# ADT IN ENVIRONMENTAL SCIENCE

Environmental Science is an interdisciplinary and multidisciplinary course of study that presents an overview of ecological issues from a scientific perspective. With a broad foundation across the natural sciences, the coursework examines the interrelated nature of environmental and social systems. This program is designed to equip students with the skills and tools to successfully use the scientific method while studying and solving environmental problems.

## **Learning Outcomes**

#### A.S.-Transfer Degree Level Student Learning Outcomes

Students completing the Environmental A.S.-Transfer Degree will:

- Demonstrate knowledge of the physical, biological, ecological, and social sciences required to effectively address current environmental issues and be prepared to pursue further study in an Environmental Science Program at the baccalaureate level.
- Be proficient in the research, analytical and communication skills necessary to present critical analysis in natural and social systems and the behaviors that impact and effect the environment.
- Facilitate habits of independent and objective thought with an integrated approach to the physical and natural sciences to understand long-term sustainability.

## Requirements

# Students receiving this transfer degree must meet the following requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) (http://catalog.citruscollege.edu/programs-study/ graduation-requirements-associate-degree/general-educationrequirements-transfer-csu-uc-igetc-option-iii/) or the California State University General Education - Breadth Requirements (http://catalog.citruscollege.edu/programs-study/graduationrequirements-associate-degree/general-education-requirementstransfer-csu-csuge-option-ii/).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- 2. Obtainment of a minimum grade point average of 2.0.
- 3. Meet the 12-unit residency requirement.

ADTs also require that students must earn a "C" (or "P") or better in all courses required for the major or area of emphasis.

Code	Title	Units
Required courses:		
BIOL 124	Molecular and Cellular Biology	5
BIOL 125	Evolution, Ecology & Biodiversity (Required Core )	5

Code	Title	Units
BIOL 145	Environmental Science	3
CHEM 111	General Chemistry I	5
ECON 102	Principles of Microeconomics	3
ESCI 120	Physical Geology	4
MATH 165	Introduction to Statistics	4
or MATH 165H	Introduction to Statistics - Honors	
PHYS 111	College Physics A	4
PHYS 112	College Physics B	4
Select one (1) of the following	g math options:	
MATH 180	Calculus for Business and Social Sciences	4
MATH 190	Calculus with Analytic Geometry I	5
Total Units		41-42

## **Curriculum Map**

#### 2-3 Year Curriculum Map Examples

These maps represents two possible pathways through the program and are only for reference.

\*It is highly recommended that you make an appointment (https://www.citruscollege.edu/stdntsrv/counsel/Pages/ApptSchedule.aspx) to create a customized education plan that fits your needs.

Note: Co-requisite MATH course (2 units) and/or substitute ENGL 101E (5 units) may be needed based on placement.

#### 2-Year Map:

Course	Title	Units
Fall Term 1		
CHEM 111	General Chemistry I	5
MATH 190	Calculus with Analytic Geometry I	5
BIOL 145	Environmental Science	3
COUN 160 or COUN 206	Strategies for College Success or Pathways to Careers in STEM	3
ENGL 101 or ENGL 101H	Reading and Composition or Reading and Composition - Honors	4
	Units	20
Winter Term 1		
ARCH 250	History of Architecture: Prehistory to Mannerism	3
or ARCH 251	or History of Architecture: Baroque to the Present Day	
or ART 100	or Art History - Fundamentals of Global Art History	
or ART 105	or Art History - Topics in Contemporary Art	
or ART 108	or History of Photography	
or ART 110	or Introduction to the Visual Arts	
or ART 199	or Motion Picture Appreciation	
or ART 199H	or Motion Picture Appreciation - Honors	
or DANC 102	or History of Dance	
or MUSE 113	or History of Rock and Roll	
or THEA 101	or Introduction to Theatre Arts	
or THEA 101H	or Introduction to Theatre Arts - Honors	
ENGL 104	Argumentative Writing and Critical Thinking	3
or ENGL 104H	or Argumentative Writing and Critical Thinking - Honors	
	Units	6
Spring Term 1		
BIOL 124	Molecular and Cellular Biology	5
CHEM 112	General Chemistry II	5

