



2025 Spring/Fall Ph.D. Positions in Industrial Engineering

Position Description

The Electrified, Autonomous, and Shared Transportation (EAST) lab in the Department of Industrial and Systems Engineering (ISE) at the University of Tennessee, Knoxville (UTK) invites highly motivated candidates to apply for Ph.D. positions starting Spring/Fall 2025, working under Dr. Hongyu Zheng. Applicants with research experiences in mathematical modeling, machine learning, optimization, or network modeling are strongly encouraged to apply. Applicants with a master's degree in Industrial Engineering, Transportation Engineering, Computer Science, Management, or other relevant fields are preferred but not required.

About the PI

Dr. Zheng holds an Assistant Professor appointment in the ISE department with a courtesy appointment in the Department of Civil and Environmental Engineering at UTK. His research centers on the crosscutting field of Industrial Engineering and Mobility. Methodology-wise, he specializes in developing novel tools based on transportation economics, game theory, machine learning (ML), optimization, and network modeling. Key areas of his research include, but are not limited to:

- Transportation electrification for sustainability
- Design and regulation of shared mobility services
- Autonomous modular vehicle systems
- Transportation equity
- Smart logistics systems

Dr. Zheng received his Ph.D. degree in Transportation System Analysis and Planning from Northwestern University in 2024. His research has been published in world-leading journals including Transportation Science, Transportation Research Part A, B, and C. For more information, please visit Dr. Zheng's website: <https://zhenghongyu.github.io/>.

Application Process

The admission requirements for the Ph.D. program in Industrial Engineering at UTK can be found at <https://ise.utk.edu/graduate/admission-procedure/>. If interested, please send your CV, transcripts, TOEFL (if applicable), and research interests to zheng@utk.edu in an email titled "PhD Application – Your Name – Your University". Accepted Ph.D. students will receive full doctoral-level financial support with a tuition waiver. *Dr. Zheng is also happy to host (remote) undergraduate/graduate visitors.* For more information, please refer to his website.

About the University of Tennessee, Knoxville

Future mobility is one of the five research focus areas ("[gateways](#)") of the University of Tennessee, Knoxville. The [Center for Transportation Research](#) offers various [programs](#) for graduate students to explore unique research interests and partner with nearby Oak Ridge National Laboratory, the National Institute for Computational Sciences, etc. The newly appointed [Institute for Future Mobility](#) serves as an additional resource and support, offering opportunities such as the [Volkswagen PhD Fellows program](#). UTK is Tennessee's flagship university, a campus of choice for outstanding undergraduates, and a premier graduate institution. The campus is located in one of the most beautiful areas of the country, with easy access to pristine state and national parks, miles of inland waterways, and diverse cultural opportunities. Please find more information about UTK and the ISE department at <https://www.utk.edu> and <https://ise.utk.edu>.