

Environmental Science - AS-T



2023-24

Program map for Environmental Science Associate in Science-Transfer (AS-T)

Today's environmental problems call for people who are educated in more than one discipline, highly trained in scientific and technical skills, and aware of the ecological, political, economic, and social dimensions of environmental decisions. The Associate in Science-Transfer (AS-T) degree in Environmental Science provides a foundation in basic physical, biological, and social sciences, and also addresses the human element in environmental issues. This curriculum prepares students to transfer and complete a BS or BA in an Environmental Science field for subsequent graduate study in MS, PhD, and law degree programs and careers in government agencies or the private sector.

See also

- [Degree Requirements for Science, Technology, Engineering and Math programs \(lowercolumbia.edu/programs/stem \)](https://lowercolumbia.edu/programs/stem/)
- [Course descriptions in LCC Catalog \(lowercolumbia.edu/publications/catalog/courses \)](https://lowercolumbia.edu/publications/catalog/courses)
- [Distribution lists in LCC Catalog \(lowercolumbia.edu/publications/catalog/distribution-lists \)](https://lowercolumbia.edu/publications/catalog/distribution-lists)

(lowercolumbia.edu/program-maps/stem/) **Important:** Many course sequences only begin in fall quarter. Check with your program advisor.

By Quarter Overview

First Quarter

- COLL 101: College Success 101 (2 credits)
- CHEM& 161: General Chemistry w/ Lab I (5 credits)
- MATH& 142: Precalculus II (5 credits)
- Choose one:
 - ART& 100: Art Appreciation (5 credits)
 - CMST 250: Intercultural Communication (5 credits)
 - HIST& 126: World Civilization I (5 credits)
 - HUM 104: Ethics and Cultural Values (5 credits)
 - MUSC& 105: Music Appreciation (5 credits)

Second Quarter

- CHEM& 162: General Chemistry w/ Lab II (5 credits)
- ENVS& 100: Survey of Environmental Science (5 credits)
- MATH& 151: Calculus I (5 credits)

Third Quarter

- CHEM& 163: General Chemistry w/ Lab III (5 credits)
- MATH& 152: Calculus II (5 credits)
- ENGL& 101: English Composition I (5 credits)

Fourth Quarter (Summer)

- MATH& 153: Calculus III (5 credits)

Fifth Quarter

- BIOL& 221: Majors Ecology/Evolution w/ Lab (5 credits)
- MATH& 146: Introduction to Statistics (5 credits)
- Choose one:
 - ANTH& 204: Archaeology (5 credits)
 - CDS 101: Intro to Addictions/Chemical Dependency (5 credits)
 - ECON 105: Introduction to Economics (5 credits)
 - HIST& 128: World Civilization III (5 credits)
 - POLS& 202: American Government (5 credits)
 - PSYC& 100: General Psychology (5 credits)
 - SOC& 101: Intro to Sociology (5 credits)

Sixth Quarter

- BIOL& 222: Majors Cell/Molecular w/ Lab (5 credits)
- Choose one:
 - ANTH& 206: Cultural Anthropology (5 credits)
 - ART& 100: Art Appreciation (5 credits)
 - CMST& 250: Intercultural Communication (5 credits)
 - HIST& 128: World Civilization III (5 credits)
 - HUM 104: Ethics and Cultural Values (5 credits)
 - HUM 210: Myths and Rites (5 credits)
 - SOC& 101: Intro to Sociology (5 credits)
- Choose one:
 - GEOG 105: Physical Geography (5 credits)
 - OCEA& 101: Intro to Oceanography (5 credits)
 - BIOL& 260: Microbiology (5 credits)
 - ANTH& 100: Survey of Anthropology (5 credits)
 - ANTH& 205: Biological Anthropology (5 credits)

Seventh Quarter

- BIOL& 223: Majors Organismal Phys w/ Lab (5 credits)

- ENVS 215: Environmental Issues (5 credits)
- Choose one:
 - GEOG 105: Physical Geography (5 credits)
 - OCEA& 101: Intro to Oceanography (5 credits)
 - BIOL& 260: Microbiology (5 credits)
 - ANTH& 100: Survey of Anthropology (5 credits)
 - ANTH& 205: Biological Anthropology (5 credits)

Detailed Class Sequence

1. College Success

COLL 101: College Success 101 (2 credits)

2. Pre-Major Requirement

CHEM& 161: General Chemistry w/ Lab I (5 credits)

- *Prerequisites: CHEM& 100 or high school chemistry and MATH 098.*

3. Prerequisite Coursework / Elective

MATH& 142: Precalculus II (5 credits)

- *Prerequisite: C or better in MATH& 141.*

4. Humanities Requirement

Choose one of these recommended courses:

- ART& 100: Art Appreciation (5 credits)
- CMST 250: Intercultural Communication (5 credits)
 - *Fulfills [DIVR] requirement at WSU*
- HIST& 126: World Civilization I (5 credits)
 - *Fulfills [DIVR] requirement at WSU*
- HUM 104: Ethics and Cultural Values (5 credits)
- MUSC& 105: Music Appreciation (5 credits)

5. Pre-Major Requirement

CHEM& 162: General Chemistry w/ Lab II (5 credits)

- *Prerequisite: CHEM& 161*

6. Survey of Environmental Science

ENVS& 100 (5 credits)

7. Math Requirement

MATH& 151: Calculus I (5 credits)

- *Prerequisite: MATH& 142 with a grade of C or better.*

8. Pre-Major Requirement

CHEM& 163: General Chemistry w/ Lab III (5 credits)

- *Prerequisite: CHEM& 162*

9. Math Requirement

MATH& 152: Calculus II (5 credits)

