

University of Southern California
VITERBI SCHOOL OF ENGINEERING

Master of Science in Industrial and Systems Engineering
Program Learning Objectives

The purpose of the USC Viterbi School of Engineering Master of Science in Industrial and Systems Engineering is to prepare students for high level professional employment in service and manufacturing organizations that require advanced technical knowledge, and for continued graduate study at the doctoral level.

Upon completion of the USC Viterbi School of Engineering Master of Science in Industrial and Systems Engineering, students will

- demonstrate advanced understanding of production planning and scheduling methods;
- demonstrate understanding of the inherent balance among cost, schedule, and functional requirements for a project, and be able to apply management practices that motivate project team members toward successful completion of projects;
- demonstrate a deeper understanding of production systems and information systems than is typical of an undergraduate engineer, and be able to apply advanced design and analysis methods to those systems; and
- be able to apply the methods and practices described above to a specific field of endeavor (e.g.: supply chain management, transportation systems management, and health care systems management).