## SOLVING URBANIZATION CHALLENGES BY DESIGN



Research Traineeship

₾ Columbia University | GSAPP | SEAS | Earth Institute





## An Integrative PhD Program Between Architecture & Engineering

Global urbanization is creating an array of contemporary, and interconnected, physical, environmental and societal challenges related to the planning and design of transportation systems, water and sewer systems, power and telecommunications networks, and buildings of all sorts. The complexity and enormity of today's urbanization challenges require a new approach to urban planning, engineering and design, that combines, and extends, current research and practice in the fields of architecture and engineering.

This IGERT program seeks to address the growing challenges of urbanization through a PhD program that integrates architecture, engineering and planning perspectives to focus on adaptive, ecological and resilient urban planning and design. IGERT Trainees will make use of emerging science and technology research at the interface of architecture and engineering to develop new paradigms that enable urban areas to adapt to changing requirements, absorb disturbance and effectively reorganize and recover, and reduce their impact on the natural environment.

Each IGERT trainee will be empowered to conduct research at the emergent boundaries between architecture, urban planning, and engineering, and will be uniquely capable of contributing to the advancement of technological and scientific solutions that can address the grand challenges of urbanization. The IGERT team is comprised of a diverse group of faculty members, drawing graduate students from the Graduate School of Architecture, Planning and Preservation and the School of Engineering and Applied Science at Columbia University.

All IGERT Trainees receive the fellowship support provided by the National Science Foundation, including full tuition, fees, and a stipend for a minimum period of two years.

Eligibility: Open to any U.S. Citizen or Permanent Resident. Applicants who do not meet this eligibility requirement may still apply and participate as an Affiliate (will not be eligible for fellowship support).

How to Apply: http://www.columbia.edu/cu/civileng/igert/fellowships.html

For more information, visit http://www.civil.columbia.edu/igert or contact Diana Kim, the IGERT Coordinator, at dk2629@columbia.edu.





