

Environmental Science AS-T (IGETC for STEM GE Track)

+If you have completed coursework at another college and/or are starting in a semester other than a Fall term, please follow up with the Counseling Department to determine if this sequence is appropriate for your academic and career goals.

Program Description: The Environmental Science Program is an interdisciplinary and multidisciplinary course of study that presents an overview of ecological issues from a scientific perspective. The broad course work requirements include biology, chemistry, physics and geology and serve to examine the interrelated nature of environmental and social systems. The program is designed to equip students with the skills and analytical ability to apply the scientific method to explore and solve environmental problems.

The curriculum in the Environmental Science Associate Degree program is designed to prepare students to transfer to a baccalaureate institution and complete a four year degree in an environmental related field of study, including, but not limited to, Environmental Science, Environmental Studies, Environmental Management, Environmental Policy, Energy Studies, Sustainability Studies, Conservation Biology, Ecology, and Wildlife Management. [The Student Transfer Achievement Reform Act \(SB 1440\)](#)

If following this map for this Associate Degree for Transfer, a student needs to complete the IGETC for STEM, which means that within IGETC Area 3, the student only needs at least one 3-unit Art course and at least one 3-unit Humanities course, rather than needing three courses (or 9 units) from Area 3. The student also only needs two 3-unit courses from IGETC Area 4-Social Sciences, rather than needing three courses (or 9 units) from Area 4.

Program SLO: Students will be able to analyze environmental problems and evaluate potential solutions based on scientific data looking at ecological, economic and social factors.

Important Transfer Information: *Connect with a counselor to develop an individualized student education plan through the Counseling Department @ <https://www.canyons.edu/counseling> or (661) 362-3288/(661) 362-3811. This sequence listed below may not meet all your transfer admissions requirements.*

*Major courses are sequenced and **BOLDED** based on recommendations by the [Department of Biology](#).*

First Semester (4-16 units) FA = Fall; WI = Winter; SP = Spring; SU = Summer

Course	Title	Units	Major and GE Courses
ENVRMT 103	Introduction to Environmental Sci (FA, SP)	4	Major Course, Area 5A and 5C
*MATH 102 or MATH 102X	Trigonometry (FA, WI, SP, SU) or Trigonometry with Support (FA, SP)	4 -5	Prerequisite (Not UC transferable)
+CHEM 151/151H	Preparatory Chemistry (FA, WI, SP, SU)	4	Prerequisite for CHEM 201
ENGL 101/101H	English Composition (FA, WI, SP, SU)	4	Area 1A
Term Totals:		16-17	

*MATH 211 is required for this major. MATH 102 or 102X (Trigonometry) and Math 104 (Pre-calculus) are pre-requisites for MATH 211. Start with the math level you place into. Consult with a counselor for more information.

+Students can take Chemistry Diagnostic Exam to place into CHEM 201

Check the Honors website for most recent course offerings. Must be enrolled in the Honors program to take courses, see below

Intersession I (17-19 units)

Course	Title	Units	Major and GE Courses
COMS 105/105H	Fundamentals of Public Speaking (FA, WI, SP, SU)	3	Area 1C
Term Totals:		3	

Course	Title	Units	Major and GE Courses
BIOL 106/106H	Organismal & Environmental Biology (FA, WI, SP, SU)	4	Major Course, Area 5B and 5C
CHEM 201/201H	General Chemistry I (FA, WI, SP, SU)	5	Major Course
*MATH 104	Pre-Calculus (FA, SP, SU)	5	Prerequisite and Area 2
American Institutions – Choose Option I or II	Complete first course in chosen option – (note: must take both classes within one option) (FA, WI, SP, SU)	3	American Institutions and Area 3B or 4
Term Totals:		17	

Second Semester (20-36 units)

*If you place into MATH 211 (Calculus) you do not need MATH 104.

