

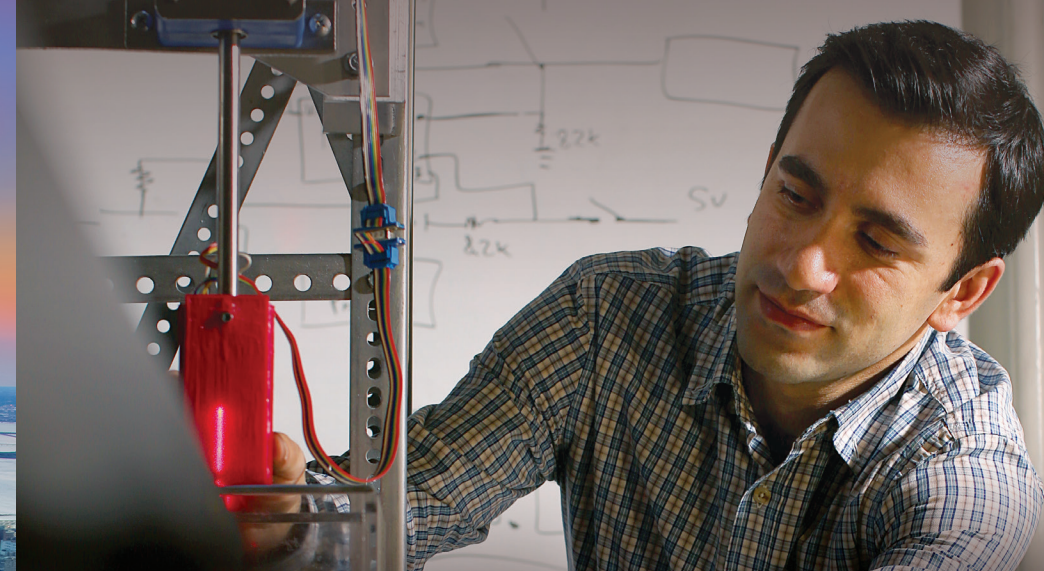
# NYU AND NYC

As part of America's largest private research university, the NYU School of Engineering offers nearly unlimited possibilities for professional growth and collaboration with one of the largest and most active civil engineering communities in the world.

The school combines outstanding graduate programs in Civil Engineering with the dynamic infrastructure of New York City. Pursue your graduate degree in Civil and Urban Engineering or a related discipline at a school that provides a gateway laboratory to one of the most complex civil and urban systems in the world.



# BECOME AN INNOVATOR



## MEHDI OMIDVAR, CE '15

Civil engineering doctoral student Mehdi Omidvar is not afraid to get his hands dirty. As a graduate research assistant, he explores the dynamics of penetration into granular media, using transparent soils. He is studying micro-scale soil-structure interactions during pile installation and is developing methods for mapping kinematics of motion by tracking the movement of individual soil grains. Mehdi published six articles in top journals from his PhD work and collaborated with other graduate students on four more.

LEARN MORE AND APPLY  
[ENGINEERING.NYU.EDU/CE](http://ENGINEERING.NYU.EDU/CE)



NYU Polytechnic School of Engineering  
Department of Civil and Urban Engineering  
Six MetroTech Center  
Brooklyn, NY 11201  
+1 646 997 3600

### HOW TO APPLY

The best and brightest from around the world apply for admission to the NYU School of Engineering.

### START YOUR APPLICATION

[engineering.nyu.edu/admissions/graduate/apply](http://engineering.nyu.edu/admissions/graduate/apply)

