



Greenway Institute

Position: Engineering Faculty (Teaching Faculty at any rank)

Focus: Sustainability and Engineering Education

Greenway Institute, in partnership with Elizabethtown College, is redesigning engineering education to support the goals of equity and sustainability. We are launching the Greenway Center for Equity and Sustainability (GCES), and the Center will launch as an immersive study away program for 1st and 2nd year engineering students in collaboration with Elizabethtown's ABET-accredited engineering program. Our mission is to prepare the current and next generations to engineer our equitable and sustainable future. With the support of a National Science Foundation grant, our founding faculty will develop an innovative, project-based engineering program that uses a mastery approach to support and assess student learning. Greenway will provide a supportive, inclusive community where students learn engineering by working in teams on hands-on engineering challenges, and where every student can develop the competence, confidence, and connections they need to thrive in engineering and entrepreneurship.

Applications should include a cover letter, curriculum vitae, a statement of teaching philosophy (including a discussion of strategies to promote equity and sustainability in the classroom), a statement of research interests, and email addresses for three references. References will be contacted by Greenway to submit letters of recommendation electronically. Applications are encouraged before July 1, but will be considered after that until the position is filled.

Inquiries can be addressed to Dr. Rebecca Holcombe at GCES@greenwayinstitute.org.

Description:

Greenway Institute is pleased to invite qualified applicants to join the founding faculty team at our innovation campus. Faculty will develop, pilot and teach our innovative 100% hands-on, project-based, lecture-free engineering modules and programs. Faculty members will work with our team to collaboratively develop our sustainable engineering courses and programs, assess student mastery of target outcomes, and support the development of a collaborative and inclusive culture on campus. Applicants should be organized, self-motivated, and able to manage multiple concurrent tasks. All candidates must have solid engineering and communications skills.

Applications are preferred by December 15, but this position will be open until filled by the right candidate. This full-time position is 40 hours per week, potentially starting as early as January, 2023. Founding faculty positions are not tenure line positions at this time. Initial work will include strong input in the development of coursework and curriculum, as well as protocols for continuous improvement of our academic program. The initial student cohort starts in September 2023.

The successful applicant will share a deep commitment to sustainability and inclusive and effective engineering education. GCES aims to support the success of a more diverse group of students, including students who historically have been underrepresented in engineering. Founding faculty will demonstrate through their instruction and communication the value of diverse experiences and perspectives to sustainability. If hired, the candidate will develop, document and share instructional practices with proven effectiveness at supporting the learning of students from underrepresented groups in engineering, and help develop courses based on effective pedagogies related to project-based learning and mastery-based



learning. Founding faculty will also mentor students in research, outreach, and professional development.

Responsibilities

- Collaborative development and teaching of engineering project-based courses for our undergraduate educational program.
- Collaborative development of our educational programs with our team and our educational partners.
- Working with the founding team and partners to help shape our learning outcomes and protocols for how progressive mastery of outcomes will be assessed and reported in the context of our hands-on projects.
- Serve as an engineering mentor to our students and help organize mentoring teams for each student to maximize their motivation and experience at Greenway.
- Perform community, commercial, or research work in a field within sustainability and engineering that can support student project work and may include collaboration with local businesses to maximize the engineering and sustainability relevance and local impacts of our project-based engineering courses.
- Help organize acquisition of engineering supplies and software for our educational programs while maximizing economic, social, and environmental sustainability
- Take part in collaborative educational rounds to improve faculty and student performance.
- Assist in the documentation and mapping of outcomes and objectives for our educational program, including with our educational partners and state agencies.

Competencies and Qualifications

- Ph.D degree in engineering preferred. Individuals with BS/MS in engineering with strong life experience in engineering will also be considered.
- Preferred experience, passion, and familiarity with the latest in sustainability and engineering education.
- Strong engineering skills especially related to practical hands-on engineering and applied green technology.
- Excellent verbal communications skills and interest in working with students and other faculty in engineering education.
- Preferred connections or ability to develop connections with local engineering and renewable energy industry for collaborative projects and work.
- Ability to work both independently and as a collaborative member of a team while prioritizing and managing multiple tasks. Preferred project experience working with groups of students.
- Ability to research, analyze and organize various types of data and information, especially related to project-based engineering education, learning outcomes, mastery-based learning, education, and sustainability.
- Willingness to work on a broad range of tasks in a dynamic entrepreneurial early-stage environment.