The Construction and Infrastructure Systems Engineering program at the Georgia Institute of Technology focuses on methods of building civil infrastructure projects that effectively control the project cost and duration while meeting safety, quality, environmental and other criteria. Established methods are taught in a variety of courses, and graduate students have the opportunity to assist in researching new ones. The program offers a collaborative environment for students, faculty and staff across campus. A strong research program in Construction and Infrastructure Systems Engineering and Management funded by the National Science Foundation, Construction Industry Institute, Georgia Department of Transportation, National Cooperative Highway and Research Program, foundations, and various industry partners provides an excellent complement to the educational component of the program.

Georgia Tech focuses on innovative research in construction engineering where students participate in state-of-the-art basic and applied projects in construction information technology, infrastructure sensors and sensor systems, construction data modeling and visualization, knowledge management for decision support systems, and other advanced areas of technology.

The interdisciplinary nature of construction engineering encourages students to supplement graduate courses in civil and environmental engineering with those from other programs at Georgia Tech, such as computer science, electrical and computer engineering, building construction and industrial and systems engineering.

Robotics and Intelligent Construction Automation Lab (RICAL) is a research facility used in the development and application of advanced construction technologies to improve current construction methods and process for building and transportation-related infrastructure. The facility is equipped with a custom-built hybrid LIDAR system; commercial LIDAR units; UAV; custom-built, all-terrain, heavy-duty mobile robots; large display touch screens; a robot testbed; thermography cameras; wireless technologies (RFID, Ultra-Wideband, bluetooth sensors); portable pneumatic and electrical power systems.

For more information, visit ce.gatech.edu/research/const
School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0355
404.894.2246 | gradinfo@ce.gatech.edu | ce.gatech.edu/academics/graduate
FACULTY

BAABAK ASHURI, PH.D., DBIA, CCP ASSOCIATE PROFESSOR
Innovative project delivery systems, economic decision analysis of resilient and sustainable infrastructure systems, investment valuation of high-performance buildings, energy performance benchmarking of multifamily properties, financial feasibility analysis of alternative energy technologies, predictive project analytics, data mining of BIM projects, project finance, real options analysis for infrastructure asset valuation, cost estimation and forecasting, budget-based design, risk management, portfolio management.

YONG K. CHO, PH.D. ASSOCIATE PROFESSOR
Field automation in construction, robotics, pavement maintenance, sustainable building energy management, construction safety, BIM, virtual design and construction, machine vision, thermography, rapid as-built modeling, real-time equipment tracking and 3D visualization, wireless sensor networking for mobile asset tracking.

LAURENCE J. JACOBS, PH.D. COLLEGE OF ENGINEERING ASSOCIATE DEAN FOR ACADEMIC AFFAIRS & PROFESSOR
Quantitative nondestructive evaluation of civil engineering materials; wave propagation in solids, emphasizing guided waves; nonlinear methods and heterogeneous materials; optical techniques; acoustic sensors for condition monitoring of structural components.

KIMBERLY E. KURTIS, PH.D. COLLEGE OF ENGINEERING ASSOCIATE DEAN FOR FACULTY DEVELOPMENT AND SCHOLARSHIP & PROFESSOR
Multi-scale structure and performance (i.e., early age through durability) of cement-based materials, cement and admixture chemistry, characterization of cement-based materials, fiber-cement composites, sustainable construction materials, forensics.

IRIS TIEN, PH.D. ASSISTANT PROFESSOR
Probabilistic methods for modeling and reliability assessment of civil infrastructure systems, stochastic processes, risk analysis, structural and infrastructure health monitoring, signal processing and machine learning, and decision making under uncertainty.

EMERITUS FACULTY

LAWRENCE F. KAHN PH.D.

ADJUNCT FACULTY

DANIEL CASTRO, PH.D., P.E.
T. RUSSELL GENTRY, PH.D., P.E.