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Course	Title	Units
MATH 191	Calculus with Analytic Geometry II	5
	Units	15
Summer Term 1		
HIST 107 or HIST 107H or HIST 108 or HIST 108H or HIST 160	History of the United States before 1877 or History of the United States before 1877 - Honors or History of the United States since 1877 or History of the United States since 1877 - Honors or History of Women in the United States	3
SPCH 100 or SPCH 100H or SPCH 101 or SPCH 101H or SPCH 106	Interpersonal Communication or Interpersonal Communication - Honors or Public Address or Public Address - Honors or Small Group Communication	3
	Units	6
Fall Term 2		
ESCI 120	Physical Geology	4
BIOL 125	Evolution, Ecology & Biodiversity	5
PHYS 111	College Physics A	4
ETHN 101 or ETHN 116	Introduction to Ethnic Studies or Introduction to Chicano/Latino Studies	3
OI LITIN ITO	Units	16
Winter Term 2	Office	10
ECON 101	Principles of Macroeconomics	2
or ECON 101H	or Principles of Macroeconomics - Honors	3
POLI 103	American Government and Politics	3
or POLI 103H	or American Government and Politics - Honors	· ·
	Units	6
Spring Term 2		
ECON 102	Principles of Microeconomics	3
PHYS 112	College Physics B	4
ARCH 250	History of Architecture: Prehistory to Mannerism	3
or ARCH 251 or ART 100 or ART 105 or ART 108 or ART 110 or ART 110 or ART 119 or ART 119 or ART 199H or DANC 102 or ENGL 290 or ENGL 293 or ENGL 293 or ENGL 298 or KIN 166 or MUSE 113 or PHIL 101 or SOC 130 or THEA 101 MATH 165 or MATH 1655	or History of Architecture: Baroque to the Present Day or Art History - Fundamentals of Global Art History or Art History - Topics in Contemporary Art or History of Photography or Introduction to the Visual Arts or Motion Picture Appreciation or Motion Picture Appreciation - Honors or History of Dance or Ethnic Voices in Film or Children's Literature or Children's Literature or Children's Literature or Literature of the Bible or American Food And Culture: Global Origins, History, and Current Impacts or History of Rock and Roll or Great Religions of the World or Introduction to LGBTQ Studies or Introduction to Theatre Arts - Honors	4
OF MIATH 165H	or Introductory Statistics - Honors  Units	14
-		
	Total Units	83

Note: Course selections may affect total unit value.

# 3-Year Map:

Course	Title	Units
Fall Term 1		
MATH 175	Pre-Calculus	6
ENGL 101 or ENGL 101H	Reading and Composition or Reading and Composition - Honors	4
COUN 160 or COUN 206	Strategies for College Success or Pathways to Careers in STEM	3
	Units	13

