SUSTAINABLE PLANNING AND URBAN DESIGN - BACHELOR OF ENVIRONMENTAL DESIGN (BENVD)

The sustainable planning and urban design major examines issues of sustainability and social justice in communities, cities and regions around the world. Heavily centered around community engagement, this major allows students to focus on a variety of topics, such as housing, environmental planning, transportation planning and urban design. Students examine these topics through a combination of design, policy and management perspectives.

Required Courses and Credits

The curriculum for the Bachelor of Environmental Design (BEnvD) is subdivided into two parts:

1. The first part consists of a core lasting one-and-a-half years which provides a balanced introduction to each of the majors offered. By the end of the core studies, students select or confirm their intended major.

2. The second part is focused on a selected major. Studies lead to the degree Bachelor of Environmental Design (BEnvD) with a major in either environmental products of design, architecture, landscape architecture and sustainable planning and urban design. Each area has specific requirements for completing the major.

Credit Hours

Students must complete a minimum of 120 credit hours subject to the maximum outlined in this catalog, meet all specified university general education requirements, all major core requirements and maintain a GPA of 2.00 or better. Students must complete courses with a grade of C- or better to fulfill university and degree requirements.

Students in the Department in Environmental Design are required to complete coursework meeting General Education requirements; each major may have differing totals. Students who take approved CU Boulder coursework to fulfill their General Education requirements must take those courses for a letter grade and receive a grade of C- or higher. Students may not use thesis hours, independent study, internship or practicum courses to fill any of the General Education requirements. All courses approved to fulfill specific General Education requirements are identified as such in this catalog and are searchable in CU Boulder Class Search.

Code	Title	Credit Hours
Environmental Design core		**37**
Consists of a sequential core lasting one-and-a-half years which provides a balanced introduction to each of the majors offered. By the end of the core semesters, students select or confirm their intended major.		
Environmental Design major		**54**

The second part of the sequential Environmental Design core is focused on a selected major, which leads to the degree Bachelor of Environmental Design (BEnvD) with a major in either environmental products of design, architecture, landscape architecture, or sustainable planning and urban design. Each major has specific requirements and culminates into capstone requirements to complete the major.

Code	Title	Credit Hours
Environmental Design electives (9 credits)		
General Education Requirements		
Lower-Division Writing requirement		3
Choose one:		
ARSC 1150	Writing in Arts and Sciences	
ENVD 1150	First Year Writing for Environmental Design	
ENVS 1150	First-Year Writing in Energy, Environment and Sustainability	
WRTG 1100	Extended First-Year Writing and Rhetoric	
WRTG 1150	First-Year Writing and Rhetoric	
Upper-Division Writing requirement [1]		3
Lower-Division Social Science requirement [2]		3
Lower-Division Arts & Humanities requirement [3]		3
Upper-Division Art and Humanities or Social Science requirement [4]		3
Math requirement		3
Meet with Academic Advisor to determine requirement for specific major. Choose one:		
MATH 1150 & MATH 1151	Precalculus Mathematics and Precalculus Supplemental Lab	
MATH 1300	Calculus 1	
MATH 2510	Introduction to Statistics	
GEOG 3023	Statistics and Geographic Data	
SOCY 2061	Introduction to Social Statistics	
Natural Science requirement		3
Meet with an Academic Advisor to determine requirements for specific major. Choose from the following:		
PHYS 1110	General Physics 1	
PHYS 2010	General Physics 1	
EBIO 1210 & EBIO 1230	General Biology 1 and General Biology Laboratory 1	
EBIO 1220 & EBIO 1240	General Biology 2 and General Biology Laboratory 2	
EBIO 3590	Plants and Society	
CHEM 1113 & CHEM 1114	General Chemistry 1 and Laboratory in General Chemistry 1	
GEOG 1001	Our Changing Planet: Climate and Vegetation	
GEOG 1011	Our Changing Planet: Landscapes and Water	
GEOL 1060 & GEOL 1030	Global Change: An Earth Science Perspective and Introduction to Geology Laboratory 1	
Non-Environmental Design electives (6-9 credits) to meet 120 graduation credits.		**9**
Total Credit Hours		**121**

[1]   May be fulfilled by courses in Upper-Division Writing requirement list or ENVD 3150.

[2]   May be fulfilled by courses in Lower-Division Social Science requirement list.

[3]   May be fulfilled by courses in Lower-Division Arts & Humanities requirement list.

[4]   May be fulfilled by 3000/4000-level courses in Upper-Division Art and Humanities or Social Science requirement lists.

