University of Southern California VITERBI SCHOOL OF ENGINEERING

<u>Master of Science in Civil Engineering (Structural Engineering)</u> Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Master of Science in Civil Engineering (Structural Engineering) is to prepare students for high-level professional employment in structural design or forensic engineering firms, in leadership positions in the public sector, or to pursue advanced graduate studies focused on problems in structural mechanics, structural analysis or earthquake engineering.

- Upon completion of the USC Master of Science in Civil Engineering (Structural Engineering), students will demonstrate broad understanding of structural mechanics, structural analysis and structural design pertinent to the practice of structural engineering. Building upon an undergraduate foundation in Civil Engineering, students will integrate theory and practice in the understanding of the behavior of structures to nature's forces and the design of these structures utilizing techniques based on structural mechanics and the current structural design practice. Students can tailor their program to emphasize structural mechanics, structural analysis or professional practice.
- Upon completion of the USC Master of Science in Civil Engineering (Structural Engineering), students will be able to apply critical principles, technical skills and management and communication skills to engineering duties in their employment and professional practice.
- Upon completion of the USC Master of Science in Civil Engineering (Structural Engineering), students will be able to work in diverse global contexts and apply universally respectful and globally centric practices pertinent to the design and management of structural engineering projects in international and domestic contexts.
- USC Viterbi School of Engineering students enrolled in the Master of Science in Civil Engineering (Structural Engineering) program will demonstrate understanding of contemporary research questions, results, and areas of application relating to structural engineering.