College of
ENGINEERING & COMPUTING

Department of Civil and Environmental Engineering

RESEARCH

The Department of Civil and Environmental Engineering (CEE) is renowned for its structural and transportation engineering research. The Accelerated Bridge Construction University Transportation Center (ABC-UTC) focuses on efficient bridge rehabilitation, replacement and workforce development. The NHERI Wall of Wind (WOW) Experimental Facility (EF), funded by the National Science Foundation (NSF), enables researchers to better understand wind effects on civil infrastructure systems and to prevent wind hazards from becoming community disasters. The Lehman Center for Transportation Research (LCTR) conducts research and training to improve transportation mobility and safety, and educate a multidisciplinary workforce to plan, manage, and implement transportation systems.

FACULTY

Atorod Azizinamini, chair and ABC-UTC director, has developed several bridge engineering products and systems used worldwide. He received the 2015 White House Champion of Change: Transportation Innovator. Mohammed Hadi received Best Paper Awards from the Transportation Research Board (TRB) Travel Time, Speed, and Reliability Subcommittee, and the TRB Freeway Operations Committee. Kingsley Lau is the vice-chair of the Corrosion of TEG053X Reinforced Concrete Symposia. Seung Jae Lee serves on the Technical Committee 103: Numerical Methods in Geomechanics – (ISSMGE). Hesham Ali was holds a patent for three dimensional paving. Ioannis Zisis was awarded a Certificate of Outstanding Contribution in Reviewing by the Journal of Wind Engineering & Industrial Aerodynamics.

PARTNERSHIPS

CEE boasts a number of multi-university and research partners and works with multiple funding agencies. ABC-UTC collaborates with the University of Nevada, Reno, University of Washington, Iowa State University and University of Oklahoma. Research partners include Southeastern Transportation Research, Innovation, Development and Education Center (STRIDE); Center for Urban Transportation Research (CUTR), Oak Ridge National Laboratory (ORNL) and various centers at FIU. Funding agencies range from the U.S. Department of Transportation (US DOT), NSF and National Aeronautics and Space Administration (NASA) to the U.S. Environmental Protection Agency (EPA) and Florida Department of Transportation (FDOT), among several others.

POINTS OF PRIDE

2018 Charles Pankow Award* for Innovation
to the Wall of Wind

First University Transportation Center
devoted solely to Accelerated Bridge Construction (ABC)

*ASCE

GRADUATE DEGREES OFFERED

- M.S. Civil Engineering
- M.S. Environmental Engineering
- Ph.D. Civil Engineering

RESEARCH HIGHLIGHTS

- Accelerated bridge construction
- Wind effects on civil infrastructure systems
- Transportation mobility and safety
- Geotechnical engineering
- Environmental and water resources engineering

GRADUATE RESEARCH OPPORTUNITIES

- Bridge engineering
- Wind and structural engineering
- Transportation engineering
- Geotechnical engineering
- Environmental and water resources engineering

FACILITIES

Wall of Wind (WOW): Powered by a 12-fan system capable of up to 157 mph wind speeds

Titan America Structures and Construction Testing Laboratory: Supports development of innovative hurricane-resistant and durable construction materials, structural systems and components

Intelligent Transportation Systems (ITS): Real-time traffic video feeds used for planning for "normal" conditions, major emergencies and evacuations

FIU | Engineering & Computing

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