

# Sustainable Environmental Design

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**College of Environmental Design** (<http://ced.berkeley.edu>)

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**Program Website: Sustainable Environmental Design** (<http://ced.berkeley.edu/academics/bachelor-of-arts-in-sustainable-environmental-design>)

## Related Course Descriptions:

**Architecture courses** (<http://bulletin.berkeley.edu/archive/2013-14/courses/arch>)

**City and Regional Planning courses** ([http://bulletin.berkeley.edu/archive/2013-14/courses/cy\\_plan](http://bulletin.berkeley.edu/archive/2013-14/courses/cy_plan))

**Environmental Design courses** ([http://bulletin.berkeley.edu/archive/2013-14/courses/env\\_des](http://bulletin.berkeley.edu/archive/2013-14/courses/env_des))

**Landscape Architecture courses** ([http://bulletin.berkeley.edu/archive/2013-14/courses/ld\\_arch](http://bulletin.berkeley.edu/archive/2013-14/courses/ld_arch))

## Overview

The sustainable environmental design major recognizes that the emergent, multidisciplinary field of sustainability science is growing rapidly. As the world population urbanizes, the planning and design of resilient, resource-efficient, healthy and socially just cities and metropolitan regions is profoundly important. The College of Environmental Design, with its long-standing expertise in sustainable urbanism and design, is an ideal setting for an undergraduate major in sustainable environmental design, with a focus on the built environment.

The major offers students a critical understanding of the sustainability challenges facing urban regions in California and around the globe, and equips them with the technical, analytic and design tools key to devising creative solutions. Graduates have many career paths and fields of graduate study open to them. Students who complete this major will:

- Understand the application of physical, biological and social science in the design of sustainable cities and metropolitan regions.
- Understand sustainable urban technologies and design strategies.
- Comprehend issues of equity and social justice as they relate to sustainable cities and regions.
- Evaluate and monitor the present state and future potential of built environments in terms of sustainability.
- Comprehend the implications of policy and institutions and their potential to shape future sustainable cities and regions.=

## Features of the major include:

- The gateway course, LD ARCH 12, Environmental Design for Sustainable Development, which introduces students to the scientific basis of sustainability as explored through the study of energy, water, food, natural resources and the built environment, with a focus on the application of this knowledge to sustainable development strategies.
- A critical approaches course, ENV DES 102 Critical Debates in Sustainable Urbanism. The course challenges students to think critically about the idea of sustainability, develop critiques of current sustainable urbanism/design practice, and envision the institutional and behavioral changes required for a more sustainable future.
- A methods/technology course, LD ARCH/GEOG C188 Geographic Information Systems. GIS has become a basic tool for a wide range of analytic tasks across all environmental design fields. The course addresses both GIS theory and applications, offering a dynamic analytical framework for gathering, integrating, interpreting and manipulating temporal and spatial data.
- A set of upper division courses, on energy and environment; deep green design; the nature of cities; planning for sustainability; ecological analysis; and sustainable cities and landscapes.
- A series of area requirements allowing students to specialize in a variety of aspects of sustainability, such as economics, business, and policy; society, culture, and ethics; resources and environmental management; design and technology.
- A capstone workshop course, ENV DES 106 Sustainable Environmental Design Workshop. Linking sustainability science and technology with urban form and social dynamics, the workshop requires independent and collaborative research, with an external 'client' organization, to offer innovative strategies for sustainable environmental design.

For more information see the department website. (<http://ced.berkeley.edu/academics/bachelor-of-arts-in-sustainable-environmental-design>)