Name _____ ID#_____

Term Admitted: _____

At least twenty one units of industrial and systems engineering courses related to operations research.

Twenty one units must be at 500 level or above

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 30 unit master's degree, subject to departmental approval, is four units.

Required Prerequisite Courses	**Where Completed**	**Course #**	**Title**
Calculus I, II, III			
Linear Algebra			
Programming			
Probability & Statistics			
Engr. Economy			
System Simulation			

REQUIRED COURSES

Semester	**Course**	**Prerequisite**
	*ISE 532 – Network Flows	ISE 330 or ISE 536
	ISE 536 – Linear Programming and Extensions (3 units, Fa)	MATH 225 or EE 441*)*
	ISE 538 – Performance Analysis Using Markov Models (3 units, Fa)	
	ISE 580 – Performance Analysis with Simulation (3 units Sp)	*Recommended*: ISE 220, 325, 435
	ISE 582 – Web Technology for Industrial Engineering ***or***	ISE 382
	ISE 583 – Enterprise Wide Information Systems (3 units, FaSpSm)	

*Replacement course ISE 632

Select at least 2 of the following 10 courses:

Semester	**Course**	**Prerequisite**
	CE 645 – Uncertainty Modeling and Stochastic Optimization	
	ISE 513 – Inventory Systems (3 units, Sp)	
	ISE 514 – Advanced Production Planning and Scheduling (3 units,FaSp)	
	ISE 520 – Optimization: Theory and Algorithms (3 units, Fa)	MATH 225 or EE 441
	ISE 525 – Design of Experiments (3 units Sp)	ISE 225
	ISE 539 – Stochastic Elements of Simulation (3 units, Sp)	*corequisite* ISE 538
	ISE 562 – Decision Analysis (3 units, Sp)	
	ISE 563 – Financial Engineering (3units, FaSp)	
	ISE 576 – Industrial Ecology:Technology-Environment Interaction (3 units, Fa)	
	SAE 541 – Systems Engineering Theory and Practice (3 units, FaSpSm)	

400- or 500-level computer science course, approved by faculty advisor (3 or 4 units)

Semester	**Course**	**Approval and date**

Advisor Approved Electives (6 units):

Semester	**Course**	**Approval and date**

Master of Science in Operations Research
Total 30 units