## University of Southern California VITERBI SCHOOL OF ENGINEERING

## Engineer in Mechanical Engineering Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Engineer degree in Mechanical Engineering is to prepare students to think critically about current advanced research concepts and apply them to the solution of practical engineering challenges. Graduates might be employed at any organization involved in the solution of contemporary complex problems.

The USC Viterbi School of Engineering Engineer in Mechanical Engineering degree program is designed to satisfy the following learning objectives:

- 1. provide breadth of knowledge to further an awareness of the interdisciplinary nature of mechanical engineering;
- 2. provide depth of knowledge in a particular field of study;
- 3. further develop the ability to formulate problems, to synthesize and integrate information, to work both independently and collaboratively, and to communicate effectively;
- 4. educate students in methods of advanced analysis and the use of tools appropriate to an increasingly complex field;
- 5. develop an awareness of the dynamic and evolving nature of the field, including current controversies, novel approaches, and significant critiques;
- 6. develop the ability to think critically about new problems and apply knowledge gained through research to the solution of such problems;
- 7. promote a sense of leadership and service among our graduates; and
- 8. prepare students for successful careers regardless of the path they follow.