

# Sustainable Design

Sustainable Design implies making decisions at various scales of the built environment (buildings, communities, land use patterns, urban support systems) in ways that support environmental quality, social equity, and economic vitality. The undergraduate minor in Sustainable Design is jointly offered by the Department of Architecture and the Department of Landscape Architecture and Environmental Planning but also includes interdisciplinary courses across campus. The minor is open to all majors at UC Berkeley.

Students interested in pursuing this course of study at the major level should consider the Sustainable Environmental Design (<http://guide.berkeley.edu/undergraduate/degree-programs/sustainable-environmental-design/>) program.

## Declaring the Minor

A letter grade of C- or higher in ENV DES 1, LD ARCH 1, or LD ARCH 12 (or a 3 or higher in AP Env Sci) is required to declare the minor. To declare, students must submit the CED Minor Declaration Form (<https://ced.berkeley.edu/advising/undergraduate-advising/undergraduate-students/major-minor-requirements/>), available on the CED website. Once this request has been approved, you will see the minor added to your Cal Central student profile. It is your responsibility to track your progress towards minor completion using the Academic Progress Report and CED Advising Services.

**DEADLINE TO SUBMIT FORM:** One semester prior to a student's final semester.

## General Information

Websites: Department of Architecture (<http://ced.berkeley.edu/academics/architecture/>), Department of Landscape Architecture and Environmental Planning (<http://ced.berkeley.edu/academics/landscape-architecture-environmental-planning/>), Sustainable Environmental Design Major (<https://ced.berkeley.edu/academics/bachelor-of-arts-in-sustainable-environmental-design/>), Sustainable Design Minor (<https://ced.berkeley.edu/academics/additional-programs/sustainable-design/>)

Students who have a strong interest in an area of study outside their major often decide to complete a minor program.

## General Guidelines

- All minors must be declared no later than one semester before a student's Expected Graduation Term (EGT).
- A letter grade of C- or higher in ENV DES 1, LD ARCH 1, or LD ARCH 12 (or a 3 or higher in AP Env Sci) is required to declare the minor. To declare, students must submit the CED Minor Declaration Form (<https://ced.berkeley.edu/students/undergraduate-advising/forms-documents/>), available on the CED website.
  - DEADLINE TO SUBMIT FORM:** One semester prior to a student's final semester.
- Each course used to fulfill minor requirements must be completed with a letter grade of C- or above.
- Students must earn a 2.0 GPA in the upper division requirements for the minor.
- Any course used in fulfillment of minor requirements may also be used to fulfill major and upper division CED non-major requirements.

- Courses used to fulfill a breadth requirement may also be used to satisfy minor requirements.
- Students may apply the non-CED version of a CED cross-listed course towards the minor.
- Students may use up to two courses taken abroad to fulfill upper division minor requirements, with faculty approval of the individual courses.

## Requirements

**Lower Division** (a letter grade of C- or higher is required to declare the minor)

Select one course from the following:

AP Environmental Science, Passing Score of 3, 4, or 5

ENV DES 1 Introduction to Environmental Design [3]

LD ARCH 1 Drawing a Green Future: Fundamentals of Visual Representation and Creativity [4]

LD ARCH 12 Environmental Science for Sustainable Development [4]

### Upper Division (Five Courses)

Select five courses from the following; a minimum of two courses must be selected from CED courses and a minimum of two courses selected from non-CED courses

#### CED Courses

ARCH 124A Introduction to Digital Design Methods [2]

ARCH 140 Energy and Environment [4]

ARCH 149 Special Topics in Energy and Environment [2-4] <sup>1</sup>

ARCH 169 Special Topics in Construction Materials [2-4] <sup>1</sup>

ARCH 240 Advanced Study of Energy and Environment [3]

ARCH 241 Research Methods in Building Sciences [3]

ARCH 242 Sustainability Colloquium [2] <sup>2</sup>  
or ARCH 14: Sustainability Colloquium

ARCH 249 Special Topics in the Physical Environment in Buildings [2-4] <sup>1</sup>

CY PLAN 114 Introduction to Urban and Regional Transportation [3]

CY PLAN 115 Urbanization in Developing Countries [4]

CY PLAN 119 Planning for Sustainability [4]

