

**PROGRESSIVE DEGREE PROGRAM  
COURSE PLAN TEMPLATE**

<b>USC SCHOOL</b>	Viterbi School of Engineering
<b>ACADEMIC DEPARTMENT</b>	Systems Architecting and Engineering
<b>GRADUATE PROGRAM</b>	MS. Systems Architecting and Engineering
<b>POST CODE</b>	1165
<b>TERM EFFECTIVE DATE</b>	Spring 2021

**PROGRAM DESCRIPTION**

A brief description of the graduate program.

This program is recommended to graduate engineers and engineering managers responsible for the conception and implementation of complex systems. Emphasis is on the creative processes and methods by which complex systems are conceived, planned, designed, built, tested and certified. The architecture experience can be applied to defense, space, aircraft, communications, navigation, sensors, computer software, computer hardware, and other aerospace and commercial systems and activities.

**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.

ASTE, AE, ME, EE, Math, Physics, Engineering undergraduates are eligible.	These majors should have an engineering background.
Non engineering majors with engineering experience on interest can become eligible if they have engineering or management experience.	

**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
	NONE		

**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	

**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
SAE 560	Economic Considerations for Systems Engineering	3
SAE 541	Systems Engineering Theory and Practice	3
SAE 542	Advanced Topics in Systems Engineering	3
SAE 547 or SAE 548	Model-Based Systems Architecting and Engineering or Model-Based Systems Architecting and Engineering	3
SAE 549	Systems Architecting	3
SAE 500 elective	SAE 500 elective	3
SAE 500 elective	SAE 500 elective	3

**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.

**TOTAL ELECTIVE UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE**

**TOTAL ELECTIVE UNITS REQUIRED FOR THE PROGRESSIVE GRADUATE DEGREE**

**TOTAL UNIT COUNTS AND REQUIRED GRADUATE UNITS**

**TOTAL UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE**

**TOTAL GRADUATE UNITS THAT MAY BE WAIVED (IF ANY)**

**MINIMUM NUMBER OF GRADUATE UNITS THAT MUST BE AT THE 500 LEVEL OR ABOVE**

**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.

Tech electives are waived for MS SAE PDP program.

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Kelly Goulis

**Authorizing Dean's Name**

April 7, 2021

**Date Approved**

Senior Associate Dean, Viterbi School of Engineering

**Authorizing Dean's Title**