Course Title U Winter Term 1  MATH 190 Calculus with Analytic Geometry I Units  Spring Term 1  MATH 191 Calculus with Analytic Geometry II  BIOL 145 Environmental Science	5 5 5 3 5 3
MATH 190 Calculus with Analytic Geometry I Units  Spring Term 1  MATH 191 Calculus with Analytic Geometry II	5 3 5 3
Units  Spring Term 1  MATH 191 Calculus with Analytic Geometry II	5 3 5 3
Spring Term 1  MATH 191 Calculus with Analytic Geometry II	5 3 5 3
MATH 191 Calculus with Analytic Geometry II	3 5 3
	3 5 3
RIOL 145 Environmental Science	5 3
DIOL 143 Environmental Science	3
CHEM 110 Beginning General Chemistry	
ENGL 104 Argumentative Writing and Critical Thinking	16
or ENGL 104H or Argumentative Writing and Critical Thinking - Honors	16
Units	
Summer Term 1	
ECON 101 Principles of Macroeconomics	3
or ECON 101H or Principles of Macroeconomics - Honors	
Units	3
Fall Term 2	
CHEM 111 General Chemistry I	5
BIOL 124 Molecular and Cellular Biology	5
ENGL 290 Ethnic Voices in Film	3
or ENGL 293 or Children's Literature or ENGL 293H or Children's Literature - Honors	
or ENGL 298 or Literature of the Bible	
or KIN 166 or American Food And Culture: Global Origins, History,	
or PHIL 101 and Current Impacts	
or SOC 130 or Great Religions of the World	
or Introduction to LGBTQ Studies	
Units	13
Winter Term 2	
ARCH 250 History of Architecture: Prehistory to Mannerism	3
or ARCH 251 or History of Architecture: Baroque to the Present Day	
or ART 100 or Art History - Fundamentals of Global Art History or ART 105 or Art History - Topics in Contemporary Art	
or ART 108 or History of Photography	
or ART 110 or Introduction to the Visual Arts	
or ART 199 or Motion Picture Appreciation	
or ART 199H or Motion Picture Appreciation - Honors	
or DANC 102 or History of Dance	
or MUSE 113 or History of Rock and Roll	
or THEA 101 or Introduction to Theatre Arts or THEA 101H or Introduction to Theatre Arts - Honors	
	3
SPCH 100 Interpersonal Communication or SPCH 100H or Interpersonal Communication - Honors	3
or SPCH 101 or Public Address	
or SPCH 101H or Public Address - Honors	
or SPCH 106 or Small Group Communication	
Units	6
Spring Term 2	
BIOL 125 Evolution, Ecology & Biodiversity	5
CHEM 112 General Chemistry II	5
PHYS 111 College Physics A	4

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Units

Course	Title	Units
Summer Term 2		
ARCH 250	History of Architecture: Prehistory to Mannerism	3
or ARCH 251	or History of Architecture: Baroque to the Present Day	
or ART 100	or Art History - Fundamentals of Global Art History	
or ART 105	or Art History - Topics in Contemporary Art	
or ART 108	or History of Photography	
or ART 110	or Introduction to the Visual Arts	
or ART 199	or Motion Picture Appreciation	
or ART 199H	or Motion Picture Appreciation - Honors	
or DANC 102	or History of Dance	
or ENGL 290	or Ethnic Voices in Film	
or ENGL 293H	or Children's Literature - Honors	
or ENGL 298	or Literature of the Bible	
or ENGL 298	or Literature of the Bible	
or KIN 166	or American Food And Culture: Global Origins, History,	
or MUSE 113	and Current Impacts	
or PHIL 101	or History of Rock and Roll	
or SOC 130	or Great Religions of the World	
or THEA 101	or Introduction to LGBTQ Studies	
or THEA 101H	or Introduction to Theatre Arts	
	or Introduction to Theatre Arts - Honors	
	Units	3
Fall Term 3		
PHYS 112	College Physics B	4
ETHN 101	Introduction to Ethnic Studies	3
or ETHN 116	or Introduction to Chicano/Latino Studies	
MATH 165	Introductory Statistics	4
or MATH 165H	or Introductory Statistics - Honors	
	Units	11
Winter Term 3		
POLI 103	American Government and Politics	3
or POLI 103H	or American Government and Politics - Honors	3
	Units	3
	Units	3
Spring Term 3		
ECON 102	Principles of Microeconomics	3
ESCI 120	Physical Geology	4
HIST 107	History of the United States before 1877	3
or HIST 107H	or History of the United States before 1877 - Honors	
or HIST 108	or History of the United States since 1877	
or HIST 108H	or History of the United States since 1877 - Honors	
or HIST 160	or History of Women in the United States	
	Units	10
	Total Units	97

#### Notes:

- Organic chemistry is required for UC transfer.
- Course selections may affect total unit value.

# **Career Information**

### **Career Opportunities**

There are a variety of careers you can do with this major.

To explore more about this major, schedule an appointment (https://www.citruscollege.edu/stdntsrv/ctcenter/Pages/ApptSchedule.aspx) with a career counselor.