



NYU

TANDON SCHOOL
OF ENGINEERING



Fully-Funded PhD Positions in the Climate Resilient Cities Lab

Position Title: PhD in Urban Complex Systems with a focus on Climate Resilience

Department: Department of Mechanical and Aerospace Engineering (MAE) and Center for Urban Science and Progress (CUSP), Tandon School of Engineering, New York University

Description:

The Climate Resilient Cities Lab, led by Dr. Anamika Shreevastava, is seeking 1-2 motivated PhD candidates for positions starting in Fall 2025. The successful candidates will engage in cutting-edge research aimed at advancing urban resilience in the face of a changing climate. The lab is driven by critical questions such as: How can cities better prepare for future climate extremes? Can innovative urban design mitigate extreme heat and improve public health outcomes? What sustainable growth strategies can benefit rapidly developing cities? Students will explore topics such as urban heat dynamics, climate adaptation strategies, green infrastructure, and the integration of climate data into urban planning. This PhD will be granted by the Department of Mechanical and Aerospace Engineering (MAE) and is part of the Urban Complex Systems track at NYU CUSP. In addition to working within NYU's interdisciplinary research environment, students will have the unique opportunity to intern at the NASA Jet Propulsion Laboratory. The successful candidate will receive full financial support, including tuition coverage, competitive stipends, and travel funding for conferences and internships.

Key Responsibilities:

- Conduct independent and collaborative research on urban resilience, climate adaptation, and sustainable urban design
- Analyze large datasets, including climate models, remote sensing data, and urban microclimate measurements
- Present research findings at conferences and publish in peer-reviewed journals

Qualifications:

- A Master's or Bachelor's degree (with relevant experience) in Engineering, Applied Math/Physics, Computer Science, Earth and Atmospheric Sciences, or other related fields
- Strong interest in urban resilience, climate adaptation, and sustainability
- Scientific writing and communication skills
- Experience with data analysis, modeling, or remote sensing is a plus

Application Process:

Interested candidates should apply to the NYU Mechanical and Aerospace Engineering PhD program (Link: <https://engineering.nyu.edu/admissions/graduate>). Please mention your interest in the Climate Resilient Cities Lab in your application. Additionally, send your CV and a cover letter outlining your research interests to Dr. Anamika Shreevastava at anamika.shreevastava@nyu.edu. Applications will be reviewed on a rolling basis, with priority given to those submitted by December 1st, 2024. We welcome applicants from around the world.

About Dr. Anamika Shreevastava:

Dr. Shreevastava is an incoming Assistant Professor at NYU with a joint appointment in the Mechanical and Aerospace Engineering Department and the Center for Urban Science and Progress. Her pioneering research on "fractal intra-urban heat islets" during her PhD has laid the foundation for globally adaptive heat models. Her postdoctoral work at NASA Jet Propulsion Laboratory advanced our understanding of how extreme heat affects marginalized urban communities and contributed to innovative cooling solutions. She is committed to translating research into practical climate adaptation strategies and regularly collaborates with stakeholders to design climate resilience solutions for cities. Please see full profile here: <https://engineering.nyu.edu/faculty/anamika-shreevastava>