

ENVIRONMENTAL STUDIES AND SUSTAINABILITY

The broad spectrum of environmental studies at CSU is uniquely dispersed in 100 majors and concentrations housed in departments throughout CSU. As a land-grant institution, a key component of CSU's mission is to provide education in environmental management, science, and policy. It is difficult to find a degree or department that does not directly address environmental issues at local, national, and international scales. Campus-wide participation in environmental science and management is a result of fundamental linkages between basic science and management of critical environmental issues. Consequently, a unique strength of CSU is a tradition of interdisciplinary research, teaching, and service, which is essential in understanding the environmental issues of today's world.

Programs engaged in environmental studies at CSU have goals that include:

- Understanding that scientific knowledge, policy considerations, and ethical issues are necessarily joined;
- Comprehending the interrelationships among the environment, natural resources, and human society.
- Perceiving the need to integrate diverse social, political, legal, institutional, and scientific considerations inherent in attaining environmental goals;
- Educating students to be articulate, sensitive, and knowledgeable about the complexity of environmental issues facing society;
- Providing a balanced understanding of the natural and social processes as they relate to the environment.

Some examples of the many areas in environmental studies at CSU are: agricultural business; air pollution assessment and management; air quality; biological control and pest management; global climate change; biodiversity and conservation biology; biomedical engineering; ecology and ecosystem management; ecotourism; ecotoxicology; environmental communication; environmental engineering; environmental ethics; environmental history and policy analysis; environmental horticulture; environmental soil science; environmental geology, land ethics, and stewardship; environmental sociology; natural resource economics; natural resources and environmental management; natural resource tourism; occupational health and workplace management/control; park and protected areas management; pesticide management; pollution control; reproductive and environmental risk factors; risk assessment and management; solid and hazardous waste management; sustainable building design and construction; and water chemistry, quality, and management.

CSU is also, proudly, one of the most sustainable universities in the world (https://source.colostate.edu/csu-moves-up-to-no-2-in-top-national-sustainability-ranking/?utm_source=Newsletter&utm_medium=Email&utm_campaign=tu090925). We were the first university in the nation to receive a Platinum designation – the highest available – from the Association for the Advancement of Sustainability in Higher Education (AASHE) (<https://www.aashe.org/>), and we earned our fourth Platinum rating in 2023. CSU has the best interdisciplinary sustainability curriculum among all institutions listed in the AASHE's 2023 Sustainable Campus Index Ratings (<https://www.aashe.org/resources/sustainable-campus-index/>).

Each of CSU's eight colleges offer at least one sustainability-related major or minor, along with multiple concentration and certificate options. The programs at CSU that engage in environmental studies and sustainability are incorporated within existing programs in the following colleges/departments:

College of Agricultural Sciences

Departments: Agricultural and Resource Economics; Agricultural Biology; Animal Sciences; Horticulture and Landscape Architecture; Soil and Crop Sciences

The College of Agricultural Sciences engages students in participatory learning through 48 sustainability-focused academic programs and a network of 10 research centers around the state, preparing them to meet global challenges in food safety, food security, wellness and economic prosperity through the sustainable use of natural resources.

College of Business

Departments: Accounting; Computer Information Systems; Finance and Real Estate; Management; Marketing

The College of Business has a mission of focusing on Business for a Better World (<https://biz.colostate.edu/about/mission-vision/>), encompassing developing the next generation of business leaders to create sustainable solutions balancing social, environmental and economic needs. At the graduate level, the College offers a Graduate Certificate in Sustainable Business (<https://catalog.colostate.edu/general-catalog/colleges/business/graduate-certificate-sustainable-business/>). The college also offers the Impact MBA (<https://catalog.colostate.edu/general-catalog/colleges/business/business-administration/business-administration-mba-impact-specialization/>), a STEM-designated, sustainability-focused degree to help professionals across industries address our most pressing needs from climate change to food insecurity. At the undergraduate level, the college offers a Major in Business Administration, Sustainable Business Concentration (<https://catalog.colostate.edu/general-catalog/colleges/business/marketing/business-administration-major-sustainable-business-concentration/>).

