Energy at Hopkins

FOR GRADUATE STUDENTS

A VARIETY OF PROGRAMS FOR STUDENTS AT ALL LEVELS

No matter your expertise or interest, the Johns Hopkins Whiting School of Engineering offers an in-person, full-time **master's program** with content and opportunities relevant to energy. Requirements differ, but all include coursework, and most include options for essay (thesis) or design (project). Programs can be completed in one to two years. Students in these programs can also select from hundreds of flexible courses from the online, part-time Engineering for Professionals (EP) program.

Scan for more information on offered Engineering degrees.

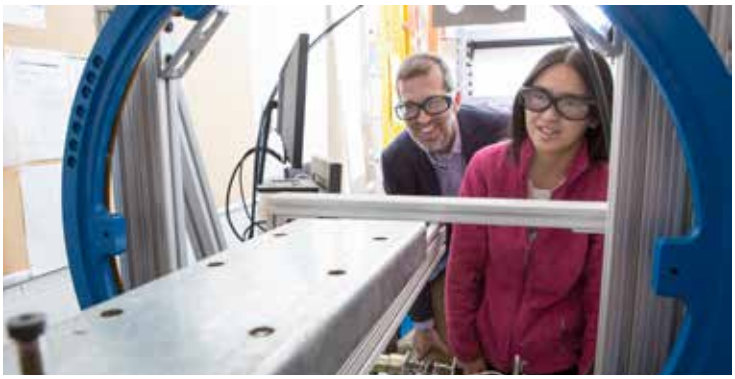
If you dream of discovering the next energy transition breakthrough, our **PhD programs**, which are housed in the academic departments at JHU, could be your departmental home. PhD students working in sustainable energy represent divisions across the university. Please note that each department has its own guidelines for time to degree, coursework, examinations, stipend levels, and more.

For working engineers looking to gain a competitive advantage, change careers, or broaden skills in energy, the Whiting School is home to the top-ranked EP program, which delivers challenging **part-time, online courses** in more than 22 disciplines that address the most current engineering technologies, practices, and issues. Study online, in your own time, and gain solutions-based knowledge—immediate learning you can use to advance your career.

Scan for more information about Engineering for Professionals.

The Whiting School also offers professional and executive, non-degree courses through our **Lifelong Learning program**. We offer reskilling and upskilling for individuals, as well as custom curricula for industry and organizations.

Scan for more information on Lifelong Learning.



A VIBRANT COMMUNITY

"There is nothing more exciting than a community of brilliant people working together to make an impact on one of the most important problems of our time. Graduate student researchers are the heart of our community of scholars, driving forward novel impactful answers to the challenges we face in the energy transition."

— Ben Schafer, *Director of the Ralph O'Connor Sustainable Energy Institute (ROSEI)*

While ROSEI does not offer degree programs within the institute, it serves as the research hub and home for all students and faculty working in sustainable energy.

ROSEI has a graduate student association that provides a network for every student energy researcher to tap into. It also provides several community events, conferences, specialized training, opportunities in translation, and more. ROSEI even sponsors graduate student fellowships so they may expand their dissertation essay research in areas of special impact for the energy transition.

Scan for more information on master's in sustainable energy.

Scan for more information on a doctorate in sustainable energy.

Graduate students are critical to everything that JHU, the Whiting School, and ROSEI want to achieve. Our faculty are always looking to recruit and add talented students who will help push their research forward. Please investigate ROSEI's faculty and (a) let us know of your interest and (b) let the faculty know directly of your interest in working with them.

INNOVATION

Johns Hopkins Engineering includes more than 25 established research centers and institutes, several of which span across university divisions, as well as partnerships with industry, government and universities and laboratories around the globe. Only at Johns Hopkins are we able to collaborate with researchers and clinicians at the renowned schools of Medicine, Public Health and Arts and Sciences.

Research in ROSEI is focused on enabling innovations that address our vast energy needs and their consequences. ROSEI researchers cover a broad array of sustainable energy topics but have made the most significant strides in its four research pillars—carbon, grid, storage, and wind—and we encourage collaborations between individuals with a variety of research backgrounds.

Carbon: Our work in carbon management, particularly in partnership with the Department of Energy's ARPA-E program, has already spun out two companies—one working on cleanly converting natural gas to hydrogen at point of use, and one working on direct air capture of carbon.

Storage: Our work in energy storage spans a remarkable partnership with the Johns Hopkins Applied Physics Lab (APL), the largest university-affiliated research center in the country. The ROSEI-APL partnership is investigating more sustainable storage solutions and looking at integrated solar-storage solutions.

Wind: ROSEI is leading Maryland's presence in a new national center—titled Academic Center for Reliability and Resilience of Offshore Wind (ARROW)—that aims to expand the local offshore wind industry and provide greater opportunities for Maryland residents and businesses to participate in the growing clean energy economy.

Grid: ROSEI is leading a new global center—titled Electric Power Innovation for a Carbon-free Society (EPICS)—with a total budget of $15 million that is focused on helping society transition towards 100% renewable energy for power grids.

RESOURCES

Student Affairs serves Whiting School of Engineering graduate students, learners, and postdoctoral fellows. The group focuses heavily on student satisfaction, offering resources for academic engagement, career planning, community life, and more.

Scan to learn more about WSE student affairs.

ROSEI looks to help graduate students in their development by providing several unique services. This includes but is not limited to:

- A Translation to Market (T2M) Workshop that brings in external speakers to help students take their ideas for sustainability tech and help create a business.
- Presenting at the ROSEI Summit, which brings in all researchers that focus on sustainable energy at Hopkins.
- Holding regular sustainable energy-related talks with external researchers, including getting to meet with the speaker in a small group.
- Hosting social events so graduate students can connect with others in their field and network.
- A Graduate Student Association, which plays a central role in scaling the institute's campus presence by promoting upcoming events and assisting staff and faculty members.
- Entrepreneurship that is heavily featured in energy coursework and training.
- Opportunities to teach and work in outreach roles in energy education.
- Access to JHU's vast network of alumni working in energy.

JOIN US!

Scan to learn more about WSE graduate studies.

JHU and ROSEI contingent meeting Maryland Governor Wes Moore at the 2023 ARPA-E Innovation Summit