CY PLAN 140 Urban Design: City-Building and Place-Making [3]

CY PLAN 254 Sustainable Communities [3] <sup>4</sup>

CY PLAN C256 Healthy Cities [3] <sup>4</sup>

ENV DES 102 Climate Change and City Planning: Adaptation and Resilience [3]

LD ARCH 103 Energy, Fantasy, and Form [5]

LD ARCH/ESPM C110A Ecological Analysis [4] (formerly LD ARCH 110)

LD ARCH 111 Plants in Design [3]

LD ARCH 122 Hydrology for Planners [4]

LD ARCH 130 Sustainable Landscapes and Cities [4]

LD ARCH 140 Social and Psychological Factors in Open Space Design [3]

LD ARCH C188 Geographic Information Science [4]

LD ARCH 191 Course Not Available (Sustainable Cities of Northern Europe, UC Davis Study Abroad)

#### Non-CED Courses

ANTHRO 137	Energy, Culture and Social Organization [4]
CIV ENG 103	Course Not Available [3]
CIV ENG C103	Terrestrial Hydrology [4] (cross-listed w/ ESPM C130 and GEOG C136)
CIV ENG 107	Climate Change Mitigation [3]
CIV ENG 108	Climate Change Adaptation [3]
CIV ENG 113	Ecological Engineering for Water Quality Improvement [3]
CIV ENG 292A	Technologies for Sustainable Societies [1] <sup>3</sup>
ENE,RES C100	Energy and Society [4] (cross-listed w/ PUB POL C184)
ENE,RES W10	Energy and Society [4]
ENE,RES C160/ ESPM C176	CLIMATE JUSTICE [4]
ENVECON 100	Intermediate Microeconomics with Applications to Sustainability [4]
ENVECON C101/ ECON C125	Environmental Economics [4]
ENVECON/ ECON C102	Natural Resource Economics [4]
ENVECON 162	Economics of Water Resources [3]
ENVECON C17	Climate Change Economics [4]
ENVECON C18	Forest Ecosystem Management [4]
ESPM 102C	Resource Management [4]
ESPM 102D	Climate and Energy Policy [4] (Behavior and Sustainability )
ESPM 117	Urban Garden Ecosystems [4]
ESPM 134	Fire, Insects, and Diseases in Forest Ecosystems [3]
ESPM 137	Landscape Ecology [3]
ESPM 151	Society, Environment, and Culture [4]
ESPM 155AC	Sociology and Political Ecology of Agro-Food Systems [4]
ESPM 161	Environmental Philosophy and Ethics [4]
ESPM 162	Bioethics and Society [4]
ESPM 163AC	Environmental Justice: Race, Class, Equity, and the Environment [4]
ESPM C167	Environmental Health and Development [4]
ESPM 168	Political Ecology [4]
ESPM 169	International Environmental Politics [4]
ESPM 177A	Sustainable Water and Food Security [4]
ESPM 183	Forest Ecosystem Management and Planning [4]
ESPM 186	Grassland and Woodland Management and Conservation [4]
GEOG 130	Food and the Environment [4]
GEOG 138	Global Environmental Politics [4]
GEOG C160	The American Landscape: Place, Power and Culture [4]
GEOG 185	Earth System Remote Sensing [3]
GEOG 186	Web Cartography [5]
IAS/ ENVECON C175	The Economics of Climate Change [4]

PB HLTH C160 Environmental Health and Development [4]  
 ESPM173(UC Davis) Sustainable Cities of Northern Europe, UC Davis Study Abroad

- <sup>1</sup> Special topics courses will be evaluated each semester by student request. Please ask the relevant staff adviser if a course has been reviewed and/or approved. ARCH 149, ARCH 169, and ARCH 249 must be minimum 2 units.
- <sup>2</sup> The ARCH 142/ ARCH 242 colloquium and ENV DES 198 may only count as a third CED course, and may be taken *Pass/No Pass* for either 1 or 2 units.
- <sup>3</sup> CIV ENG 292A may only count as a third non-CED course.
- <sup>4</sup> Only with instructor approval for students in their senior year.

## Courses

Expand all course descriptions [+]  
 Collapse all course descriptions [-]  
 No courses found for AGR CHM