

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

Doctor of Philosophy in Computer Engineering  
Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Ph.D. program in Computer Engineering is to prepare students to execute original, high-level research in the discipline specific to the student's area of emphasis, especially computer networks, VLSI, digital systems, software engineering, and computer-aided applications. 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 Computer Engineering will achieve and demonstrate deep methodological skills 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 Viterbi School of Engineering doctoral students enrolled in the Ph.D. program in Computer 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 Computer Engineering and their area of emphasis in diverse contexts.
- USC Viterbi School of Engineering doctoral students enrolled in the Ph.D. program in Computer 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 Viterbi School of Engineering doctoral students enrolled in the Ph.D. program in Computer Engineering will launch an independent research agenda in their respective area of emphasis under the guidance of their faculty advisor.
- USC Viterbi School of Engineering doctoral students enrolled in the Ph.D. program in Computer 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 Computer Engineering, capacity for independent research, and a scholarly result.