Pursue a Ph.D. in Urban Sustainability

Wayne State University (WSU) is recruiting outstanding applicants for a new, interdisciplinary NSF funded PhD and M.S. training program in Urban Sustainability. Competitive funding opportunities are available for this program. Student must first be admitted into WSU, and then submit an application to the Transformative Research in Urban Sustainability and Training (T-RUST) NRT program in urban environment sustainability. Current participating departments include: Biology, Civil Engineering, Urban Planning, Economics, Environmental Science, Anthropology, and Communication. Students in other WSU departments and colleges will be considered provided their proposed work includes urban and cross-disciplinary components compatible with program objectives.

We are seeking students committed to integrating perspectives from multiple disciplines to address emerging ecological, social, economic and technological challenges in urban sustainability. We strongly encourage applicants from traditionally underrepresented groups including women, veterans, persons with disabilities and African- Hispanic-, Native-, and Pacific-Islander-Americans to apply.

The program will provide innovative graduate-level training that integrates social and physical science, technology, and engineering. The program vision is to train students to work with local communities, businesses, industries, scientists and policy-makers to understand and address sustainability challenges in urban settings.

Successful applicants will participate in a new interdisciplinary training program that includes:

• Cutting-edge research methods to address complex, multidisciplinary environmental problems
• Practice in effective communication with practitioners, policymakers, industry and the broader public.
• Professional development and leadership training
• Networking and communication skills development
• Engagement with internationally-recognized faculty, representing multiple disciplinary approaches to urban sustainability
• Opportunities to participate in student exchange programs in Windsor, Baltimore or Puerto Rico
• Attend local, regional, national and international conferences, expenses paid
• Paid experience internships with The Nature Conservancy, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and USGS, Army Corps of Engineers, or other organizations.

• Develop your career through professional mentoring and/or thesis dissertation co-advisors

Specific Research themes include:

• **Urban Ecological Systems** – The evaluation and maintenance of urban ecosystem services requires the integration of natural sciences, social sciences, and engineering solutions combine with community and education outreach research projects.

• **Urban Redevelopment and the Blue Economy** – From land use and urban re-design, to global supply-chain and behavioral economics, and sociological and natural systems that make cities healthy and vital places, this research track unites social and physical sciences with engineering and design for spatially and socially integrated solutions. Studies of the “Blue Economy” are particularly relevant for cities with waterfronts that are reinventing themselves.

• **Sustainable Urban Water Infrastructure** – Analysis of the natural, engineered, and societal systems that have formed the current water infrastructure of Detroit will provide NRT trainees the foundation for understanding the complex inter-relationships and progressive solutions for sustainable urban infrastructure. Specialties within this track will include drinking water treatment and distribution, wastewater management, and the use of big data and sensor technologies in decision-making for improved infrastructure sustainability.

More Information and Application Instructions

Wayne State University is a large, comprehensive, nationally ranked research institution with state-of-the-art research facilities. The metropolitan Detroit area offers a rich cultural and educational environment, an excellent standard of living, and easy proximity to Michigan’s lakes, forests and recreational sites.

For more information and application in “Sustainable Urban Water Infrastructure”, please contact Dr. Yongli Zhang at zhangyl@wayne.edu or 313-577-9962.