

**University of Southern California**  
**VITERBI SCHOOL OF ENGINEERING**

Master of Science in Civil Engineering (Transportation Systems)  
Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Master of Science in Civil Engineering (Transportation Systems) program is to prepare students for high-level professional employment to the design, delivery, management, and improvement of transportation infrastructure and infrastructure-based services; or to pursue advanced graduate studies focusing on related problems in the field. Graduates might pursue transportation-related employment or advanced graduate study relating to facilities and networks, distribution and logistics, planning and analysis, or related areas.

- Upon completion of the USC Master of Science in Civil Engineering (Transportation Systems), students will be able to demonstrate broad understanding of transportation systems; particularly with respect to infrastructure requirements and planning; and including transportation systems analysis; data management; optimization; predictive modeling and forecasting; technology choice and implementation; transportation planning; sustainability; and relevant social science constructs, including the legal context of transportation decisions.
- Upon completion of the USC Master of Science in Civil Engineering (Transportation Systems), students will be able to apply critical principles and skills pertinent to MSCE (Transportation Systems) duties in their employment and professional practice.
- Upon completion of the USC Master of Science in Civil Engineering (Transportation Systems), students will be able to work in diverse global contexts and apply universally respectful and globally centric practices pertinent to MSCE (Transportation Systems) duties in international and domestic contexts.
- USC VSoE students enrolled in the MSCE (Transportation Systems) program will demonstrate understanding of contemporary research questions, results, and areas of application relating to transportation systems, particularly with respect to urban infrastructure.