



University
of Vermont

College of Engineering and
Mathematical Sciences
Civil and Environmental Engineering

Ph.D. Positions @ the University of Vermont, Burlington, VT

Are you mathematically curious? Do you want to be part of a highly collaborative and motivated team of researchers and solve complex engineering problems across built and natural environments? Do you have or are you soon completing a BS or MS in engineering or a related field and are you wondering, "What's next?"

If so, join us in Vermont! Under the supervision of [Dr. Kathryn Hinkelman](#), the [Sustainable Energy and Environments \(SEE\) Laboratory](#) in the Department of [Civil and Environmental Engineering \(CEE\)](#) at the [University of Vermont \(UVM\)](#) is recruiting **Ph.D. students**. The Graduate Research Assistant (GRA) positions are fully funded 12-month positions for up to 4 years and include possible internship opportunities with world-class collaborators at national laboratories, academia, and industry.

The SEE Lab develops sustainable, resilient, and equitable energy technologies at the nexus of built and natural environments, with expertise in thermal energy systems (district heating and cooling), dynamic modeling and simulation (Modelica), and system-level design (biomimetics, LCA, control co-design). Our group is part of the **Next-gen Energy Systems Team of Vermont (NEST-VT)**, which includes 20 graduate researchers, post-docs, and faculty in CEE and Electrical Engineering who work on power/energy systems.

Qualifications

The following are some characteristics and qualifications that align well with the position:

- A bachelor's or master's degree (preferred) in Environmental, Civil, Mechanical, Electrical, or Architectural Engineering, or a closely related field, prior to starting the position.
- Expertise in some of the following areas: fluid mechanics, heat transfer, thermodynamics, building and district energy systems, building controls, computational modeling and simulation (e.g., CFD, FEA, EnergyPlus, TRNSYS), biomimicry, or life cycle assessment (e.g., SimaPro, GaBi, openLCA).
- Programming experience in Modelica, Python, Julia, C/C++, or MATLAB.
- Strong English language skills, including technical writing and verbal communication.
- The ability to work successfully independently and in collaborative team environments.
- Research experience with tangible outcomes (e.g., peer reviewed publications) is preferred.

Candidates are encouraged to apply even if they do not think they possess every single point above, particularly for candidates from underrepresented or marginalized groups who may not have had access to certain development opportunities.

About the University of Vermont

Burlington, home of UVM, is known for its [high quality of life](#), features year-round outdoor recreation and cultural events, and is recognized for its world-leading accomplishments in urban sustainability. Greater Burlington has a population of ~150,000 and enjoys a panoramic setting on Lake Champlain, bordered by the Adirondack and Green Mountains. The City of Burlington is one of the most environmentally progressive cities in the nation, with 100% of its electricity coming from renewable sources, while Vermont has the "[the largest share of in-state electricity net generation from renewable resources of any state](#)".

To Apply

Please submit a complete application via [this Google Form](#). Applications will **not** be accepted via email; however, feel free to email Dr. Hinkelman ([here](#)) with any questions. Additional information may be requested upon review. Review of applications will occur on a rolling basis.

To formally apply to the Graduate College, please follow the [application instructions here](#) and check out the [CEE graduate program FAQ](#). Formal applications must be submitted by **Jan. 15** for full consideration (Fall start).