Geoscience PhD

COLLEGE OF SCIENCE AND TECHNOLOGY

Learn more about the Doctor of Philosophy in Geoscience.

About the Program

The Department of Earth and Environmental Science offers a PhD program that includes graduate courses in the geosciences, weekly graduate seminars, qualifying exams, and research leading to a doctoral dissertation.

Time Limit for Degree Completion: 7 years

Campus Location: Main

Full-Time/Part-Time Status: Full-time status is expected.

Areas of Specialization: Advanced courses and research opportunities are available in:

- Environmental geology, including ecohydrology, energy and land degradation, environmental geophysics, groundwater modeling, ice sheet stability and climate change, Karst hydrology, nanomineralogy and urban hydrology.
- Geochemistry, including nanomineralogy, paleontology-fossil provenance, planetary geology, and weathering and diagenesis.
- Sedimentary geology and paleontology, including coastal and aeolian dynamics, ichnology, paleontology-fossil provenance, paleopedology and modern soils, planetary geology and impact studies, and Precambrian geology.
- Structural geology, including geothermal energy and geomechanics.

Job Prospects: Graduates secure positions in academia, industry and government.

Licensure/Certification: For careers in industry, licensure is recommended after three years of on-the-job training. The Pennsylvania Professional Geologist Licensing Examination is administered by the National Association of State Boards of Geology (ASBOG®).

Non-Matriculated Student Policy: Doctoral courses are open only to matriculated students.

Financing Opportunities: Students are supported by a combination of Teaching and Research Assistantships, which typically provide a nine-month academic-year stipend and full tuition remission. Summer stipends are also available. Teaching and Research Assistants are expected to devote 20 hours per week to their duties. Teaching Assistants teach introductory geology labs and labs for majors. The duties for Research Assistants are determined by the primary research advisor. Both Teaching and Research Assistantships are awarded competitively. Funding after four years is not guaranteed.

Temple University also offers a limited number of two-year fellowships to support outstanding doctoral students.

Admission Requirements and Deadlines

Application Deadline:

Fall: January 15
Spring: October 15

For full consideration, applications must be submitted by the deadline. Late applications may be considered on a case-by-case basis. Applicants should target Fall entry as Spring admission is rare.

Program admissions are limited and competitive. Applicants are expected to contact the faculty in their area of interest prior to submitting an application.

APPLY ONLINE to this graduate program.

Letters of Reference:
Number Required: 3

From Whom: Letters of recommendation should be obtained from college/university faculty members familiar with the applicant's academic competence.

Coursework Required for Admission Consideration: Applicants are required to have taken courses in Geology to prepare them for graduate-level classes and instructing undergraduate majors. In addition, at least one year of college-level Chemistry, Calculus, and either Physics or Biology is expected.

Master's Degree in Discipline/Related Discipline: A master's degree is recommended, but undergraduate research experience is also considered in evaluating applicants.

Bachelor's Degree in Discipline/Related Discipline: A baccalaureate degree, whether a BA or a BS, with a major in Geology or a related program in Science or Mathematics is required.

Statement of Goals: Identify your specific interest in Temple's Geoscience PhD program and the faculty member with whom you would like to work, and report on your research goal, future career goals, and academic and research achievements.

Standardized Test Scores:
GRE: Optional. Scores above the 50th percentile in the quantitative and verbal sections are expected, but higher scores are more competitive.

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master's degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

- TOEFL iBT: 85
- IELTS Academic: 6.5
- PTE Academic: 58
- Duolingo: 110

Resume: Current resume required.

Writing Sample: Applicants are required to submit a writing sample directly to the Graduate Chair of Earth and Environmental Science. Acceptable materials include the undergraduate thesis or research paper, master's thesis, and published journal articles in which the applicant is first author.

Advanced Standing: For students who enter the program with a subject-appropriate master's degree, coursework may be counted for advanced standing. Requests for advanced standing are evaluated on a case-by-case basis for appropriateness of the coursework and performance. Up to a maximum of 30 credits of formal graduate courses completed with a grade of "B" or better may be accepted.

Program Requirements

General Program Requirements:
Number of Credits Required Beyond the Baccalaureate: 37, including 7 core courses required in the Department of Earth and Environmental Science, with one additional course taken outside of the department, if desired

Number of Credits Required Beyond the Master's: 18, including 3 courses required in the Department of Earth and Environmental Science, with one additional course taken outside of the department, if desired

Required Courses:

Code	Title	Credit Hours
Core Courses		
28 credits of EES courses at the 5000 level or higher [1]		28
Elective [2]		**3**
Research Courses		**6**
EES 9994	Preliminary Examination Preparation	
EES 9998	Pre-Dissertation Research / Elevation to Candidacy	
EES 9999	Dissertation Research	
Total Credit Hours		**37**

1 Select three of the courses if entering the PhD program with a master's degree.
2 The elective is selected in consultation with an advisor.

Culminating Events:
Candidacy Assessment:
Qualifying for PhD candidacy includes completion of coursework within the Department of Earth and Environmental Science, as well as demonstrations of subject area knowledge, skill and the ability to conduct research to define and investigate new questions. The assessment for candidacy consists of four parts:

1. Completion of a minimum of three departmental graduate courses in good standing
2. Successfully passing the written and oral components of the Preliminary Examination

3. Submission and acceptance of an NSF-style research proposal
4. Oral defense of the research proposal

Dissertation:
The Department of Earth and Environmental Science requires an original research dissertation as the culminating project in its PhD program.

Contacts

Program Web Address:

https://www.temple.edu/academics/degree-programs/geoscience-phd-st-gesc-phd

Department Information:

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215-204-8227

Submission Address for Application Materials:

https://cst.temple.edu/academics/graduate-programs/apply-now

Department Contacts:

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