

# Sustainability PSM

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Learn more about the Professional Science Master's in Sustainability.

## About the Program

Sustainability science is a transdisciplinary and integrative field that intersects the natural and social sciences. Through the curriculum, students will understand the relationship between humans and the environment on a local and global scale. The program emphasizes environmental justice so graduates learn how community-led solutions are critical for addressing environmental problems and social justice.

Led by faculty scholars in the College of Liberal Arts and College of Science and Technology, the Sustainability PSM offers you

- an interdisciplinary, comprehensive curriculum designed and taught by Temple faculty and industry experts;
- ethics and communication training to cross disciplinary boundaries; and
- hands-on training in a variety of environmental methodologies.

**Time Limit for Degree Completion:** 3 years

**Campus Location:** Main

**Full-Time/Part-Time Status:** The degree program can be completed on a full- or part-time basis.

**Job Prospects:** The advanced skills gained from an interdisciplinary graduate degree are highly relevant in today's rapidly evolving world. You will form expertise through rigorous coursework and research to meet your professional and personal goals. Students gain advanced skill sets in high demand by many employers. The broadly applicable sustainability skill set is sought after by employers in a variety of fields, including:

- resource management and conservation with the federal or local government or nongovernmental organizations;
- policymaking and consulting on alternative energy production, storage and planning;
- GIS specialist at environmental nonprofits, environmental consulting, and city or state agencies;
- environmental consultants and policymakers, political advisors, and sustainability managers in industry;
- researchers and program directors in fields working towards equitable economic and environmental futures for people living in and around cities; and
- community engagement, political organizing, policymaking and climate resilience planning to benefit marginalized communities who disproportionately bear the burdens of climate change.

**Transfer Credit:** Applicable graduate coursework may be transferred from outside the University, provided that the credits were obtained no more than five years prior to the student's matriculation at Temple and the grades are "B" or better. The credits must be equivalent to coursework offered at Temple. The maximum number of credits a student may transfer is 6.

**Funding Opportunities:** Communities of color and members of other underrepresented groups are disproportionately affected by environmental degradation and climate change. A small number of partial and full scholarships are available to individuals from groups currently underrepresented in sustainability sciences. If you are interested in applying for these scholarships, please email [sustainabilitypsm@temple.edu](mailto:sustainabilitypsm@temple.edu).

## Admission Requirements and Deadlines

### Application Deadline:

*Fall:* August 1

*Spring:* November 1

Applications are processed as they are received. Late applications may be considered for admission.

*APPLY ONLINE to this graduate program.*

### Letters of Reference:

*Number Required:* 2

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

**Coursework Required for Admission Consideration:** No specific coursework is required as applicants are drawn from a variety of disciplines.

**Bachelor's Degree in Discipline/Related Discipline:** A baccalaureate degree in any field is appropriate. An undergraduate GPA of 3.0 is preferred.

**Statement of Goals:** In approximately 500 to 1,000 words, share why you are interested in this program, your research and academic goals, future career goals, academic and research achievements, and any other information that you believe will be helpful in evaluating your application.

**Standardized Test Scores:**

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: 88
- IELTS Academic: 6.5
- PTE Academic: 60
- Duolingo: 110

**Resume:** Current resume required.

## Program Requirements

**General Program Requirements:**

*Number of Credits Required Beyond the Baccalaureate: 30*

*Required Courses:*

Code	Title	Credit Hours
<b>Core Course</b>		
Select one of the following:		3
BIOL 5052	Fundamentals of Sustainability Science and Environmental Justice	
EES 5052	Fundamentals of Sustainability Science and Environmental Justice	
GUS 5052	Fundamentals of Sustainability Science and Environmental Justice	
<b>Communications Requirement</b>		
Select one of the following:		3
BIOL 5522	Introduction to Scientific and Regulatory Writing	
BIOL 5533	Communicating Science to a Broader Audience / Non-Scientists	
BIOL 5441	Broader Impacts: The Art of Scientific Communication	
<b>Ethics Requirement</b>		
Select one of the following:		3
BIOL 5505	Ethics Regulation and Policy in Biotechnology	
GUS 8069	GIS Ethics and Professional Practice	
GUS 8113	Community-Based Research	
<b>Methods Requirement</b>		
Select one of the following:		3-4
BIOL 5312	Biostatistics	
EES 5011	Remote Sensing and GIS	
EES 5401	Analytical Methods in Mineralogy	
GUS 5062	Fundamentals of Geographical Information Systems	
GUS 5033	Urban Analytics	
GUS 5063	Remote Sensing	
GUS 5066	Environmental Applications of GIS	
GUS 5096	Field Methods in Environmental Justice	
GUS 5161	Statistics for Urban Spatial Analysis	
GUS 5162	Advanced Statistics for Urban Applications	
GUS 5165	Community Based Program Evaluation	
<b>Policy Requirement</b>		
GUS 5028	Environmental Impact Assessment	3
<b>Capstone</b>		
Select one of the following:		1-3
EES 9995	Capstone Project	
BIOL 9995	Capstone Project	

