University of Southern California VITERBI SCHOOL OF ENGINEERING

<u>Master of Science in Computer Science (Computer Security)</u> Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Master of Science in Computer Science (Computer Security) program is to prepare students for high level professional employment in any sector of computer science related to the practice of computer security research, development and deployment, and the secure operation of computer systems; or to pursue advanced graduate studies focusing on related problems in the field. Graduates might pursue computer science-related employment or advanced graduate study in many diverse real-world domains including industry and government facilities.

- Upon completion of the USC Master of Science in Computer Science (Computer Security) program, students will be able to demonstrate deep understanding of the development of systems that enforce security, cryptography and statistical analysis of attacks, and implementation and management of systems that depend on security technologies for correct operation.
- Upon completion of the USC Master of Science in Computer Science (Computer Security) program, students will be able to apply critical principles and skills pertinent to MSCS (Computer Security) duties in their employment and professional practice.
- Upon completion of the USC Master of Science in Computer Science (Computer Security) program, students will be able to work in diverse global contexts and apply universally respectful and globally centric practices pertinent to MSCS (Computer Security) duties in international and domestic contexts.
- USC students enrolled in the Master of Science in Computer Science (Computer Security) program will demonstrate understanding of contemporary research questions, results, and areas of application relating to computer security.