PROGRESSIVE DEGREE PROGRAM
COURSE PLAN TEMPLATE

USC SCHOOL   Viterbi School of Engineering

ACADEMIC DEPARTMENT   Daniel J. Epstein Department of Industrial & Systems Engineering

GRADUATE PROGRAM   MS ISE (Industrial & Systems Engineering)

POST CODE   274

TERM EFFECTIVE DATE   Spring 2021

PROGRAM DESCRIPTION
A brief description of the graduate program.

> The MSISE program is excellent preparation for industrial engineering program graduates who want to acquire substantial depth with respect to industrial engineering methods and the theory of the firm. This degree is also relevant if you are a graduate from another technical area and intend to leverage your existing skills toward the pursuit of responsibility for the profitability and growth of your organization.

COMMON BACHELOR DEGREE PROGRAM PATHWAYS
A list of common bachelor's degrees that undergraduate students pursue in advance of pursuing a progressive degree option with this graduate program. Some programs are restricted to certain majors while others are open to all students.

Industrial & Systems Engineering

PREPARATORY UNDERGRADUATE COURSES
A list of courses at the undergraduate level that prepare students for the graduate program. Required coursework is listed first, followed by recommended courses. If not applicable, this section will be blank.

Dept. Prefix - Course #	Course Title	Required or Recommended	Units
ISE-225	Engineering Probability, Statistics	Required	
	Calculus I, Calculus II, Calculus III	Required	
ISE-460	Engineering Economy	Required	
	Linear Algebra	Required	

UNDERGRADUATE COURSES USED TO REDUCE GRADUATE LEVEL UNITS
A list of undergraduate level courses that may be used to reduce the number of graduate level units required for the graduate program. If there are none, that is specified instead.

Dept. Prefix - Course #	Course Title	Units
	NONE	

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CORE GRADUATE PROGRAM REQUIREMENTS (# units required)
A list of all required graduate courses for the graduate program. None of these courses may be used toward satisfying undergraduate degree requirements.
If special exceptions for any of these courses are made by the academic department, the course # is marked with an asterisk (*) and the exception is explained in the "Department Notes" section at the end of this course plan template.

Dept. Prefix - Course #	Course Title	Units
ISE-513	Inventory Systems	3
ISE-514	Advanced Planning & Scheduling	3
ISE-515	Engineering Project Management	3
ISE-583	Enterprise Wide Information Systems	3
Group A Choose One:		**3**
ISE-530	Optimization Methods for Analytics	
ISE-536	Linear Programing and Extensions	
Group B Choose One:		**3**
ISE-525	Design of Experiments	
ISE-527	Quality Management for Engineers	
Group C Choose One:		**3**
ISE-538	Performance Analysis Using Markov Models	
ISE-580	Performance Analysis with Simulation	

PRE-APPROVED ELECTIVE COURSEWORK
Elective coursework is approved at the discretion of the academic department. Note the following details about the total number and units required of elective coursework.

9	**TOTAL ELECTIVE UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE**
0	**TOTAL ELECTIVE UNITS REQUIRED FOR THE PROGRESSIVE GRADUATE DEGREE**

TOTAL UNIT COUNTS AND REQUIRED GRADUATE UNITS

30	**TOTAL UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE**
9	**TOTAL GRADUATE UNITS THAT MAY BE WAIVED (IF ANY)**
21	**MINIMUM NUMBER OF GRADUATE UNITS THAT MUST BE AT THE 500 LEVEL OR ABOVE**

Last Revised 3/2/2021

NOTES FROM THE DEPARTMENT
This section highlights any unique considerations, exceptions, or requirements for the graduate program. If a program has specific restrictions (courses, majors, etc.), they are detailed below.

N/A

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Kelly Goulis

April 7, 2021

Authorizing Dean's Name

Date Approved

Senior Associate Dean, Viterbi School of Engineering

Authorizing Dean's Title