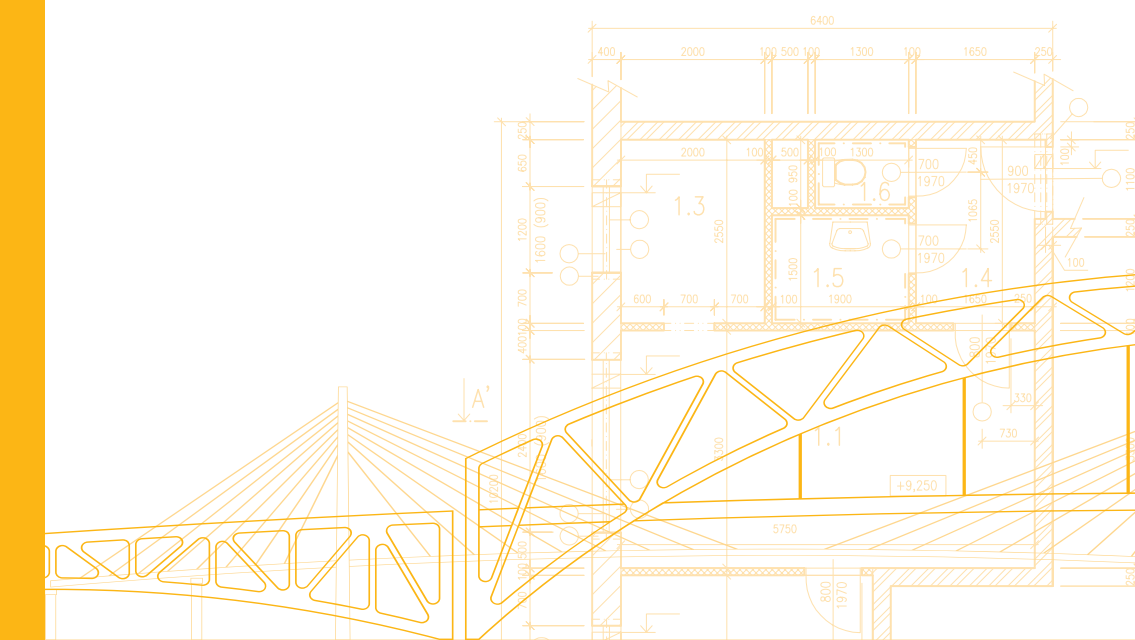
### APPLICATION REQUIREMENTS

[engineering.nyu.edu/admissions/graduate/requirements](http://engineering.nyu.edu/admissions/graduate/requirements)



# CIVIL AND URBAN ENGINEERING

## MASTER'S & PHD PROGRAMS



# BUILDING A BETTER FUTURE THROUGH INNOVATION

TRANSFORM THE FUTURE OF CIVIL AND URBAN INFRASTRUCTURE, TRANSPORTATION AND THE NATURAL ENVIRONMENT IN ONE OF THE WORLD'S GREAT CITIES.

The Department of Civil and Urban Engineering at the NYU School of Engineering engages in pioneering research to innovate methods of developing and managing civil infrastructure systems. Our faculty members are distinguished engineers and scientists who lead hands-on research with students to prepare them for professional or research careers in civil engineering. With the expertise of a distinguished community and unmatched location in New York City, we prepare our students to become engineers of the 21st century.

## ▶ SOPHIA MERCURIO, CE '15

Pursuing her master's degree in Civil Engineering, Sophia enthusiastically conducts research in geoenvironmental engineering including physical modeling of contaminant transport. Through the School's K-12 STEM initiative, she works as a Graduate Fellow in K-12 schools, broadening her engineering perspective and inspiring elementary, middle, and high school students to pursue STEM studies and careers. Sophia published two journal articles in leading journals and is working on a third.



## GRADUATE PROGRAMS

### MS IN CIVIL ENGINEERING

Design and improve infrastructure through modern technology, with a focus on smart infrastructure and materials. Students create their own path with a choice of six concentrations: construction management; structural engineering; geotechnical engineering; environmental engineering and water resources; urban systems; and highway and transportation engineering.

### MS IN CONSTRUCTION MANAGEMENT

Learn to plan and successfully manage construction projects and operations through the application of advanced organizational, technological and financial principles. Graduates are in high demand in government and the private sector, working for developers, architects, consultants and contractors.

### MS IN ENVIRONMENTAL ENGINEERING

Focus on sustainable use of natural resources through design and operation of engineered systems using an in-depth understanding of environmental chemistry and microbiology, hydrology, and pollution prevention and treatment. Graduates work in both private and public sectors in such fields as environmental assessment, remediation design and sustainable development.

### MS IN ENVIRONMENTAL SCIENCE

Engage in the multidisciplinary area of preserving and protecting the environment through an in-depth understanding of environmental interactions. Graduates enter such fields as environmental sustainability, urban development and natural resource management.

### MS IN TRANSPORTATION MANAGEMENT

Explore the fundamentals of managing and optimizing complex transportation systems with a focus on intelligent transportation systems, transit maintenance and facility management. Graduates go on to become managers in transportation operations and logistics.

