## University of Southern California VITERBI SCHOOL OF ENGINEERING

## Ph.D. in Engineering (Environmental Engineering) Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Ph.D. program in Engineering (Environmental Engineering) is to prepare students to execute original, high-level research in the discipline specific to the student's area of emphasis, especially in water, air, energy, or related areas. Graduates might be employed at leading research universities, or in any research-centric arena.

- USC Viterbi School of Engineering doctoral students enrolled in the Ph.D. program in Environmental Engineering will achieve and demonstrate deep methodological skill and an understanding of contemporary research in their respective area of emphasis, and be able to implement innovative research practices under guidance of their faculty advisor and in concert with their research team.
- USC doctoral students enrolled in the Ph.D. program in Environmental Engineering will
  demonstrate understanding of applying contemporary research in their respective area of
  emphasis to industry contexts and be able to engage in innovative practices informed by
  such research pertinent to Environmental Engineering and their area of emphasis in
  diverse contexts.
- USC doctoral students enrolled in the Ph.D. program in Environmental Engineering will
  demonstrate understanding of leading research teams in their respective area of emphasis
  by mentoring and providing teaching assistance to undergraduate and master's students
  and fellow Ph.D. students who are less advanced than they are in their respective doctoral
  programs.
- USC doctoral students enrolled in the Ph.D. program in Environmental Engineering will launch an independent research agenda in their respective area of emphasis under the guidance of their faculty advisor.
- USC doctoral students enrolled in the Ph.D. program in Environmental Engineering will complete and orally defend an acceptable dissertation based on original investigation and supervised by their dissertation committee. The dissertation must show mastery of an area of emphasis within Environmental Engineering, capacity for independent research, and a scholarly result.