## University of Southern California VITERBI SCHOOL OF ENGINEERING

## Master of Science in Environmental Engineering Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Master of Science in Environmental Engineering is to prepare students for high-level professional employment in the design, delivery, management, and improvement of environmental engineering systems and infrastructure; or to pursue advanced graduate studies focusing on related problems in the field. Graduates might pursue environmental engineering-related employment or advanced graduate study.

- Upon completion of the USC Viterbi School of Engineering Master of Science in Environmental Engineering, students will be able to demonstrate broad understanding of environmental engineering systems; particularly with respect to air, water, and energy requirements and planning; and including technology design and implementation; monitoring and analysis; data management; optimization; predictive modeling and forecasting; and achieving sustainability within relevant social science constructs.
- Upon completion of the USC Viterbi School of Engineering Master of Science in Environmental Engineering, students will be able to apply critical principles and skills pertinent to environmental engineering duties in their employment and professional practice.
- Upon completion of the USC Viterbi School of Engineering Master of Science in Environmental Engineering program, students will be able to work in diverse global contexts and apply universally respectful and globally centric practices pertinent to environmental engineering duties in international and domestic contexts.
- USC Viterbi School of Engineering students enrolled in the MSENE program will demonstrate understanding of contemporary research questions, results, and areas of application relating to environmental engineering.