- *Prerequisite: MATH& 151 with a grade of C or better.*

10. Communications Requirement

ENGL& 101: English Comp I (5 credits)

- *Prerequisites: College level reading and writing skills or completion of ENGL 099 or TECH 105 with a grade of C or better.*

11. Math Requirement

MATH& 153: Calculus III (5 credits)

- *Prerequisite: MATH& 152 with a grade of C or better.*

12. Pre-Major Requirement

BIOL& 221: Majors Ecology/Evolution w/ Lab (5 credits)

13. Pre-Major Requirement

MATH& 146: Introduction to Statistics (5 credits)

14. Social Science Requirement

Choose one of these recommended courses:

- ANTH& 204: Archaeology (5 credits)
- CDS 101: Intro to Addictions/Chemical Dependency (5 credits)
- ECON 105: Introduction to Economics (5 credits)

- HIST& 128: World Civilization III (5 credits)
 - *Fulfills [ROOT] requirement at WSU*
- POLS& 202: American Government (5 credits)
- PSYC& 100: General Psychology (5 credits)
- SOC& 101: Intro to Sociology (5 credits)

15. Pre-Major Requirement

BIOL& 222: Majors Cell/Molecular w/ Lab (5 credits)

16. Diversity Requirement

Choose one of the following recommended courses:

- ANTH& 206: Cultural Anthropology (5 credits)
 - *Fulfills [DIVR] requirement at WSU*
- ART& 100: Art Appreciation (5 credits)
- CMST& 250: Intercultural Communication (5 credits)
 - *Fulfills [DIVR] requirement at WSU*
- HIST& 128: World Civilization III (5 credits)
 - *Fulfills [ROOT] requirement at WSU*
- HUM 104: Ethics and Cultural Values (5 credits)
- HUM 210: Myths and Rites (5 credits)
- SOC& 101: Intro to Sociology (5 credits)

17. Elective

Choose one:

- GEOG 105: Physical Geography (5 credits)
- OCEA& 101: Intro to Oceanography (5 credits)
- BIOL& 260: Microbiology (5 credits)
 - *Prerequisites: BIOL& 160 or BIOL& 222 with a grade of C or better or instructor permission.*
- ANTH& 100: Survey of Anthropology (5 credits)
- ANTH& 205: Biological Anthropology (5 credits)

18. Pre-Major Requirement

BIOL& 223: Majors Organismal Phys w/ Lab (5 credits)

19. Pre-Major Requirement

ENVS 215: Environmental Issues and Applications (5 credits)

20. Elective

Choose one:

- GEOG 105: Physical Geography (5 credits)

- OCEA& 101: Intro to Oceanography (5 credits)
- BIOL& 260: Microbiology (5 credits)
 - *Prerequisites: BIOL& 160 or BIOL& 222 with a grade of C or better or instructor permission.*
- ANTH& 100: Survey of Anthropology (5 credits)
- ANTH& 205: Biological Anthropology (5 credits)



Program Maps for Science, Technology, Engineering and Math (STEM) (lowercolumbia.edu/program-maps/stem)

- Bioengineering and Chemical Pre-Engineering AS-T (Chemical Option) (lowercolumbia.edu/program-maps/stem/AST-Bioengineering-and-Chemical-Pre-Engineering-Chemical-Option)
- Bioengineering and Chemical Pre-Engineering AS-T (Bioengineering Option) (lowercolumbia.edu/program-maps/stem/AST-Bioengineering-and-Chemical-Pre-Engineering-Bioengineering-Option)
- Biological Sciences - AS-T (lowercolumbia.edu/program-maps/stem/AST-Biological-Sciences)
- Biology - DTA/MRP (lowercolumbia.edu/program-maps/stem/DTA-MRP-Biology)
- Chemistry - AS-T (lowercolumbia.edu/program-maps/stem/AST-Chemistry)
- Computer Science - AST (lowercolumbia.edu/program-maps/stem/AST-Computer-Science)
- Computer Science AS-T (WSU-V) (lowercolumbia.edu/program-maps/stem/AST-Computer-Science-WSU-V)
- Computer and Electrical Pre-Engineering - AS-T COMP E EE/MRP (2 year) (lowercolumbia.edu/program-maps/stem/AST-Computer-and-Electrical-Pre-Engineering-2-year)
- Computer and Electrical Pre-Engineering - AS-T COMP E EE/MRP (3 year) (lowercolumbia.edu/program-maps/stem/AST-Computer-and-Electrical-Pre-Engineering-3-year)
- Earth Sciences - AA-DTA (lowercolumbia.edu/program-maps/stem/AADTA-Earth-Sciences)
- Earth Sciences - AS-T (lowercolumbia.edu/program-maps/stem/AST-Earth-Sciences)
- Environmental Science - AS-T (lowercolumbia.edu/program-maps/stem/AST-Environmental-Science)
- Mechanical, Civil, Aeronautical, Industrial, Materials Science Engineering - AS-T (2 year) (lowercolumbia.edu/program-maps/stem/AST-Mechanical-Civil-Aeronautical-Industrial-Materials-Science-Engineering-2-year)
- Mechanical, Civil, Aeronautical, Industrial, and Materials Science Engineering AS-T (3 year) (lowercolumbia.edu/program-maps/stem/AST-Mechanical-Civil-Aeronautical-Industrial-Materials-Science-Engineering-3-year)
- Physics - AS-T (lowercolumbia.edu/program-maps/stem/AST-Physics)
- Physics - AS-T (Math Transfer Option) (lowercolumbia.edu/program-maps/stem/AST-Physics-Math-Transfer-Option)