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.