ENVIRONMENTAL DESIGN

Built on strong traditions within the design fields, the Program in Environmental Design (ENVD) offers an integrative approach to education and research. The program offers the Bachelor of Environmental Design (BEnvD)—a four-year, preprofessional degree that prepares students for the practice of and advanced study in four majors: architecture, landscape architecture, product design and sustainable planning. From analyzing the design of individual buildings to the planning of entire regions, the majors within ENVD offer coursework and projects addressing the diverse scales of environmental design. Course material ranges from building materials and prefabricated building systems to open space issues, political systems and institutional arrangements.

Building on an underlying philosophy of environmental awareness, students in ENVD work within their majors to:

- Design solution-based approaches that blend technical, ecological, economic, social, cultural, aesthetic and ethical concerns
- Employ evidence-based knowledge to help inform design and planning decisions
- Participate in interdisciplinary dialogues that integrate core design disciplines with the sciences, humanities, arts and other professions
- Obtain a disciplinary foundation that prepares them for careers in both traditional and emerging design fields

Graduates from the Program in Environmental Design are uniquely qualified to confront the significant environmental challenges that lie ahead. Students build on their majors to become adept at complex problem solving, analytical thinking, and leadership through coursework in theory, history, ecological impact, materials and methods and systems thinking. Students enroll in studios, lectures and seminars taught by faculty with both academic and professional expertise. Students employ state-of-the-art educational technology, including computing tools, fabrication equipment and advanced media.

The program's cross-disciplinary collaborations with colleagues in closely-affiliated CU programs enhances the curriculum and research within ENVD. Sharing in the diverse resources of Boulder campus—from natural sciences, social sciences, humanities, arts and technology fields—the ENVD program offers an educational opportunity like no other.

Preparing for a Professional Career

The program prepares preprofessional undergraduate students for entry directly into the design profession or to enter professional graduate study in the design professions. As with other four-year preprofessional degrees, such as the bachelor of science or bachelor of arts in architecture, the BEnvD prepares students for study in a master of architecture (MArch), master of landscape architecture (MLA), master of urban design (MUD) or master of urban and regional planning (MURP) degree program, or Master of Fine Arts (MFA) in design or industrial design.

It is common for bachelor’s of environmental design graduates to receive advanced standing for the work they have done in our program, which allows them to complete a graduate degree at other design schools in a shorter time.

Preparation for a Preprofessional Career in Architecture

The program prepares preprofessional undergraduate students for professional graduate study in architecture. The four year BEnvD degree is a preprofessional degree and is not accredited by the National Architectural Accrediting Board (NAAB) as a professional degree. NAAB does not accredit BA Arch, BS Arch or BEnvD degrees. The NAAB only accredits master of architecture (MArch), five-year bachelor of architecture (BArch), and doctorate of architecture (DArch) programs. The BEnvD degree prepares students for acceptance to NAAB-accredited programs. Students who have completed the BEnvD will normally be asked to complete a minimum of four semesters of additional coursework (60 hours of credit) after admission into one of 95 NAAB-accredited graduate programs nationally.

In addition to earning a MArch degree, prospective architects must complete three years of internships and must pass a state professional licensing exam. This process is overseen by the National Council of Architectural Registration Boards (NCARB). Some intern requirements may be completed concurrently with studies. In the State of Colorado, individuals with seven years of experience in professional architecture may sit for licensing exams towards professional licensure.

Preparation for a Preprofessional Career in Planning

The program prepares preprofessional undergraduate students for professional graduate study in planning. The practice of planning is currently not licensed in most states. Professional membership and certification is overseen by the American Planning Association (APA) and the American Institute of Certified Planners (AICP). Degrees in the field are accredited by the Planning Accreditation Board (PAB) of the Association of Collegiate Schools of Planning.

Although students interested in entry-level positions in planning may find the BEnvD degree adequate, an advanced degree (MURP, PhD or other graduate planning focus) is highly desirable. Students primarily interested in professional practice should obtain a graduate degree in urban planning, in urban and regional planning, in urban planning and community development or in urban design. Students interested in teaching or research in planning should complete a PhD.