College of Health and Human Sciences

Departments: Construction Management; Design & Merchandising; School of Education; Food Science and Human Nutrition; Health and Exercise Science; Human Development and Family Studies; Occupational Therapy; School of Social Work

The Department of Design and Merchandising (<https://catalog.colostate.edu/general-catalog/colleges/health-human-sciences/design-merchandising/>) focuses on sustainability and social responsibility in the apparel industry. In the Department of Construction Management (<https://catalog.colostate.edu/general-catalog/colleges/health-human-sciences/construction-management/>), sustainability is part of the industry standard and is integrated throughout the curriculum. The College's Institute for the Built Environment (<https://ibe.colostate.edu/>) consults on developing healthy, sustainable buildings and communities.

College of Liberal Arts

Departments: Anthropology & Geography; Art and Art History; Communication Studies; Economics; English; Race, Gender, and Ethnic Studies; History; Journalism and Media Communication; Languages,

Literatures, and Cultures; School of Music, Theatre, and Dance; Philosophy; Political Science; Sociology

The College of Liberal Arts has over 120 courses that focus on or include sustainability. At the undergraduate level, the college offers an Environmental Studies in Liberal Arts Interdisciplinary Minor (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/environmental-studies-liberal-arts-interdisciplinary-minor/>) and a summer program in Environmental Humanities (<https://www.libarts.colostate.edu/environmental-humanities/>). The Department of Political Science offers a Major in Political Science, Environmental Politics and Policy Concentration (<https://catalog.colostate.edu/general-catalog/colleges/liberal-arts/political-science/political-science-major-environmental-politics-policy-concentration/>), and the Department of Sociology offers a Major in Sociology, Environmental Sociology Concentration (<https://catalog.colostate.edu/general-catalog/colleges/liberal-arts/sociology/sociology-major-environmental-concentration/>). At the graduate level, the Department of Political Science offers M.A. and Ph.D. programs in Environmental Politics and Policy (<https://catalog.colostate.edu/general-catalog/colleges/liberal-arts/political-science/#graduatetext>).

College of Natural Sciences

Departments: Biochemistry and Molecular Biology; Biology; Chemistry; Computer Science; Mathematics; Physics; Psychology; Statistics

The College of Natural Sciences advances sustainability at every level – from the chemical development of infinitely recyclable plastics to the physics behind new solar energy technology, to investigating how ecosystems respond to climate changes – Natural Sciences infuses sustainability throughout its educational programs, research, and community outreach. The Department of Chemistry offers a Major in Chemistry, Sustainable Chemistry Concentration (<https://catalog.colostate.edu/general-catalog/colleges/natural-sciences/chemistry/chemistry-major/sustainable-chemistry-concentration/>).

College of Veterinary Medicine and Biomedical Sciences

Departments: Biomedical Sciences; Clinical Sciences; Environmental and Radiological Health Sciences; Microbiology, Immunology, and Pathology

The College of Veterinary Medicine and Biomedical Sciences is home to an Environmental Health program (<https://catalog.colostate.edu/general-catalog/colleges/veterinary-medicine-biomedical-sciences/environmental-radiological-health-sciences/#text>) as well as the CSU Honeybee Veterinary Medicine Club and the Center for Environmental Medicine (https://green.colostate.edu/research_area/toxicology-and-environmental-and-occupational-health/).

Walter Scott, Jr. College of Engineering

Departments: Atmospheric Science; School of Biomedical Engineering; Chemical and Biological Engineering; Civil and Environmental Engineering; Electrical and Computer Engineering; Mechanical Engineering; Systems Engineering

Dozens of faculty members conduct research related to environmental sustainability, including decarbonization, water management, and the food-energy-water nexus. The college is home to the CSU chapter of Engineers Without Borders (<https://www.engr.colostate.edu/organizations/ewb/>) (called Rams Without Borders) and significant climate/weather research through one of

the nation's premier Atmospheric Science departments (<https://catalog.colostate.edu/general-catalog/colleges/engineering/atmospheric-science/>) and the Cooperative Institute for Research in the Atmosphere, or CIRA (<https://www.cira.colostate.edu/>), which is a partnership with NOAA. At the undergraduate level, the Department of Chemical and Biological Engineering offers a Major in Chemical and Biological Engineering, Sustainable Engineering Concentration (<https://catalog.colostate.edu/general-catalog/colleges/engineering/chemical-biological/chemical-biological-engineering-major-sustainable-engineering-concentration/>), and the Department of Civil and Environmental Engineering offers a Major in Environmental Engineering (<https://catalog.colostate.edu/general-catalog/colleges/engineering/civil-environmental/environmental-engineering-major/>).

