

# ENVIRONMENTAL SCIENCE – ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER

Top Code:

0301.00

The Associate in Science in Environmental Science for Transfer provides students with a broad foundation in the sciences from an environmental perspective in preparation for upper division course work in the environmental sciences. The Associate in Science in Environmental Science for Transfer is designed to provide students a clear transfer pathway to the CSU within the environmental science major and the completion of baccalaureate degree, with guaranteed admission to a CSU to a similar major with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

Environmental sciences has a wide range of career choices available in the growing field of environmental science. Graduates in these majors are in demand as environmental issues both local and global mount and the movement towards sustainable practices under economic, social, ethical, and political pressures increase. Earning a degree in environmental science is the starting point for careers in climate resilience, sustainability, conservation, ecology, environmental engineering, hydrology, and carbon management.

## Associate Degree for Transfer Requirements

- 60 semester or 90 quarter CSU-transferable units.
- Completion of the California General Education Transfer Curriculum (Cal-GETC); OR California State University-General Education-Breadth pattern (CSU GE-Breadth), if eligible catalog rights; OR the Intersegmental General Education Transfer Curriculum (IGETC-CSU) pattern, if eligible catalog rights.
- A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- Obtainment of a minimum grade point average (GPA) of 2.0.
- All courses in the major must be completed with a grade of "C" or better, or P if the course is graded on a P/NP basis.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with an Academic Counselor to determine the particular transfer requirements of specific institutions.*

## Program Outcomes

- Use the scientific method to conduct experiments.
- Apply quantitative reasoning to analyze experimental results.
- Apply a variety of scientific disciplines to analyze environmental problems.

## Associate in Science in Environmental Science for Transfer Degree

| Code                                                       | Title                                                                                                                                                                                 | Units          |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Required Core</b>                                       |                                                                                                                                                                                       |                |
| Either:                                                    |                                                                                                                                                                                       |                |
| CHEM 001A<br>& BIOL 010A<br>& BIOL 010B                    | GENERAL CHEMISTRY AND CHEMICAL ANALYSIS I<br>and CELLULAR BIOLOGY, GENETICS AND EVOLUTION<br>and THE DIVERSITY OF LIFE ON EARTH: STRUCTURE, FUNCTION AND ECOLOGY                      | 14             |
| or                                                         |                                                                                                                                                                                       |                |
| BIOL 010A<br>& CHEM 001A<br>& CHEM 001B                    | CELLULAR BIOLOGY, GENETICS AND EVOLUTION<br>and GENERAL CHEMISTRY AND CHEMICAL ANALYSIS I<br>and GENERAL CHEMISTRY AND CHEMICAL ANALYSIS II                                           | 15             |
| or                                                         |                                                                                                                                                                                       |                |
| BIOL 004<br>& BIOL 010A<br>& CHEM 001A                     | BOTANY/PLANT DIVERSITY AND ECOLOGY<br>and CELLULAR BIOLOGY, GENETICS AND EVOLUTION<br>and GENERAL CHEMISTRY AND CHEMICAL ANALYSIS I                                                   | 14             |
| ENVS 002                                                   | HUMAN IMPACT ON THE ENVIRONMENT                                                                                                                                                       | 3              |
| GEOG 001<br>& 001L<br>or GEOL 001                          | PHYSICAL GEOGRAPHY<br>and PHYSICAL GEOGRAPHY LABORATORY<br>PHYSICAL GEOLOGY                                                                                                           | 4              |
| STAT C1000<br>or STAT C1000I<br>or STAT 015<br>or STAT 018 | INTRODUCTION TO STATISTICS<br>INTRODUCTION TO STATISTICS - HONORS<br>STATISTICS FOR BUSINESS AND ECONOMICS<br>STATISTICS FOR BEHAVIORAL AND SOCIAL SCIENCES                           | 4              |
| MATH 005A<br>or MATH 005AE<br>or MATH 005AH<br>or BUS 014B | CALCULUS I: LATE TRANSCENDENTALS<br>CALCULUS I: LATE TRANSCENDENTALS - EMBEDDED SUPPORT<br>CALCULUS I: LATE TRANSCENDENTALS - HONORS<br>MATHEMATICAL ANALYSIS FOR BUSINESS - CALCULUS | 4-5.5          |
| ECON C2001<br>or ECON C2001                                | PRINCIPLES OF MICROECONOMICS<br>PRINCIPLES OF MICROECONOMICS - HONORS                                                                                                                 | 3              |
| Either:                                                    |                                                                                                                                                                                       |                |
| PHYS 008A<br>& PHYS 008B                                   | PHYSICS FOR SCIENTISTS AND ENGINEERS I: MECHANICS<br>and PHYSICS FOR SCIENTISTS AND ENGINEERS II: WAVES, ELECTRICITY & MAGNETISM                                                      | 10             |
| or                                                         |                                                                                                                                                                                       |                |
| PHYS 002A<br>& PHYS 002B                                   | GENERAL PHYSICS I: MECHANICS AND THERMAL PHYSICS<br>and GENERAL PHYSICS II: ELECTROMAGNETISM, OPTICS, AND MODERN PHYSICS                                                              | 8              |
| <b>Required Subtotal</b>                                   |                                                                                                                                                                                       | <b>40-44.5</b> |
| Cal-GETC <sup>1</sup>                                      |                                                                                                                                                                                       | 34             |

Transferable Electives (as needed to reach 60 transferable units)

|                     |           |
|---------------------|-----------|
| <b>Degree Total</b> | <b>60</b> |
|---------------------|-----------|

<sup>1</sup> Students with rights to former general education patterns are able to use the CSU GE or IGETC-CSU in lieu of Cal-GETC to complete the general education requirement of this degree. Students should consult with an Academic Counselor to help determine which general education pattern to complete.

## General Education Requirements for the Associate in Science Degree for Transfer

- General Information (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/>)
- Cal-GETC (<https://curriculum.pasadena.edu/degree-certificate-requirements/#calgetctext>)
- Students with rights to the former general education patterns can complete IGETC-CSU or CSU GE in lieu of Cal-GETC. Students should consult with an Academic Counselor to determine which general education pattern to complete and may refer to an appropriate archived College Catalog (<https://curriculum.pasadena.edu/previous-catalogs/>) or [www.assist.org](http://www.assist.org) (<https://www.assist.org/>) for more information.