

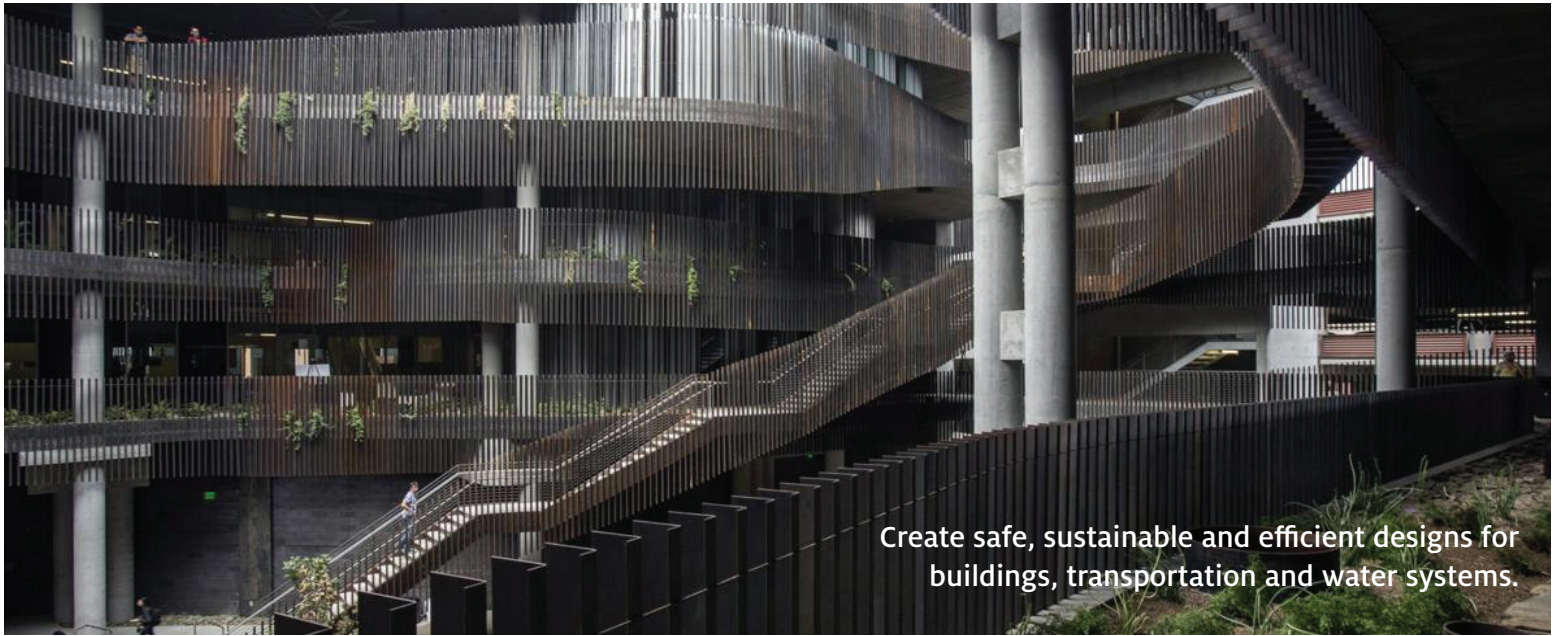


COLLEGE OF ENGINEERING

Civil & Architectural
Engineering & Mechanics

GRADUATE STUDIES

Developing infrastructure, from the ground up



Create safe, sustainable and efficient designs for buildings, transportation and water systems.

RESEARCH FOCUS AREAS

- Engineering mechanics
- Geomechanics and geotechnical
- Hydraulics and hydrology
- Structures
- Transportation engineering



TRANSPORTATION RESEARCH INSTITUTE

Do interdisciplinary research addressing the mobility, safety and environmental challenges of a rapidly evolving transportation landscape.

DEGREES

- PhD Civil Engineering & Engineering Mechanics
- MS Civil Engineering & Engineering Mechanics
- ME Civil Engineering & Engineering Mechanics

CERTIFICATES

- Advanced Transportation Engineering
- Geoengineering
- Hydraulics & Water Resources Engineering

CERTIFICATE TO MASTER'S IN TRANSPORTATION

- A global partnership with Soochow & Tongji universities

TOP 30%

Civil engineering graduate programs
(U.S. News & World Report 2022)

“ We were not just doing something for a thesis or paper. This seismic safety building project will make people’s lives better. ”

- Anshul Agarwal, research specialist



FUNDING OPTIONS
THROUGHOUT DEGREE
LIFECYCLE, INCLUDING
GAANN FELLOWSHIPS

APPLICATION DEADLINES

- Fall: January 1
- Spring: June 1

CONTACTS

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Engineering & Mechanics



“ There are many opportunities here for interdisciplinary research, and students are at the core of the work. ”
- Dominic Boccelli, head of UA Civil & Architectural Engineering & Mechanics

Faculty Expertise

Dominic Boccelli – dboccelli@arizona.edu
urban water infrastructure • drinking water distribution systems

Yi-Chang Chiu – chiu@arizona.edu
network modeling and applications in large-scale dynamic track assignment
• emergency evacuation modeling • integration with activity-based models

Cac Dao – cmd@arizona.edu
ultrasonic wave propagation

Jennifer G. Duan – gduan@arizona.edu
computational modeling of hydraulics and sediment transport • sediment transport mechanism • flow in vegetated channels • bridge scour analysis
• pathogen transport in waterways • river engineering

Robert Fleischman – rfleisch@arizona.edu
special seismic mitigation systems for buildings • earthquake engineering for precast/prestressed concrete and steel structures • progressive collapse of structures due to sudden events

George Frantziskonis – frantzis@arizona.edu
multiscale modeling and simulation • material characterization
• probabilistic and multiscale material description and applications in safety and reliability • behavior of materials at nanoscale

Achintya Haldar – haldar@arizona.edu
probabilistic methods in earthquake engineering • structural dynamics, fatigue/fracture reliability/maintainability of infrastructure • system identification • finite element analysis non-destructive inspections

Hongki Jo – hjo@arizona.edu
computer vision based structural health monitoring and machine learning

Rachel (Hee-Jeong) Kim – heejeong@arizona.edu
Carbon capture, utilization, and storage in cementitious materials, development of sustainable concrete through multiscale chemo-mechanical characterization, development of low-CO2 concrete for sustainable 3D-printed construction material

Tribikram Kundu – tkundu@arizona.edu
nondestructive testing • structural health monitoring by ultrasonic and electromagnetic techniques

Kevin Lansey – lansey@arizona.edu
water resources and hydraulics • resilient cities • water resources systems analysis • water distribution network modeling • optimization methods
• uncertainty analysis

Dean Papajohn – dpapajohn@arizona.edu
alternative delivery methods • public-private partnerships • sustainable construction

Alyssa Ryan – alyssaryan@arizona.edu
Smart city applications, big data analytics, human factors, sustainable transportation, transportation equity

Yao-Jan Wu – yaojan@arizona.edu
intelligent transportation systems • geographic information systems
• traveler behavior analysis • transportation safety analysis and accident modeling • sustainable transportation systems

Lianyang Zhang – lyzhang@arizona.edu
rock mechanics and rock engineering • sustainable geotechnics and geoenvironmental engineering • deep foundations • recycling of solid waste • sustainable and green construction materials