Civil and Environmental Engineering

PennState College of Engineering

cee.psu.edu

"Led by our outstanding faculty, staff, and students, we perform state-of-the-art research and offer modern civil engineering education aimed at advancing the quality of life for all through sustainable and resilient civil infrastructure systems."

FARSHAD RAJABIPOUR
Shaw Professor and Interim Department Head

WATCH: What is Civil Engineering?

VOICES

"Civil engineering is more than math and science—it's about the creative process and working with community stakeholders and experts from other disciplines. We aim to understand problems from a global perspective and create collaborative, place-based solutions."

— **RACHEL BRENNAN**, Professor and Interim Associate Department Head

Undergraduate Excellence

Our bachelor of science program provides a broad-based education in construction engineering and management, environmental engineering, geotechnical engineering, materials engineering, structural engineering and mechanics, transportation engineering, and water resources engineering.

We accomplish this through a base of physics, mathematics, project management, computational and artificial intelligence tools, and disciplinary civil engineering design courses along with hands-on project-based learning and real-world experiences.

> **Available Minors: Environmental Engineering, Residential Construction**

> **Top 15: *U.S. News & World Report* Specialty Ranking – Civil Engineering, Environmental Engineering**

SPOTLIGHT

Penn State's chapter of the American Society of Civil Engineers was named as the **distinguished chapter for 2024**, with first-place finishes in regional competitions for ethics, surveying, and sustainable sites.

BY THE NUMBERS

437
Undergraduate Students
(FALL 2023)

119
Graduate Students
(FALL 2023)

28
Full-Time Faculty
(SPRING 2024)

$13.4M
Externally Funded Research Expenditures
(FY22-23)

SPOTLIGHT

Li Li, Barry and Shirley Isett Professor, was honored as the inaugural Person of the Year by the Penn State Institute of Energy and the Environment. Her pioneering research highlights the impact of climate change on water quality and aquatic ecosystems.

READ: Rivers warming and losing oxygen faster than oceans

Graduate Excellence

Our master of science (M.S.) and doctoral (Ph.D.) offerings in civil engineering and environmental engineering prepare students for research-focused roles in academia, industry, government, and other sectors.

Non-thesis options in civil engineering and environmental engineering help students gain technical and professional skills to enhance marketability to employers and accelerate their career growth.

> **Top 25: *U.S. News & World Report* Specialty Rankings – Civil Engineering, Environmental Engineering**

SPOTLIGHT

Prateek Stivastava (M.Eng. – CE '17) has partnered on projects to help communities in Rwanda and Guatemala as part of Engineers Without Borders. He received an Early Career Award from the college in 2023.

> **In 2024, as part of the College of Engineering's facilities transformation, the Department of Civil and Environmental Engineering joins three other academic departments and student support offices in the newly constructed Engineering Collaborative Research and Education Building, Penn State's largest academic building. The new space devotes more than 50,000-square-feet to modernized research labs.**

Discovery & Impact

Faculty in the civil and environmental engineering department support undergraduate- and graduate-level teaching of more than 80 courses per year; advising to hundreds of students; service to the University, community, and society; and impactful research that has generated more than 200,000 citations. The department's research enterprise is newly oriented around five core thematic areas:

> **Infrastructure resilience and adaptation to climate change**

> **Decarbonization of the built environment**

> **Safe and equitable mobility systems**

> **Sustainable solutions for water management**

> **Artificial intelligence and physics-informed machine learning for sustainability challenges**

Penn State Department of Civil and Environmental Engineering
208 Engineering Collaborative Research and Education (ECoRE) Building
556 White Course Drive
The Pennsylvania State University, University Park, PA 16802
814-863-3084 | cee@psu.edu | **cee.psu.edu**

PennState College of Engineering

CIVIL AND ENVIRONMENTAL ENGINEERING