



SCHOOL OF
**MECHANICAL AND
AEROSPACE ENGINEERING**
College of Engineering, Architecture and Technology

Graduate Research Assistantship - Building HVAC & Thermal Systems Spring 2027

The [Building & Environmental Thermal Systems](#) research group (BETRSG) and [Center for Integrated Building Systems \(CIBS\)](#) in the School of Mechanical and Aerospace Engineering at Oklahoma State University are seeking motivated PhD students to join our team in Spring 2027. Our research spans building science and technology, heat pumps and refrigeration, HVAC and building thermal systems, and advanced thermal-management and cooling technologies.

Qualified candidates should have a strong background in thermos-fluid science and interest in modeling and experiments. Preference will be given to candidates with experience in:

- **Heat Pumps and Refrigeration**
- **Two-phase or Multiphase Flow CFD Simulation**
- **HVAC System Simulation and Controls**
- **Building Energy Simulation**

Preferred Qualifications

Applicants should have:

- Strong academic record with a degree in Mechanical, Architectural, or Electrical Engineering or closely related fields
- Strong background in Thermodynamics, Heat Transfer, Fluid Mechanics, HVAC, Refrigeration, Building & Community Energy Systems, Controls, Data-Driven modeling
- Research experience with peer-reviewed publications
- Experience with multiphase CFD simulation tools (ANSYS, STAR-CCM+, OpenFOAM)
- Computer programming experience (Python, MATLAB, C/C++, ...)
- Experience with building energy simulation (EnergyPlus, Modelica, TRNSYS, ...)
- Experience with Laboratory Experiments, instrumentation, controls, data acquisition
- Good English verbal and written communication skills
- Self-motivation and the ability to work independently and collaboratively

Contact Information

Interested applicants are encouraged to reach out to Dr. Ardeshir Moftakhari (ardeshir@okstate.edu) with CV and full transcripts ahead of application for Spring 2027.

For full application requirement, see <https://ceat.okstate.edu/mae/students/graduate.html> & <https://gradcollege.okstate.edu/application-process/>

More information for applicants is available at the [university](#) and [personal](#) webpages.