

**PROGRESSIVE DEGREE PROGRAM
COURSE PLAN TEMPLATE**

USC SCHOOL	Viterbi School of Engineering
ACADEMIC DEPARTMENT	Ming Hsieh Department of Electrical and Computer Engineering
GRADUATE PROGRAM	Green Technologies
POST CODE	1377
TERM EFFECTIVE DATE	Spring 2021

PROGRAM DESCRIPTION

A brief description of the graduate program.

Green Technologies is a highly interdisciplinary degree program that emphasizes green systems and the environment, energy technology and efficiency, and sustainability and society. The discipline seeks opportunities for alternative sourcing, conservation, efficiency and repurposing through an understanding of product life cycles from origins to recycling or inevitable disposal. Green technologists will design products, processes and complex infrastructure systems to promote sustainable attributes of importance to the environment and the global community.

https://catalogue.usc.edu/preview_program.php?catoid=12&poid=13026&hl=GREEN+TECHNOLOGY&returnto=search

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 Viterbi BS degree	BA/BS Environmental Science, Chemistry, Physics, Mathematics, Economics
-----------------------	---

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 225	Linear Algebra and Differential Equations	Required	4
Math 229	Calculus III	Required	4
	Python or C++ Programming skills	Recommended	4

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	

**PROGRESSIVE DEGREE PROGRAM
COURSE PLAN TEMPLATE**

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 515	Sustainable Infrastructure Systems	3
ISE 576	Industrial Ecology: Technology-Environment Interactions	3
CHE 510 or AME 577	Energy and Process Efficiency or Survey of Energy and Power for a Sustainable future	3 or 3
CE 501 or ENE 505	Construction Practices or Energy and the Environment	4 or 4
Elective	Energy, Technology, and Efficiency list	3 - 4
Elective	Sustainability and Society list	3
Total Minimum Units:		18

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.

9-12*	TOTAL ELECTIVE UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE
6-8**	TOTAL ELECTIVE UNITS REQUIRED FOR THE PROGRESSIVE GRADUATE DEGREE

TOTAL UNIT COUNTS AND REQUIRED GRADUATE UNITS

27	TOTAL UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE
9	TOTAL GRADUATE UNITS THAT MAY BE WAIVED (IF ANY)
18	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.

<p>* 3 advisor approved electives</p> <p>** one elective from each of the Energy Technology and Sustainability areas, 2 electives total</p>

**PROGRESSIVE DEGREE PROGRAM
COURSE PLAN TEMPLATE**

Kelly Goulis

Authorizing Dean's Name

April 7, 2021

Date Approved

Senior Associate Dean, Viterbi School of Engineering

Authorizing Dean's Title