



NSF Research Traineeship Program

Convergent Graduate Training and

EmPOWERment

for a Sustainable Energy Future

The EmPOWERment program offers PhD students the opportunity to pursue interdisciplinary training in energy-system modeling, data science, energy policy, business, law, social and behavioral sciences, and energy technologies to address the challenges facing a sustainable energy future.

As an EmPOWERment trainee, you will be immersed in coursework, research, experiential-learning opportunities, and a student community of like-minded individuals; opportunities designed to introduce you to the unique challenges facing the advancement of sustainable energy systems. You'll gain an in-depth knowledge of every facet of the sustainable energy landscape through a unique interdisciplinary experience which combines research, education, and communication training. Working together with faculty, industry mentors, and fellow trainees, EmPOWERment students prepare to become the next generation of innovative leaders in sustainable energy.

Program Benefits

- ▶ Augments graduate education through interdisciplinary training in sustainable energy systems.
- ▶ Develops professional and communication skills.
- ▶ Helps students build their professional networks.
- ▶ Broad interdisciplinary training for future energy careers developed to meet future employer needs.
- ▶ Prepares students for both academic and non-academic careers related to sustainable energy systems.



Program Components

Graduate Interdisciplinary Specialization (GIS): Data-Driven Sustainable Energy Systems

Students will be immersed in coursework that provides a cross-cutting, interdisciplinary approach to sustainable energy systems. Students will receive formal recognition on their transcripts after the completion of the GIS curriculum which consists of: ISE 6020 (Foundations of Data-Driven Sustainable Energy Systems), four elective courses chosen from five thematic areas, and PUBAFRS 8620 (Innovating for Sustainable Energy Systems).

Student Community Of Practice and Engagement (SCOPE)

The Sustainable Energy SCOPE is a student community built to prepare future leaders in the industry and equip students with the skills they will need to make change possible. Trainees gain insight and perspective while creating a professional community through weekly gatherings led by professionals working in the energy sector. EmPOWERment trainees also have access to professional skill-building workshops and mentoring opportunities through their involvement with SCOPE.

Innovation and Applied Industry Challenges

EmPOWERment trainees will have opportunities to expand their innovation capacity and be mentored by industry professionals through unique experiential-learning opportunities such as the INNOVATE-O-thon™. Trainees will also have the opportunity to work on real-world problems for organizations within the energy sector through participation in externships, co-ops, and paid internships. Additionally, trainees will be able to participate in unique opportunities such as K-12 sustainable energy curriculum building.

Mentorship and Advising

Trainees receive comprehensive support and active mentoring throughout their graduate studies. Each trainee is assigned a mentoring team composed of an academic and an industry mentor that is separate from an academic advisor. Trainees will also receive one-on-one advising to develop a plan that outlines career-development pathways, individualized goals, and explicit milestones specific to them.

Research & Communications

The core of EmPOWERment is an independent, interdisciplinary research project. Research topics are chosen by trainees in consultation with the student's mentoring team and faculty advisor and are relevant to the EmPOWERment research theme. Additionally, trainees will have opportunities to present research and build communication skills at conferences, the EmPOWERment Annual Research Expo, and community engagement events hosted by STEAM Factory.



▶▶▶ **Empowerment encourages and supports the participation of underrepresented minorities and women.**

Fellowships

Several one-year fellowships that provide full funding are awarded each year to outstanding EmPOWERment trainees to support their PhD studies and participation in the program.

Application Process

We accept applications from any current or prospective students to a PhD program at The Ohio State University.

▶▶▶ **Apply Now**



▶▶▶ For additional information about the EmPOWERment program visit:

energyfuture.osu.edu

