PSU Green Building Summer Internship

Internship Description: The Green Building Summer Internship is intended to give Architecture and Engineering students real world, hands on experience assessing PSU campus building performance and working on an integrated team. Interns will report to PSU Capital Projects & Construction (CPC), with support and guidance from the School of Architecture’s Building Science Lab to Advance Teaching (BUILT Lab). This internship is part of the Living Lab Program which matches motivated faculty and students with University staff to work on projects that support PSU’s campus sustainability goals.

Summer 2017 Project: Projects vary year to year and will be determined closer to start date*. Past projects have included energy modeling for campus residence halls to determine possible efficiency improvements for LEED O+M compliance. The current project proposal for Summer 2017 is comparing projected vs. actual HVAC energy performance within the newly-renovated portions of the School of Business building (Karl Miller Center/KMC), and establishing performance criteria for the passively vs. mechanically ventilated spaces in the new portions of the building.

*Summer 2017 project proposal is subject to change.

Learning Outcomes:

- Students will learn how to assess the performance of existing buildings using a variety of tools and techniques with the support of the BUILT Lab. Project types may include:
  - Post occupancy studies
  - Simulations/energy modeling
  - Case studies
- Students will conduct research and write reports for campus stakeholders based on project findings
- Students will gain experience working with an integrated team of building professionals as well as working with students from other disciplines

Primary Responsibilities:

- Compare projected vs. actual energy performance of HVAC upgrades to existing, renovated side of KMC
- Establish performance criteria for future study of passive vs. mechanically ventilated spaces
  - Recommend strategies for optimizing performance (thermal comfort, ventilation, etc.) of passively ventilated spaces in Karl Miller Center
  - Recommend design and operational considerations for future renovations and construction
- Aid in collaborative development of project with stakeholders across campus
- Weekly check-in meetings with CPC staff/ Quinn Soifer and Kalina Vander Poel, acting Director of the BUILT Lab
- Other duties and projects as assigned by supervisor/CPC
- Other conditions of this funding award include:
  - Writing a blog for the Institute for Sustainable Solutions website that highlights the project worked on,
  - A project presentation at the Annual PSU Sustainability Celebration in late May 2018 (optional, dependent on graduation date), and
  - The expectation that any papers or reports published as a result of this investment acknowledge the support of the Institute for Sustainable Solutions in the publication.

Qualifications:

- Undergraduate student in either Architecture and Mechanical Engineering.
- Previous coursework in building science/green buildings is preferred, but no prior work experience in architecture or engineering required.
Students hired for these internships are expected to already be members, or be in the process of applying to become members of the Student Fellows of the Institute for Sustainable Solutions: https://www.pdx.edu/sustainability/student-fellows

Additional qualifications:

- Strong organizational skills and attention to detail
- Ability to communicate clearly and work cooperatively as a member of a team
- An understanding of LEED certification process, particularly O+M
- Ability to learn new skills quickly, and to advance projects and conduct research with minimal supervision
- Demonstrated interest in green building
- Strong project management orientation with project management experience

Timeline: The start date for this position will be 6/26/17, and will go until 9/8/17 (11 weeks total, dates subject to change slightly).

Deadline for applications is February 6, 2017, end of day. Review of applications will begin immediately.

Hours: Work schedule to be negotiated during normal business hours. 32 hours per week (hours may fluctuate slightly depending on tasks and schedule).

Compensation: Undergraduate students: $4,000 for the duration of the internship; (paid in two installments of $2,000. Stipends will be prorated depending on the day and month that you begin the internship, so may be less.

This position is being funded through the generous support of donors and the Institute for Sustainable Solutions to the Sustainability Internship Program (http://www.pdx.edu/sustainability/sustainability-internship-program) for the support of student career pathways in sustainability.

Application: This position requires current enrollment as a PSU student. To confirm that you are formally admitted and enrolled, please email your full name and student ID to internships@pdx.edu. Include the name of the internship you are applying for in the subject line. Once your status is confirmed, you will receive the full application instructions via email.