Sample Four-Year Plans of Study

The first three semesters of the BEnvD curriculum are the core curriculum, which is prerequisite for each of the majors: Environmental Products of Design, Architecture, Landscape Architecture, and Sustainable Planning and Urban Design. There are corequisite ENVD core courses each semester and the core courses are typically sequential from semester to semester.

ENVD Core

First Year

Fall Semester

		Credit Hours
ENVD 1010	Studio 1: Introduction to Environmental Products of Design	3
ENVD 1020	Studio 1: Introduction to Architecture	3
ENVD 1002	Technology 1: Applications for Environmental Design	2
ENVD 1004	Introduction to Environmental Design	3
ENVD 1976	Colloquium - Exploring Careers, Research and Practice	1
Lower-Division Writing requirement (choose one: ARSC 1150, ENVD 1150, ENVS 1150, WRTG 1100 or WRTG 1150)		3
	Credit Hours	15

Spring Semester

ENVD 1030	Studio 1: Introduction to Landscape Architecture	3
ENVD 1040	Studio 1: Introduction to Sustainable Planning and Urban Design	3
ENVD 1012	Technology 2: Visual Communications	2
ENVD 1024	History of the Built Environment	3
Lower-Division Arts & Humanities requirement [1]		3
	Credit Hours	14

Second Year

Fall Semester

ENVD 1110	Studio 2: Fundamentals of Environmental Design 1	3
ENVD 1120	Studio 2: Fundamentals of Design 2	3
ENVD 1022	Technology 3: Intermediate Applications for Environmental Design	2
ENVD 2003	Ecological Systems in Design	3
ENVD 2101	Context of Design: Planning and Implementation	3

Lower-Division Social Science requirement [2]		3
	Credit Hours	17
	Total Credit Hours	46

Second Year

Spring Semester

		Credit Hours
PLAN 2100	Studio 1: Foundations of Sustainable Planning and Urban Design	6
PLAN 2004	History and Theory of Sustainable Planning and Urban Design	3
ENVD 2001	Human Behavior and Design	3
Math requirement (choose one: MATH 1150 & 1151 or MATH 1300, MATH 2510, SOCY 2061) Meet with an Academic Advisor suggested		3
	Credit Hours	15

Third Year

Fall Semester

PLAN 3100	Studio 2: Intermediate Sustainable Planning and Urban Design	6
PLAN 3005	Process and Practice	3
Natural Science requirement (choose one or one pair: ATOC 3600, CHEM 1011, CHEM 1113 & CHEM 1114, EBIO 1210 & EBIO 1230, EBIO 1220 & EBIO 1240, EBIO 3590, EBIO 4060, GEOG 1001, GEOG 1011, GEOL 1060, PHYS 1110 or PHYS 2010)		3
Elective		3
	Credit Hours	15

Spring Semester

Professional development requirement (complete application for advisor approval) [4]		6
PLAN 3102	Strategies and Techniques for Sustainable Planning and Urban Design	3
Upper Division Writing requirement or ENVD 3150 [3]		3
Design Elective [1]		3
	Credit Hours	15

Fourth Year

Fall Semester

Elective Studio (choose one: ENVD 3100*, PLAN 3100 or an approved Design study abroad) [2]		6
PLAN 4101	Sustainable Futures Planning	3
Upper-Division Arts and Humanities or Social Science requirement [5]		3
Design Elective [1]		3
	Credit Hours	15

Spring Semester

PLAN 4100	Capstone in Sustainable Planning and Urban Design	6
Design Electives [1]		3
Elective		6
	Credit Hours	15
	Total Credit Hours	75

1   Design electives.

2   Students can enroll in an **additional** 3100 studio in their major to fulfill the elective studio requirement. Students should meet with their advisor to address course options.

3   Upper-Division Writing or ENVD 3150.

4   Application (https://cuboulder.qualtrics.com/jfe/form/SV_3myQkpi3QMKLwqN/) for professional development requirement.

5   Upper-Division Humanities (3000/4000-level courses); Upper-Division Social Science (3000/4000-level courses).

Learning Outcomes

By the completion of the program, students will be able to:

- Use creative, critical and convergent thinking to address social and environmental issues, analyzing the need for and impact of design solutions by examining precedents, applying theoretical knowledge, conducting research and using problem-defining techniques.
- Develop conceptual or material solutions to socio-environmental issues through iterative design processes, synthesizing critical feedback and collaborative findings with peers and communities they engage with.
- Employ graphic, verbal, written, spatial and other communication strategies to organize, demonstrate and effectively argue for their design concepts and proposals.
- Apply principles of social and environmental justice in their work. They will prioritize design stewardship and sustainability to ensure the health, safety and welfare of all project constituents.
- Demonstrate foundational technical skills and apply methodologies essential for entering academic and professional disciplines in environmental design.