

# ENVIRONMENTAL SCIENCE, ASSOCIATE IN SCIENCE FOR TRANSFER

The development of the Associate in Science in Environmental Science for Transfer Degree (AS-T in Environmental Science) helps transfer students focus on the core prerequisite courses and supports them as they move toward their goal in transferring to a four-year institution. Students who complete this degree will satisfy lower-division general education and major requirements for transfer to a CSU in Environmental Science program. Further, students who complete the degree will be guaranteed admission to the CSU system.

The Associate in Science in Environmental Science for Transfer Degree (AS-T) is intended for students who plan to transfer and complete a bachelor's degree in Environmental Science, or a major deemed similar at a CSU campus. Each CSU campus determines which of the degrees it offers are "similar" and can be completed with the preparation included in the AS-T in Environmental Science within 60 units once a student transfers, so which majors are "similar" varies from CSU to CSU. For a current list of what majors (and what options or areas of emphasis within that major) have been designed as "similar" to this degree at each CSU campus, please refer to the CSU's Associate Degree for Transfer Major and Campus Search (<https://www2.calstate.edu/apply/transfer/Pages/associate-degree-for-transfer-major-and-campus-search.aspx>) webpage and seek guidance from a Moorpark College counselor. Students completing this AS-T degree are guaranteed admission to the CSU system but not necessarily to a particular campus or a major of choice.

## To earn an AS-T in Environmental Science, students must:

1. Complete 60 semester 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 for Science, Technology, Engineering, Math (IGETC for STEM) pattern, and
  - b. The required coursework for the AS-T in Environmental Science as listed in the Moorpark College catalog.

**\* NOTE:** To comply with SB 1440 and to not exceed the maximum 60-semester units allowed, students may choose to complete MATH M16A (Applied Calculus I) instead of MATH M25A/H (Calculus with Analytic Geometry I/Honors) and the IGETC for STEM for this transfer degree.

2. Obtain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some transfer institutions and majors may require a higher GPA. Please consult with a counselor for more information.

3. Obtain a grade of "C" or better or "P" in all courses required in the major. Even though a "pass-no-pass" is allowed (Title 5 §55062), it is highly recommended that students complete their major courses with a letter grade (A, B, or C).

4. Complete requirements in residency. For students in the Ventura County Community College District, a minimum of 12 units must be completed in residence within the college district.

Students transferring to a CSU campus that accepts the AS-T in Environmental Science will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a

designated "high-unit" major at a particular campus). This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. Students should consult with a counselor to obtain more information on university admission and transfer requirements.

Course ID	Title	Units/ Hours
<b>REQUIRED COURSES</b>		
<b>Complete either Option 1 or Option 2</b>		<b>15</b>
<b>Option 1 - Biology sequence with one semester of General Chemistry</b>		
BIOL M02A or BIOL M02AH	General Biology I Honors: General Biology I	5
BIOL M02B	General Biology II	5
CHEM M01A or CHEM M01AH	General Chemistry I Honors: General Chemistry I	5
<b>Option 2 - Chemistry sequence with one semester of General Biology</b>		
BIOL M02A or BIOL M02AH	General Biology I Honors: General Biology I	5
CHEM M01A or CHEM M01AH	General Chemistry I Honors: General Chemistry I	5
CHEM M01B	General Chemistry II	5
LIST A		14-16
LIST B		13
Total Units		42 - 44

Course ID	Title	Units/ Hours
<b>LIST A</b>		<b>14 - 16</b>
ENSC M01	Environmental Science	3
MATH M15 or MATH M15H	Introductory Statistics Honors: Introductory Statistics	4
<b>Complete one Calculus course</b>		<b>3-5</b>
MATH M25A or MATH M25AH	Calculus with Analytic Geometry I Honors: Calculus with Analytic Geometry I	5
MATH M16A	Applied Calculus I *	3

**\* NOTE:** To comply with SB 1440 and to not exceed the maximum 60-semester units allowed, students may choose to complete MATH M16A (Applied Calculus I) instead of MATH M25A/H (Calculus with Analytic Geometry I/Honors).

<b>Complete either a Geography or Geology course, with a corresponding Lab</b>		<b>4</b>
GEOG M01 & M01L	Physical Geography and Physical Geography Lab	3, 1
GEOL M02 & M02L	Physical Geology and Physical Geology Lab	3, 1
GEOL M02H & GEOL M02L	Honors: Physical Geology and Physical Geology Lab	3, 1

Course ID	Title	Units/ Hours
<b>LIST B: Complete ECON M201 and either Option 1 or Option 2 of the Physics sequence</b>		<b>13</b>

ECON M201	Principles of Microeconomics	3
Select one of the following Options:		10
<b>Option 1:</b>		
PHYS M10A & M10AL	General Physics I and General Physics I Lab	4, 1
PHYS M10B & M10BL	General Physics II and General Physics II Laboratory	4, 1
<b>Option 2:</b>		
PHYS M20A & M20AL	Mechanics of Solids and Fluids and Mechanics of Solids and Fluids Laboratory	4, 1
PHYS M20B & M20BL	Thermodynamics, Electricity, and Magnetism and Thermodynamics, Electricity, and Magnetism Laboratory	4, 1
<b>Total Units for the Major</b>		<b>38 - 40</b>
General Education Requirements: To comply with SB 1440 and to not exceed the maximum units allowed, the IGETC for STEM is the recommended GE pattern to be used for this transfer degree.		
<b>IGETC for STEM*</b>		<b>31</b>
*IGETC 1C is required for all CSU applicants. Students applying to a UC or Private school may earn this ADT without IGETC 1C but will be ineligible to apply to a CSU.		
Double-Counted Units		13
Electives to meet 60 CSU transferable units		4
<b>Total Units Required for the AS-T Degree</b>		<b>60</b>

Upon successful completion of this program, students will be able to:

- analyze the impacts of modern technologies on living and nonliving systems, including the health of human and non-human animals.
- analyze the history and current use of fossil fuels, including the challenges associated with their use and the relevance of alternative forms of energy in the modern energy landscape.
- evaluate the properties, conservation, and role of soil in agriculture, including how water is consumed and managed throughout the anthroposphere.
- apply the concept of sustainability, from local through global scales.
- create a diagram to illustrate how water and other materials (e.g., carbon, etc.) cycle throughout the earth system.
- evaluate sources of air, land, and water pollution, including management and legislation that helps to mitigate their impacts on the ecosphere.
- analyze the relationship between population growth and environmental issues.
- analyze how photosynthesis, cellular respiration, and thermodynamics underpin the chemistry and physics of living systems.