

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/archive/2018-19/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 Request to Add Minor Form (<https://ced.berkeley.edu/students/undergraduate-advising/forms-documents>), available on the CED website. When completing the final requirements for the minor, submit the CED Minor Completion Form (<https://ced.berkeley.edu/students/undergraduate-advising/forms-documents>).

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. When completing their final requirements for the minor, students must submit the CED Minor Completion Form (<https://ced.berkeley.edu/students/undergraduate-advising/forms-documents>), available on the CED website.

General Guidelines

1. 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, submit the CED Request to Add Minor Form (<https://ced.berkeley.edu/students/undergraduate-advising/forms-documents>), available on the CED website.
2. Each course used to fulfill minor requirements must be completed with a letter grade of C- or above.
3. Students must earn a 2.0 GPA in the upper division requirements for the minor.
4. Any course used in fulfillment of minor requirements may also be used to fulfill major and upper division CED non-major requirements.
5. Courses used to fulfill a breadth requirement may also be used to satisfy minor requirements.
6. Students may apply the non-CED version of a CED cross-listed course towards the minor.

7. 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 105 Deep Green Design [4]

ARCH 140 Energy and Environment [4]

ARCH 149 Special Topics in Energy and Environment [1-4] ¹

ARCH 169 Special Topics in Construction Materials [1-4] ¹

ARCH 240 Advanced Study of Energy and Environment [3]

ARCH 241 Research Methods in Building Sciences [3]

ARCH 242 Sustainability Colloquium [2] ²

or ARCH 142 Sustainability Colloquium

ARCH 243 Natural Cooling: Sustainable Design for a Warming Planet [3]

ARCH 244 The Secret Life of Buildings [3]

ARCH 245 Daylighting [3]

ARCH 249 Special Topics in the Physical Environment in Buildings [1-4] ¹

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

CY PLAN 115 Urbanization in Developing Countries [4]

CY PLAN 119 Planning for Sustainability [3]

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

CY PLAN 254 Sustainable Communities [3] ⁴

CY PLAN C25€Healthy Cities [3] ⁴

ENV DES 102 Critical Debates in Sustainable Urbanism [3]

ENV DES 104 Design Frameworks [3]

ENV DES 105 Deep Green Design [4]

ENV DES 198 Directed Group Study [2-4] (Building Sustainability section and Leadership in Sustainable Design section) ²

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

LD ARCH 110 Ecological Analysis [3]

LD ARCH 111 Plants in Design [3]

LD ARCH 122 Hydrology for Planners [4]

LD ARCH 130 Sustainable Landscapes and Cities [3]

LD ARCH C18€Geographic Information Systems [4]

Non-CED Courses

ANTHRO 137 Energy, Culture and Social Organization [4]

CIV ENG 103 Introduction to Hydrology [3]

CIV ENG 107	Climate Change Mitigation [3]
CIV ENG 113	Ecological Engineering for Water Quality Improvement [3]
CIV ENG 292A	Technologies for Sustainable Societies [1] ³
ENE,RES C100	Energy and Society [4]
ENE,RES 101	Ecology and Society [3]
ENE,RES 102	Quantitative Aspects of Global Environmental Problems [4]
ENE,RES 175	Water and Development [4]
ENE,RES 190	Seminar in Energy and Resources Issues [3] ("Behavior and Sustainability" or "California Water and Society")
ENVECON 100	Microeconomic Theory with Application to Natural Resources [4]
ENVECON C100	Environmental Economics [4]
ENVECON C101	Natural Resource Economics [4]
ENVECON 162	Economics of Water Resources [3]
ENVECON C171	The Economics of Climate Change [4]
ENV SCI 125	Course Not Available [3]
ESPM 102C	Resource Management [4]
ESPM 102D	Climate and Energy Policy [3] (Behavior and Sustainability)
ESPM 117	Urban Garden Ecosystems [4]
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 163AC	Environmental Justice: Race, Class, Equity, and the Environment [4]
ESPM 166	Natural Resource Policy and Indigenous Peoples [4]
ESPM C167	Environmental Health and Development [4]
ESPM 168	Political Ecology [4]
ESPM 169	International Environmental Politics [4]
ESPM C193A	Environmental Education [3]
GEOG 130	Food and the Environment [4]
GEOG 138	Global Environmental Politics [4]
IND ENG 185	Challenge Lab [4] (Smart Cities in India)
INTEGBI 152	Environmental Toxicology [4]
PUB POL 182	Environment and Technology from the Policy and Business Perspective [4]

No courses found for AGR CHM

¹ 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 should be minimum 2 units.

² The 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.

³ CIV ENG 292A may only count as a third non-CED course.

⁴ Only with instructor approval for students in their senior year.

Courses

Expand all course descriptions [+]Collapse all course descriptions [-]