Interession II (37-41 units)

Course	Title	Units	Major and GE Courses
*MATH 211	Calculus I (FA, SP, SU)	5	Major Course
Term Totals:		5	

Third Semester (42-55 units)

Course	Title	Units	Major and GE Courses
BIOL 107/107H	Molecular and Cellular Biology	4	Major Course
Group 1 Course++	Choose 1st course from Group 1 listed below	4	Major Course
ECON 202/202H	Microeconomics (FA, WI, SP, SU)	3	Major Course and Area 4
Critical Thinking	Choose one course from the IGETC GE Area 1B category (FA, WI, SP, SU)	3	Area 1B
Term total:		14	

++Physics sequence varies based on transfer school. See a counselor for more information.

Interession III (56-62 units)

Course	Title	Units	Major and GE Courses
GEOGRPH 101 or GEOLOGY 101	Physical Geography with Lab (FA, WI, SP, SU) or Physical Geology with Lab (FA, WI, SP, SU)	4	Major Course
Arts Course	Choose one course in IGETC GE Area 3A (FA, WI, SP, SU)	3	Area 3A
Term total:		7	

Fourth Semester (63-73 units minimum) – may not need elective units if already have finished 60 CSU/UC units, major courses, and GE requirements (see Counseling Department for assistance)

Course	Title	Units	Major and GE Courses
Group 1 Course++	Choose 2 nd course from Group 1 listed below	4	Major Course
MATH 140/140H OR MATH 140X	Introductory Statistics (FA, WI, SP, SU) OR Statistics with Support (FA, SP)	4-5	Major Course
American Institutions – Choose Option I or II	Complete second course in chosen option – (note: must take both classes within one option) (FA, WI, SP, SU)	3	American Institutions and Area 3B or 4
#UC Elective (if needed)	Suggested to take a #foreign language class from IGETC-Language Other Than English (unless you completed 2 years of High School language already)	4-5 (if needed)	UC Elective (if short units or still need a foreign language for the UCs or other transfer college)
Term total:		11-17	

Total Units: 73+ units (these units include Math 102 and Math 104 if necessary)

#Note: Foreign language is required as part of the UC transfer general education breadth. This requirement may be met by through two years of high school foreign language. Official high school transcript must be on file with Admission & Records Office. Please see the Counseling Department for additional information.

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Group 1 – Need eight units from the following two options:

++Physics sequence varies based on transfer school. See a counselor for more information.

++Physics 110 & 111 OR	General Physics I (FA, SP, SU) & General Physics II (FA, SP, SU) <i>4 units each</i>	8
++Physics 220 & 221	Physics for Scientists and Engineers: Mechanics of Solids and Fluids (FA, SP, SU) & Physics for Scientists and Engineers: Electricity and Magnetism (FA, SP, SU) <i>4 units each</i>	8

American Institutions Requirement – Select one of the options below and complete a total of 6 units

Option 1	One course from the following: Economics 170/170H, History 111/111H, History 112/112H, History 120/120H, or History 130 AND Political Science 150/150H (FA, WI, SP, SU)
Option 2	History 111/111H AND History 112/112H (FA, WI, SP, SU)

Counseling ResourcesBiology Department: <https://www.canyons.edu/academics/biology/index.php>Counseling Department: www.canyons.edu/counselingUC General Education Guide: <https://www.canyons.edu/student-services/counseling/degrees/generaled.php>CSU/UC Articulation Agreements: www.assist.orgUniversity of California: www.universityofcalifornia.eduUC Transfer Pathway: <http://admission.universityofcalifornia.edu/transfer/preparation-paths/index.html>COC Club -Hands on Earth: Email Hands.On.Earth@gmail.comCOC Club -National Parks Club: Email nationalparkclub@gmail.comCOC Honors Program: <https://www.canyons.edu/academics/honors/index.php>Campus Alliances: <https://www.canyons.edu/administration/ie2/equity/alliances.php>

Petition for Associate Degree: Check the student calendar for term-specific submission deadlines. Summer graduation associate degree petitions are due by April 1st for your name to appear in the spring commencement pamphlet. The petition form must be reviewed with a counselor and may be found here:

<https://www.canyons.edu/student-services/admissions/records/forms.php>

Career ResourcesCalifornia Career Zone: <https://www.cacareerzone.org/>O*Net Online: <https://www.onetonline.org/>Bureau of Labor and Statistics: www.bls.govProfessional Associations: AESS Association for Environmental Studies and Sciences: <https://aessonline.org/>