Preparation for a Preprofessional Career in Landscape Architecture

The program prepares preprofessional undergraduate students for professional graduate study in landscape architecture. To obtain a license, landscape architects should have an advanced degree and work experience, and pass the national examination. In the United States, licensing is overseen both at the state level and nationally by the Council of Landscape Architectural Registration Boards (CLARB). Accreditation of educational programs is voluntary. The Landscape Architectural Accreditation Board (LAAB) evaluates programs and provides an assessment. Advanced standing for graduate study is evaluated on a case-by-case basis, according to the standards of each graduate program as demonstrated by and in accordance with a student’s prior academic accomplishments in the application, portfolio, and the transcript.

Preparation for Preprofessional Opportunities in Design

Professional and career opportunities are broad and varied. There is an increasing demand in the design, construction and development industries for people who combine an understanding of design with a specialized understanding of related fields like computing, management, finance or marketing. Some students may use the design studies major as general preparation for graduate study in any number of academic
fields that are also concerned with the design and planning of the built environment such as art history, environment behavior studies, and information graphics. Other students may use this emphasis to prepare for further graduate study in a professional field related to architecture, landscape architecture and planning, including business, law, journalism, public administration, product design and digital design. Design thinking is increasingly recognized in the business world as a valuable expertise in the analysis of the design of corporate structures and business plans, industrial processes, manufacturing, marketing and other related pursuits. Excellent design constitutes a fundamental aspect of sustainability in any field.

**Facilities**

Facilities for the program are provided in the Environmental Design Building and at the Center for Innovation and Creativity (CINC) facility.

**Environmental Design Building**

Located in the heart of campus, the ENVD building (http://www.colorado.edu/campusmap/map.html?bldg=ENVD) houses administrative and faculty offices, studio spaces, conference rooms, lecture rooms and exhibit spaces located on the first floor, basement, and third floors of the building.

Studio spaces provide large open areas with individualized work tables available to students 24 hours a day. Studios are located in the basement and on the third floor of the ENVD building.

The Digital Media Center (http://www.colorado.edu/envd/resources/dmc/), (DMC) an ENVD Academic Support Center housed in the ENVD Building, offers students digital imaging computer workstations, a printing and production lab with state-of-the-art large format printers for professional style presentation boards, a photographic studio for portfolio creation and in-house 3D printing, electronics and basic maker tools. The DMC has expanded and offers a 24-person workshop area where students can learn imaging based software and other programs as well as a student lounge area where ENVD students can walk in and ask questions or simply get work done.

**Creative Lab Center**

The Creative Lab Center (http://www.colorado.edu/envd/resources/cinc/) (CLC) provides students access to studio space along with specialized fabrication facilities where ENVD students learn technological design skills and make and fabricate components for their projects. Most of our tech courses such as 3D modeling, building information modeling, digital design and fabrication, are being taught here. In addition to teaching and learning spaces and assembly areas, students access different digital design and fabrication resources at the CLC supported by a state-of-the-art wood lab, metal lab, laser cutting machines, two 3-Axis CNC routers and a high end CPU lab.

A mandatory basic safety orientation is required for all students before access to the shops are granted. This course is an introduction to the program’s safety policies as well as the proper use of personal safety equipment and safe practices on the fabrication equipment. Specific technological trainings are also provided and require viewing prior to lab use.

The CLC also offers a virtual reality lab were students can test their designs and ideas in the digital world before building them. These labs enhance the ENVD curriculum by providing students with the technological resources for design visualization, scale modeling and full scale prototyping, turning ideas into tangible objects.

The CLC is located in the university’s Center for Innovation and Creativity, which is located on the CU Boulder East Campus. The CLC is an approximately 15,000 square-foot space that houses makers spaces, classrooms, computer labs, studio spaces and our shops.

**Lecture Series**

The Program in Environmental Design offers a number of lecture series that bring professionals and researchers into the classroom as well as in highlighted lectures.