GUS 9187	GIS Capstone	
GUS 9188	Sustainability Capstone	
<b>Electives</b>		
Students must select at least 11-12 credits in their concentration to bring the overall total for the program to 30 credits. Electives below fit into one or more of the 5 concentrations, as indicated by the following: ES: Energy Systems and Natural Resources; BC: Biodiversity and Conservation; GT: Geospatial Technologies; US: Urban Sustainability; CJ: Climate Justice		11-12
BIOL 5323	Global Change Science: Analytics with R (BC, ES)	
BIOL 5335	Polar Biology - Life at the Extremes (BC)	
BIOL 5275	Ecology of Invasive Species (BC)	
BIOL 5307	Conservation Biology (BC)	
BIOL 5389	Field Research in Community Ecology (BC)	
BIOL 5416	Tropical Marine Biology: Belize (BC)	
EES 5011	Remote Sensing and GIS (CJ, GT)	
EES 5042	Coastal Processes (US)	
EES 5401	Analytical Methods in Mineralogy (ES)	
EES 5015	Drone Short Course (ES)	
EES 5101	Structural Geology (Graduate) (ES)	
EES 5406	Nanoscience and the Environment (US, ES)	
EES 5434	Ecohydrology (BC, ES, US)	
EES 5454	Introduction to Geophysics (ES)	
EES 5506	Observing and Modeling Climate Change (CJ)	
EES 5725	Soils and Paleosols (ES)	
EES 5801	Quantitative Structural Geo (ES)	
GUS 5031	GIS Programming (GT)	
GUS 5033	Urban Analytics (US, GT)	
GUS 5041	Sustainable Natural-Human Systems (BC, ES)	
GUS 5042	Climate Change and Security (CJ)	
GUS 5051	Environmental Hazards and Disasters (CJ)	
GUS 5056	Political Ecology (CJ)	
GUS 5062	Fundamentals of Geographical Information Systems (GT)	
GUS 5063	Remote Sensing (GT, CJ)	
GUS 5066	Environmental Applications of GIS (GT)	
GUS 5068	Census Analysis with Geographical Information Systems (GT)	
GUS 5072	Advanced Remote Sensing (GT, CJ)	
GUS 5073	Geovisualization (ES, GT)	
GUS 5096	Field Methods in Environmental Justice (CJ)	
GUS 5097	Race, Class, Gender in Cities (US)	
GUS 5161	Statistics for Urban Spatial Analysis (GT, CJ, US)	
GUS 5162	Advanced Statistics for Urban Applications (US, GT)	
GUS 5165	Community Based Program Evaluation (CJ)	
GUS 5304	Food Studies (CJ, US)	
GUS 8016	Public Policy for Urban Regions (US)	
GUS 8055	Sustainable Cities (US)	
GUS 5006	Sustainable Infrastructures: Theory, Practice and Application (US)	
GUS 5221	Land System Science (BC, ES)	
GUS 5054	Energy, Resources and Society: An Interdisciplinary Approach (ES, CJ)	
GUS 5045	Urban Public Spaces (US)	
GUS 5023	Police, Prisons and Pollution (CJ)	
GUS 5006	Sustainable Infrastructures: Theory, Practice and Application (CJ)	
EES 5343	Environmental Sensors (US, ES)	
EES 5234	Energy and Environment (ES)	
BIOL 5045	Marine Ecology (BC)	

BIOL 5041	Invertebrate Biology (BC)
BIOL 5028	Ornithology (BC)
BIOL 5027	Principles of Ecology (BC)
GUS 5022	Climate Justice (CJ, US, ES)

## Contacts

### Admissions:

sustainability.psm@temple.edu

### Department Contacts:

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