

**PROGRESSIVE DEGREE PROGRAM
COURSE PLAN TEMPLATE**

USC SCHOOL	Viterbi School of Engineering
ACADEMIC DEPARTMENT	Sonny Astani Department of Civil and Environmental Engineering
GRADUATE PROGRAM	Master of Science in Emerging Transportation Systems
POST CODE	1995
TERM EFFECTIVE DATE	Fall 2024

PROGRAM DESCRIPTION

A brief description of the graduate program.

The program prepares students for professional employment in transportation planning agencies, firms, and nonprofit organizations. The program is designed as a terminal professional degree.

The program core provides students with a broad basis for understanding transportation systems and needs. A required specialization provides particular depth in a focused aspect of transportation systems relating to a particular set of methods or problem domain.

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.

Any BS or BA degree offered by the University of Southern California.	<i>This program is opened to many majors.</i>

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
MATH 114	Foundations of Statistics	Required	4
CE 471	Principles of Transportation Engineering	Recommended	4

**PROGRESSIVE DEGREE PROGRAM
COURSE PLAN TEMPLATE**

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

CORE GRADUATE PROGRAM REQUIREMENTS (6 units required)

A list of all required graduate courses for the graduate program core. 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
CE 536	Future of Mobility	4
CE 579	Introduction to Transportation Law	2

PRE-APPROVED ELECTIVE COURSEWORK (SPECIALIZATION OPTIONS)

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.

20	TOTAL ELECTIVE UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE
16	TOTAL ELECTIVE UNITS REQUIRED FOR THE PROGRESSIVE GRADUATE DEGREE

TOTAL UNIT COUNTS AND REQUIRED GRADUATE UNITS

32	TOTAL UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE
10	TOTAL GRADUATE UNITS THAT MAY BE WAIVED (IF ANY)
22	MINIMUM NUMBER OF GRADUATE UNITS THAT MUST BE AT THE 500 LEVEL OR ABOVE

**PROGRESSIVE DEGREE PROGRAM
COURSE PLAN TEMPLATE**

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.

Approved Electives:
CE 505: Data Management for Civil and Environmental Engineering (2 units)
CE 521: Transportation Systems Analysis (4 units)
CE 524: Digital Tools for Transportation
CE 568: Fundamental Concepts of Computing and Programming in Civil and Environmental Engineering (2 units)
CE 573: Advanced Technologies in AEC Practices (4 units)
CE 577: Data Analytics for Surface Transportation (4 units)
CE 582: Transportation System Security and Emergency Management (4 units)
CE 584: Intelligent Transportation Systems (4 units)
PPD 631: Geographic Information Systems for Policy, Planning, & Development (2 units)
PPD 634: Institutional and Policy Issues in Transportation (4 units)

DocuSigned by:

407039A648C8431...

Authorizing Dean's Name

11/19/2024 | 10:07:39 PM PST

Date Approved

kelly Goulis Senior Associate Dean

Authorizing Dean's Title