program in environmental sciences have career opportunities with governmental agencies, private industries, consulting firms and educational institutions. Areas of responsibility may include environmental field or laboratory research and analysis, environmental policy and law, environmental remediation, solid and hazardous waste management, groundwater pollution control, water management, air quality management, environmental and ecological risk assessments, and restoration environmental engineering. According to a recent report by the U.S. Department of Labor, employment of environmental scientists and specialists is projected to grow 11 percent through 2026, which is faster than the average for all occupations in the United States.

## Admission Requirements

- Graduate School application and \$40 fee
- Submission of all postsecondary academic transcripts
- Admission to this program requires a positive recommendation from the Environmental Sciences Admission Committee. The program requires all prospective students to submit a letter stating their academic and professional goals.
- The GRE is required for those students whose undergraduate GPA is below 3.0 (4.0 scale).
- Additionally, for those students whose GPA is below 2.75 (4.0 scale), two letters of recommendation are required.



## Faculty

**Zhi-Qing Lin, PhD**  
*Graduate Program Director*  
*Professor*  
McGill University

**Nathaniel Femi Adegboyega, PhD**  
*Assistant Professor*  
Florida Institute of Technology

**Ben Greenfield, PhD**  
*Assistant Professor*  
University of California - Berkeley

**Nicholas P. Guehlstorf, PhD**  
*Professor and Chair*  
Purdue University

**Sharon Locke, PhD**  
*Associate Professor*  
University of Minnesota

**Adriana E. Martinez, PhD**  
*Assistant Professor*  
University of Oregon

**William A. Retzlaff, PhD**  
*Distinguished Research Professor*  
Clemson University

**Christopher W. Theodorakis, PhD**  
*Professor*  
University of Tennessee

**Kyong Sup Yoon, PhD**  
*Assistant Professor*  
University of Massachusetts

## Admission Requirements, Cont.

- Applicants with less than a 2.5 GPA will ordinarily not be admitted. Students entering any of the areas of emphasis must have a baccalaureate degree in an appropriate academic major. Computer literacy is strongly encouraged.
- International Applicants: Proof of English Proficiency, minimum requirements are TOEFL (79), IELTS (6.5) or equivalent

Program application materials may be uploaded during the application process, but official transcripts must be sent directly from the school attended, and test scores must be verifiable with the appropriate testing service. Please contact the Graduate Admissions office with questions regarding the application submission process at [graduateadmissions@siue.edu](mailto:graduateadmissions@siue.edu).

Competitive graduate assistantships through the Department of Environmental Sciences and Competitive Graduate Awards through the Graduate School are available.

## Graduation Requirements

Each student is required to complete a research thesis or non-thesis paper. With advisement and agreement of the thesis committee, students may select their own research topic. Students are encouraged to work with faculty on their ongoing research projects. Because of career enhancements, students are encouraged to select the thesis option.

Following the completion of the program of study, including the thesis or non-thesis paper, the student will present the thesis or non-thesis paper, open to the public, to the graduate advisory committee for critique. Student must also pass a final oral examination administered by the graduate advisory committee.

## Curriculum

The master of science in environmental sciences requires a minimum of 33 hours of graduate work for those students electing to complete a thesis and 38 hours of graduate work for those students electing to complete a non-thesis paper.

Students will choose one of five emphasis options.

Within the first semester of study, the student must select a graduate faculty member as thesis (or non-thesis) chairperson for graduate advisory committee. The chairperson will advise the student on coursework and research. Within the first year of study, the graduate advisory committee must be complete, consisting of the chairperson and two or more additional graduate faculty members. The graduate advisory committee should consist of faculty with expertise or interests that are appropriate to the student's academic background, goals, and career interests. The graduate advisory committee and the student will develop a research project outline and will determine before the work begins whether the project is to result in a thesis or a non-thesis paper. The research project is then approved for initiation and supervised by the committee chairperson.

## Contact Information

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