### MS IN TRANSPORTATION PLANNING AND ENGINEERING

Design state-of-the-art transportation systems with a focus on multimodal transportation planning and operations. Emphasis is placed on intelligent transportation systems (ITS) and on using modern tools such as CUBE, TRANSCAD and Synchro. Graduates work as traffic engineers, transportation planners and highway designers.

### MS IN URBAN SYSTEMS ENGINEERING AND MANAGEMENT

Specialize in sustaining and upgrading infrastructure systems with innovative dynamic monitoring and smart-system control. Graduates enter such fields as urban planning, urban engineering and municipal infrastructure management.

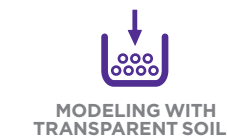
### PHD IN CIVIL ENGINEERING

Conduct original investigations demonstrating creativity and scholarship. Candidates typically focus on one of six civil engineering sub-disciplines: structural materials; geotechnical and geoenvironmental engineering; environmental and water resources; construction management; transportation engineering; and urban infrastructure systems engineering and management. Graduates are employed in academia and in advanced consulting positions.

### PHD IN TRANSPORTATION PLANNING AND ENGINEERING

Apply advanced analytical and computational techniques to solve complex transportation problems in urban areas. Emphasis is placed on the deployment of technology-oriented, sustainable engineering solutions. Graduates enter fields such as transportation safety, traffic engineering and intelligent transportation systems.

## TOP RESEARCH AREAS



## RESEARCH AND RESOURCES

The Department of Civil and Urban Engineering prides itself on excellent teaching and one-on-one mentorship of students. The faculty is involved in a wide variety of state-of-the-art research, primarily in the development and implementation of intelligent infrastructure-monitoring technologies and smart materials.

Students receive daily exposure to engineering issues through the department's involvement in local and regional matters of highway capacity, urban utilities management, intelligent transportation systems technologies and coastal preparedness. The department offers access to the following hands-on research centers:

- Concrete Lab
- Construction Modeling, Visualization and Simulation Lab
- Fluid Mechanics Lab
- Environmental Engineering Lab
- Intelligent Transportation Systems Lab
- Materials Lab
- New York State Resiliency Institute for Storms and Emergencies
- Optical Diagnostics Lab
- Photo Mechanics Lab
- Soil Mechanics Lab
- The Urban Observatory
- Transparent Soils Lab
- Urban Mobility and Intelligent Transportation Systems Lab



## ADVANCING INTELLIGENT TRANSPORTATION

Recipient of the prestigious NSF Career Award, **Kaan Ozbay** is dedicated to the advancement of Intelligent Transportation Systems, from operations to safety and security. He is the co-author of several books and more than 300 papers. Professor Ozbay serves on the editorial boards of several transportation journals. At NYU, he established UrbanMITS Lab where he conducts pioneering research on data-driven Intelligent Transportation Systems' (ITS) problems with his PhD students and post-doctoral fellows.

## CAREERS

FROM INDUSTRY GIANTS TO FAST-PACED STARTUPS, THE MOST COMPETITIVE COMPANIES IN THE WORLD SEEK SCHOOL OF ENGINEERING GRADUATE STUDENTS.

### INDUSTRY POSITIONS

- Civil Engineer
- Construction Manager
- Construction Superintendent
- Environmental Engineer
- Geotechnical Engineer
- Project Manager
- Structural Engineer
- Traffic Engineer
- Transportation Analyst
- Transportation Planner
- Wastewater Engineer
- Water Resources Engineers and Managers

### COMPANIES AND AGENCIES HIRING OUR GRADUATES

- AECOM
- Arup
- CDM Smith, Inc.
- GZA GeoEnvironmental, Inc.
- Hardesty & Hanover
- Hatch Mott MacDonald
- Hill International
- HNTB Corporation
- Jacobs Engineering Group
- Kiewit Corporation
- Langan Engineering & Environmental Services, Inc.
- Lend Lease Group
- Long Island Rail Road
- Louis Berger
- Metropolitan Transportation Authority
- National Grid
- NYC Department of Environmental Protection
- NYC/NYS/NJ/US Department of Transportation
- Parsons Brinckerhoff
- Port Authority of New York & New Jersey
- Skanska
- Thornton Tomasetti
- Turner Construction Company

### CAREER SUPPORT

The Wasserman Center for Career Development offers powerful resources such as résumé and interview guidance, specialized seminars and networking connections to prepare you for the next step in your career.