Warner College of Natural Resources

Departments: Ecosystem Science and Sustainability; Fish, Wildlife, and Conservation Biology; Forest and Rangeland Stewardship; Geosciences; Human Dimensions of Natural Resources

Warner College of Natural Resources is one of the largest and most comprehensive natural resource colleges in the nation. Offering students the opportunity to immerse themselves in their environmental fields of choice, Warner College is a leader in natural resources education, outreach, and research both in Colorado and around the world. Warner College of Natural Resources offers over 160 courses that focus on or include sustainability, as well as a Master's degree and Ph.D. in Ecosystem Sustainability (<https://catalog.colostate.edu/general-catalog/colleges/natural-resources/ecosystem-science-sustainability/#graduatetext>). WCNR also offers programs in Watershed Science and Sustainability, Wildlife Conservation Actions, Forest Sciences, Natural Resources Stewardship, Rangeland Ecosystem Science, Fire and Emergency Services Administration, Restoration Ecology, Environmental Leadership, Conservation Leadership, Park and Protected Area Management, and Natural Resource Tourism.

In addition, CSU offers an Exploratory Studies: Environmental/Natural Resource Interest for students who first wish to explore options with environmental studies campus-wide before selecting a major (contact the Warner College of Natural Resources for more information on the Exploratory Studies option). For further information about specific environmental and sustainability-focused majors, please contact the respective college/department and see their program descriptions within this catalog.

School of Global Environmental Sustainability (SoGES) (<https://sustainability.colostate.edu/>)

Office in Johnson Hall, Room 108
(970) 491-4070

The **School of Global Environmental Sustainability** (<http://sustainability.colostate.edu/>) (SoGES) seeks to prepare students to meet today's pressing environmental challenges. Using an interdisciplinary approach within a framework of sustainability, students will be led in innovative research leading to the knowledge and understanding needed to approach and solve problems of the human-environment interaction. SoGES' vision encompasses laying the foundation and defining the principles and practices that will ensure long-term environmental sustainability, while continuing to meet the needs of people around the earth. SoGES offers the following programs:

Interdisciplinary Minors:

- Global Environmental Sustainability Interdisciplinary Minor (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/global-environmental-sustainability-interdisciplinary-minor/>)
- Sustainable Energy Interdisciplinary Minor (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/sustainable-energy-interdisciplinary-minor/>)
- Sustainable Water Interdisciplinary Minor (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/sustainable-water-interdisciplinary-minor/>)

Minor:

- Minor in Climate Change Studies (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/global-environmental-sustainability-school/climate-change-studies-minor/>)

Undergraduate Certificate:

- Certificate in Climate Change and Society (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/global-environmental-sustainability-school/climate-change-society-certificate/>)

Graduate Certificates:

- Graduate Certificate in Applied Global Stability: Agriculture (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/global-environmental-sustainability-school/graduate-certificate-applied-global-stability-agriculture/>)
- [Graduate Certificate](#) in Applied Global Stability: [Natural Resources](#)
- Graduate Certificate in Applied Global Stability: Water Resources (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/global-environmental-sustainability-school/graduate-certificate-applied-global-stability-water-resources/>)

Graduate Interdisciplinary Studies Program:

- Sustainable Peace and Reconciliation Studies Graduate Interdisciplinary Studies Program (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/peace-reconciliation-program/>)

Center for Environmental Justice (CEJ) (<https://environmentaljustice.colostate.edu/>)

Email: cla_environmentaljustice@colostate.edu

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. It ensures that all communities, particularly those disproportionately affected by pollution and environmental hazards, have equal access to a healthy environment and participate in decisions impacting their communities.

The university-wide Center for Environmental Justice (<https://environmentaljustice.colostate.edu/>) (CEJ) seeks to develop and implement strategies to address environmental inequalities that are

informed by community knowledge, interdisciplinary collaboration, and a focus on social justice outcomes.

CEJ has over 150 members from academic and practitioner/community organizations. Over 50 members are CSU faculty, graduate students, and postdocs from all eight colleges at CSU. CEJ also fosters collaborations with other universities across the region and the globe.

Graduate Certificate:

- Graduate Certificate in Environmental Justice (<https://catalog.colostate.edu/general-catalog/university-wide-programs/interdisciplinary-studies/global-environmental-sustainability-school/graduate-certificate-environmental-justice/>)

This certificate is administered through the Center for Environmental Justice (<https://environmentaljustice.colostate.edu/>) and housed in the School of Global Environmental Sustainability (<https://sustainability.colostate.edu/>).