

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

Master of Science in Electrical Engineering (VLSI Design)

*Program Learning Objectives*

The purpose of the USC Viterbi School of Engineering Master of Science in Electrical Engineering (VLSI Design) is to prepare students for high-level professional employment in any sector of the media systems arena that incorporates analytical techniques; or, to pursue advanced graduate studies focusing on related problems in the field. Graduates might pursue VLSI-related employment or advanced graduate study relating to digital systems architectures, computer-aided design, or mixed-signal circuits and their implementation.

- Upon completion of the USC Master of Science in Electrical Engineering (VLSI Design), students will be able to demonstrate broad understanding of digital systems architectures, computer-aided design, and mixed-signal circuits.
- Upon completion of the USC Master of Science in Electrical Engineering (VLSI Design), students will be able to apply critical principles and skills pertinent to MSEE (VLSI Design) duties in their employment and professional practice.
- Upon completion of the USC Master of Science in Electrical Engineering (VLSI Design), students will be able to work in diverse global contexts and apply universally respectful and globally centric practices pertinent to MSEE (VLSI Design) duties in international and domestic contexts.
- USC students enrolled in the Master of Science in Electrical Engineering (VLSI Design) will demonstrate understanding of contemporary research questions, results, and areas of application relating to digital systems.