

Name _____

ID# _____

Term Admitted: _____

- *Twenty units must be at 500 level or above*
- *At least twenty units of industrial and systems engineering courses related to operations research.*
- *Courses used toward a degree completed elsewhere may not be applied toward a master's degree at USC. If courses were not used toward a completed degree, the maximum number of transfer credits that may be applied towards a 28- unit master's degree, subject to departmental approval, is four units.*

Required Prerequisite Courses/Equivalents:

Calculus I, II, III
 Linear Algebra & Diff. Eq. (e.g. Math 225)
 Probability & Statistics (e.g. ISE 220, ISE 225)
 Linear Programming

REQUIRED COURSES (20 units)

Semester	Course	Prerequisite
	ISE 536 – Linear Programming and Extensions (4 units, FaSp)	
	ISE 538 – Performance Analysis Using Markov Models (4 units, FaSp)	
	ISE 580 – Performance Analysis with Simulation (4 units FaSp)	
	ISE 583 – Enterprise Wide Information Systems (4 units, FaSpSm)	
	ISE 632 – Network Flows and Combinatorial Optimization	ISE 536

Select 1 of the following 10 courses – 4 Units (minimum)

Semester	Course	Prerequisite
	ISE 513 – Inventory Systems (4 units, Sp)	
	ISE 514 – Advanced Production Planning and Scheduling (4 units, FaSp)	
	ISE 520 – Optimization Theory and Algorithms: Numerical Optimization (4 units, Fa)	
	ISE 525 – Design of Experiments (4 units Sp)	
	ISE 539 – Stochastic Elements of Simulation (4 units, Sp)	<i>corequisite</i> ISE 538
	ISE 562 – Decision Analysis (4 units, FaSp)	
	ISE 563 – Financial Engineering (4 units, FaSp)	
	ISE 576 – Industrial Ecology: Technology-Environment Interaction (4 units, Sp)	

Advisor Approved Electives (4 units):

Semester	Course	

Master of Science in Operations Research
Total Minimum Units: 28