# Engineering

# graduate

# student research at Penn State

Graduate students in Penn State's College of Engineering drive research. The pursuit of knowledge coupled with the desire to solve society's greatest challenges leads our graduate students to discover and innovate from their first day at Penn State. To aid students on this path, the University offers a multitude of facilities and support. With expert mentorship from world-renowned faculty, access to leading-edge facilities, and collaborative interdisciplinary units, Penn State engineering graduate students conduct hands-on research that impacts the world.



### **Faculty Research**

Penn State engineering students can explore a broad range of research areas. The College of Engineering has approximately 400 faculty members conducting research and mentoring students across 13 academic departments and schools. With more than \$119 million in external research expenditures, the college provides access to top-tier equipment in leading-edge facilities to prepare students to engineer what's next.

#### **FACILITY HIGHLIGHTS**

- More than 10,000 square feet of cleanroom space
- Access to Roar supercomputer, a high-performance research cloud
- Advanced additive manufacturing capabilities
- State-of-the-art microscopes, spectrometers, calorimeters, and more

### **Interdisciplinary Innovation**

Penn State's vast resources promote interdisciplinary collaboration to focus research strengths on vital scientific questions and pressing societal needs. There are 15 centers within the college and eight interdisciplinary research units across the University that provide research opportunities and resources for engineering graduate students. View a complete listing: <a href="mailto:bit.ly/coe-cl">bit.ly/coe-cl</a>

#### **APPLIED RESEARCH LABORATORY**

This University Center of Excellence in naval science, systems engineering, and technologies provides solutions to problems in national security, economic competitiveness, and quality of life. Visit: arl.psu.edu



## HUCK INSTITUTES OF THE LIFE SCIENCES

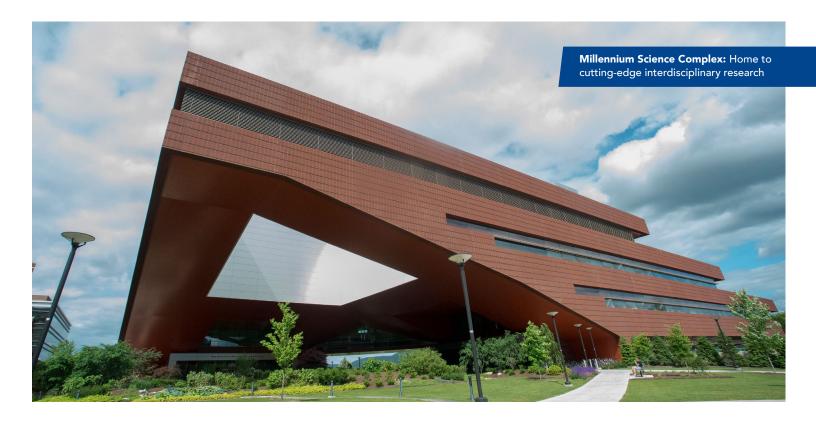
Located in the Millennium Science Complex, this unit promotes excellence in interdisciplinary life science research and education at Penn State.

Visit: bit.ly/huck-il

#### **INSTITUTE FOR COMPUTATIONAL AND DATA SCIENCES**

The Institute for Computational and Data Sciences supports Penn State researchers using advanced and high-performance computing methods by offering consulting services, customized computing solutions, and a robust cyberinfrastructure for researchers' needs. Visit: bit.ly/psu-icds





#### INSTITUTE OF ENERGY AND THE ENVIRONMENT

The mission of the Penn State Institute of Energy and the Environment is to foster and facilitate interdisciplinary scholarship and collaboration to positively impact important energy and environmental challenges. Visit: bit.ly/iee-pg

#### LARSON TRANSPORTATION INSTITUTE

This institute brings together faculty and students from across the University in partnership with public and private stakeholders to address critical transportation-related issues. Visit: bit.ly/lti-psu

#### **MATERIALS RESEARCH INSTITUTE**

Housed in the 275,600-square-foot Millennium Science Complex, the Materials Research Institute is a catalyst for multidisciplinary education and innovations in materials. Visit: mri.psu.edu

### By the numbers

1,801

graduate students enrolled in the College of Engineering at University Park Degrees awarded 2021-22

97 World Campus Master's

Residential Master's

181 Ph.D.

Learn more about interdisciplinary research opportunities at Penn State: bit.ly/psu-iru

#### **FUNDING**

Graduate students have access to numerous types of financial support, both internal and external, to cover or defray the costs of graduate education. From graduate assistantships to fellowships to loans, there are many options to help support students as they pursue a Penn State College of Engineering graduate degree.

Visit: bit.ly/fs-pg

#### RADIATION SCIENCE & ENGINEERING CENTER

Housing the Breazeale Nuclear Reactor, the first licensed research reactor in the country, the Radiation Science & Engineering Center



provides safe nuclear analytical and testing facilities for research and education at Penn State. Visit: resc.psu.edu

#### **PENN STATE SUSTAINABILITY**

The mission of Penn State Sustainability is to lead and support the University in the pursuit of sustainability across all functions—in education, research, outreach, operations, and administration. Visit: bit.ly/psu-si

