Transportation Engineering

The Engineering School of Sustainable Infrastructure and Environment
Civil Engineering

Education for Leadership Roles
• Efficient, safe and reliable traffic operations techniques
• State-of-the-art analysis, modeling and evaluation of multimodal transportation systems
• Improved travel forecasting and transportation planning methods

Research Focus Areas
• Traffic signal control and optimization
• Highway capacity and level of service
• Transportation systems analysis
• Travel-demand modeling and forecasting

Research Outcomes
• Innovative traffic operations techniques
• Improved highway performance monitoring
• Advanced transportation systems evaluation methods
• New planning and policy analysis tools

Research Benefits
• Alleviation of traffic congestion
• Efficient utilization of highway facilities
• Development of reliable transportation systems
• Better planning for future transportation needs

Related Centers & Facilities
• Transportation Research Center (TRC) fostering interdisciplinary research collaborations (http://trc.ce.ufl.edu)
• Center for Multimodal Solutions for Congestion Mitigation (CMS), a US DOT funded Tier I Center (http://cms.ce.ufl.edu)
• McTrans Center, the leader in transportation software testing, distribution, and support (http://mctrans.ce.ufl.edu)
• Florida Transportation Technology Transfer (T2) Center with an extensive research library (http://t2.ce.ufl.edu)
• National Older Driver Research and Training Center (NODRTC) examining elderly driver issues
• Traffic Simulation Laboratory with a full suite of traffic analysis software
• Traffic Signal Control Laboratory equipped with video image digitizing devices, signal controllers, and a Controller Interface Device
• Instrumented vehicle for field data collection
• Driving simulator for driver behavior research

Research and Educational Opportunities
• Active research program funded by multiple sponsors
• Research and teaching assistantships and fellowships with competitive stipend and full tuition
• Concurrent graduate degree in the Department of Urban and Regional Planning
• Undergraduate research internships over the summer months

Employment Opportunities
Graduates are prepared for leadership positions in academia, research institutions, government agencies, and industry.

Employers of our recent graduates include: University of Alabama, Parsons Brinckerhoff, Wilbur Smith Associates, Kimley-Horn and Associates, Kittelson and Associates, Inc., and Amazon
Faculty

Professor Emeritus

Lily Elefteriadou, Ph.D.
Director, Transportation Research Center (TRC), Kisinger Campo Professor of Civil and Coastal Engineering
Traffic Flow Theory, Highway Capacity, Quality of Service, Traffic Simulation, Signal Control

Fazil Najafi, Ph.D.
Professor
Public Works Engineering Management and Planning

William M. Sampson, P.E.
Associate-in-Engineering
Director, McTrans
Highway Capacity and Traffic Operations, Computer Applications Transportation

Sivaramakrishnan Srinivasan, Ph.D.
Associate Professor
Activity-Based Travel Modeling, Transportation Planning, Travel Behavior, Application of Econometric Methods

Scott Washburn, Ph.D., P.E.
PBS&J Associate Professor
Traffic Operations, Quality of Service, Computational Methods and Software Development, Simulation, Statistical and Econometric Methods, Geometric Design

Yafeng Yin, Ph.D.
Associate Professor
Transportation Network Modeling, Highway Traffic Operations, Transit Planning and Operations, Intelligent Transportation Systems

Courses

Computational Methods in Transportation Engineering
Discrete Choice Analysis
Freeway Operations and Simulation
Traffic Engineering
Traffic Flow Theory
Transportation Systems Analysis
Urban Streets Simulation and Control
Urban Transportation Models
Urban Transportation Planning

Graduate students can select electives from other departments such as Industrial and Systems Engineering, Urban and Regional Planning, Economics, and Statistics.

Contact information
For information on graduate admissions requirements, research opportunities and funding information, please visit the web site for the Engineering School of Sustainable Infrastructure & Environment at www.essie.ufl.edu.

For specific inquiries, e-mail gradinfo@essie.ufl.edu

Specify Transportation Engineering