

University of Southern California
VITERBI SCHOOL OF ENGINEERING

PhD in Electrical Engineering
Program Learning Objectives

The purpose of the USC Viterbi School of Engineering PhD program in Electrical Engineering is to prepare students to execute original, high-level research in the discipline specific to the student's area of emphasis, especially communications, signal and image processing, control systems, computer systems, analog, digital, and mixed-signal circuits, optics and photonics, MEMS and nanotechnology, and other 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 Electrical 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 doctoral students enrolled in the Ph.D. program in Electrical 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 Electrical Engineering and their area of emphasis in diverse contexts.
- USC doctoral students enrolled in the Ph.D. program in Electrical 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 Electrical 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 Electrical 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 Electrical Engineering, capacity for independent research, and a scholarly result.