University of Southern California VITERBI SCHOOL OF ENGINEERING

<u>Bachelor of Science in Biomedical Engineering</u> (all emphases) <u>Program Learning Objectives</u>

USC's Bachelor of Science program in Biomedical Engineering imparts rigorous training in both science and engineering, giving our students a strategic advantage in today's healthcare industry. Graduates of our program build successful and rewarding careers as engineers, medical doctors, and professions such as law, physical therapy, and dentistry.

Upon completion of the USC Viterbi School of Engineering Bachelor of Science degree in Biomedical Engineering, students will:

- demonstrate broad understanding of biology and human physiology, bio instrumentation, signal analysis methods applied to biomedical signals, statistics, and medical device regulation;
- be able to apply critical principles and practices pertinent to the biomedical engineering field in their employment practice;
- be able to work in diverse global contexts and apply universally respectful and globally centric practices pertinent to biomedical engineering; and
- demonstrate understanding of contemporary engineering design principles and associated innovative practices relevant to bio instrumentation, medical device development and regulation, biomaterials, rehabilitation engineering or biomedical imaging. Students will be able to implement these practices under guidance of biomedical engineering faculty members in preparation for employment in biomedical and other industries.