

ENVS Skills

Guidance Document for ENVS Majors

This document provides guidance in selecting courses to learn a variety of skills. Please contact your Advisor to discuss your options.

Employers' top priorities for student learning in college

- (1) Effective oral and written communication
- (2) Critical thinking and analytical reasoning skills
- (3) Ability to apply knowledge/skills to a real world setting
- (4) Ability to analyze/solve complex problems
- (5) Make ethical decisions and connect to action
- (6) Ability to work in a team and collaborate with people from different countries and cultures
- (7) Creativity and the ability to innovate
- (8) Understand science and technology concepts

Data From: Employers' Views on College Learning in the Wake of the Economic Downturn, a survey of employers conducted for AAC&U by Hart Research Associates and published in 2010.

Skills to expect from ENVS Major

In the current job market, employers are looking for individuals with hard and soft skills. Hard skills are quantifiable skills defined by the ability to do a specific task, such as report writing skills or water quality monitoring skills. Soft skills are more difficult to quantify and can be explained with the terms "interpersonal skills" or "emotional intelligence." Teamwork and time management are common examples. The interdisciplinary environmental studies major is a great way to acquire both hard and soft skills.

Below is a discussion matching up the "Employers' Top Priorities" with the Environmental Studies Major at CU.

Plan your major for maximum academic benefit

Think ahead when planning your courses to maximize the number of skills you can obtain. Keep in mind that it is your responsibility to know and abide by all prerequisites. Prerequisites can be found in course descriptions.

Natural Sciences

Educational Purpose: Understand the scientific process in the natural sciences, understand how this process generates knowledge, and be able to apply the results of natural scientific research to problems and questions as they relate to what is broadly called the environment.

Employers' Priorities: Meets priorities "3" and "8."

Social Sciences

Educational Purpose: Develop a familiarity with the drivers of human actions regarding social-ecological systems.

Employers' Priorities: Meets priorities "2," "3," and "4."

Values

Educational Purpose: Examine the economic drivers and the underlying moral beliefs, personal and social ethics, principles, and theoretical commitments that might be informing environmental discourse and also driving human actions and decisions.

Employers' Priorities: Meets priorities "3," "5," and "8."

Policy

Educational Purpose: Learn to systematically analyze environmental problems and critically assess the ways in which public policies may help to address these problems. Students will learn a basic knowledge of existing environmental laws and policies and the processes through which environmental policies are made and implemented.

Employers' Priorities: Meets priority "2."

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Math Skills

Educational Purpose: Learn to use mathematical systems as a tool to quantify and understand complex issues and to use mathematical systems to help solve problems.

Employer's Priorities: Meets priorities "2" and "4."

Additional Info: Students are encouraged to take more than one Math course, although only one Math course is required for the major.* Below is a list of additional Math courses.

- **Calculus:** ECON 1088, MATH 1081, MATH 1300*, MATH 1310
- **College Algebra:** MATH 1011
- **Finite Math:** MATH 1071, ECON 1078
- **Second semester statistics course:** EBIO 4410, GEOG 4023, ECON 3818

Writing Skills

Educational Purpose: This requirement provides students with an understanding of rhetorical situations in professional writing. The course helps develop professional skills and awareness, focusing on written communication, critical thinking, and research skills, but also emphasizes related skills such as reading, listening, note taking, and some computer skills. Students are encouraged to seek out additional courses that focus on any or all of these skills, especially writing, reading, and computer skills.

Employer's Priorities: Meets priorities "1," "2," "3," and "4."

Application Course Skills

Educational Purpose: Acquire practical and "hands-on" experience applying knowledge and skills outside the classroom. Improve the ability to integrate the knowledge and skills taught in the ENVS major and emphasize their real-world applications.

Employer's Priorities: Meets priorities "2" and "3."

Additional Info: The application courses are broad and can lead to different skill outcomes. Below they are listed in general categories.

- **Science Skill:** ENVS/CVEN 3434 -*Applied Ecology*, ENVS 4090-*Coral Reef Ecology*, EBIO 4100-*Mountain Research Station field course*, EVEN 4100-*Environmental Sampling and Analysis*, GEOL 2700-*Introduction to Field Geology*
- **Business/Consulting:** ENVS 3001-*Sustainable Solutions Consulting*
- **Other:** ENVS 3930 -*Internship*, ENVS 2100-*Topics in Applied Environmental Studies*, ENVS 3100-*Topics in Applied Environmental Studies*, ENVS 3103-*Mining 4 Corners*, EBIO/ENVS/MUSM 4795-*Museum Field Methods/Zoology and Botany*

Specialization Courses that Teach Skills

Educational Purpose: Allow upper-division students to focus on one aspect of environmental studies to develop a deeper understanding.

Employer's Priorities: There is the potential to accomplish all employers' priorities dependent on courses chosen for specialization.

Example: The following courses are examples of specializations heavily focused on science and technology concepts : GEOG 4321-*Snow Hydrology*, ENVD-4023 *Environmental Impact Assessment*, GEOG 3053 -*Cartography: Visualization & Information Design*, GEOG/GEOL 4093 -*Remote Sensing of the Environment*

Elective Courses

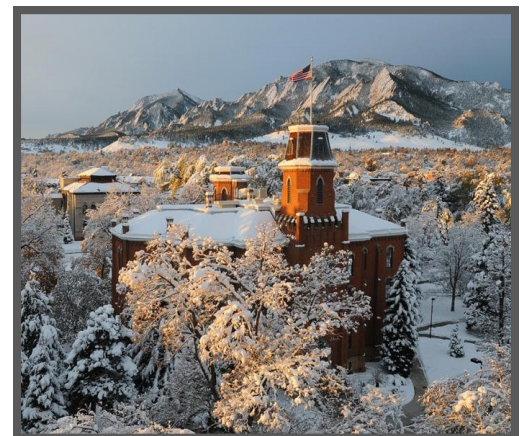
Elective courses are an opportunity to further build your skills! Examples below:

- ◊ COMM 1300 *Public Speaking*
- ◊ CSCI 1300 *Computer Science 1: Programming*
- ◊ CSCI 2270 *Computer Science 2: Data Structures*
- ◊ GEOG 4043 *Cartography 2: Interactive and Multimedia Mapping*
- ◊ GEOG 4083 *Mapping from Remotely Sensed Imagery*
- ◊ GEOG 4103 and 4203 *GIS Sequence*

Other ways to gain experience in these areas:

- ◊ Complete a significant project before graduation that demonstrates depth of knowledge in your major AND the acquisition of analytical, problem-solving and communication skills.
- ◊ Complete an internship or community-based field project to connect classroom learning with real-world experiences.
- ◊ Develop skills to answer research questions in your field and develop evidence-based analyses (this might come out of the papers you are writing in upper division courses).
- ◊ Take an ethics course*—employers will expect that you can work through ethical issues and debates to form your own opinion about issues.

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Winter Scene of Old Main taken by CU Staff photographer Casey A. Cass

*Check with ENVS guidance documents, degree audit, or Advisor to determine what courses apply to ENVS major.