

PROGRAMS OF STUDY

The Program in Environmental Design at CU Boulder offers four majors that prepare students for graduate study and careers in environmental product of design, architecture, landscape architecture, and sustainable planning and urban design. With a diverse faculty committed to excellence in teaching, research, scholarship and creative and professional work, the program provides students with a varied range of learning opportunities.

The Program in Environmental Design encourages students to expand their education opportunities and explore certificates available on campus. Students interested in the certificate options below or minors offered at CU should contact their academic advisor to have a plan set in place prior to their junior year.

To filter through all the minors and certificates offered at CU Boulder, see the undergraduate Programs A-Z section.

Bachelor's Degree

- Environmental Design - Bachelor of Environmental Design (BEnvd) (<https://catalog.colorado.edu/undergraduate/colleges-schools/environmental-design/programs-study/environmental-design-bachelor-environmental-design-benvd/>)

Minor

- Environmental Planning - Minor (<https://catalog.colorado.edu/undergraduate/colleges-schools/environmental-design/programs-study/environmental-planning-minor/>)

Faculty

While many faculty teach both undergraduate and graduate students, some instruct students at the undergraduate level only. For more information, contact the faculty member's home department.

Anderson, Brandon (https://experts.colorado.edu/individual/fisid_148082/)
Teaching Assistant Professor; MArch, Texas Tech University

Arias, Ernesto G.
Professor Emeritus

Arp, Jared (https://experts.colorado.edu/display/fisid_168314/)
Teaching Assistant Professor; BS, Metropolitan State University

Bacalzo, Dean (https://experts.colorado.edu/display/fisid_172805/)
Teaching Associate Professor; MSD, Arizona State University

Charlet, Caitlin (https://experts.colorado.edu/display/fisid_174564/)
Teaching Associate Professor; MArch, Parson's School of Constructed Environments

Chawla, Louise (https://experts.colorado.edu/display/fisid_143894/)
Professor Emerita; PhD, CUNY System Office

Crichlow, Gregory (https://experts.colorado.edu/display/fisid_142184/)
Teaching Professor; M. Arch., University of Illinois at Chicago

de Lange, Marcel (https://experts.colorado.edu/display/fisid_140404/)
Teaching Professor; MS, Delft University of Technology (Netherlands)

Ehly, Jeremy G. (https://experts.colorado.edu/display/fisid_149190/)
Teaching Associate Professor; MArch, Illinois Institute of Technology

Evers, Neal (https://experts.colorado.edu/display/fisid_157360/)
Associate Director, Teaching Assistant Professor; MBA, University of Colorado Boulder

Fantalís, Maryanne (https://experts.colorado.edu/display/fisid_156467/)
Teaching Assistant Professor; JD, Rutgers University

Felderman, Melissa (https://experts.colorado.edu/individual/fisid_163478/)
Teaching Associate Professor; MPS, New York University

Goldstein, Bruce (https://experts.colorado.edu/display/fisid_147755/)
Associate Professor; PhD, University of California, Berkeley

Greenwood, Emily (https://experts.colorado.edu/display/fisid_157375/)
Teaching Associate Professor; MLA, University of Colorado Denver

Henao Cano, Valeria (https://experts.colorado.edu/display/fisid_173407/)
Teaching Assistant Professor; MURP, University of Colorado Denver

Hersey, John K. (https://experts.colorado.edu/display/fisid_170139/)
Teaching Assistant Professor; M.A., University of Massachusetts--Amherst; M.A., University of Maryland College Park Campus

Holbert, Marianne Bellino (https://experts.colorado.edu/display/fisid_146986/)
Teaching Professor; MArch, Washington University

Juhasz, Joseph
Professor Emeritus

Kamal, Azza (https://experts.colorado.edu/display/fisid_174957/)
Teaching Associate Professor; PhD, Cairo University (Egypt)

Krizek, Kevin J. (https://experts.colorado.edu/display/fisid_145292/)
Professor; PhD, University of Washington

Lee, Rachel (https://experts.colorado.edu/display/fisid_142183/)
Teaching Assistant Professor; MArch, Tulane University

Lindberg, Case (https://experts.colorado.edu/display/fisid_154137/)
Teaching Professor; PhD, Stanford University

Massey, Susan
Teaching Associate Professor; MA, University of Michigan

Matson, Zannah (https://experts.colorado.edu/display/fisid_173968/)
Assistant Professor; MLA, Harvard Graduate School of Design

McCall, Raymond Jr.
Professor Emeritus

Muller, Brian H.F. (https://experts.colorado.edu/display/fisid_140230/)
Professor Emeritus; PhD, University of California-Berkeley

Polizzi, Jade Venus (https://experts.colorado.edu/display/fisid_140368/)
Teaching Professor; MArch, University of Colorado Denver

Roudbari, Shawhin (https://experts.colorado.edu/display/fisid_153645/)
Associate Professor; PhD, University of California, Berkeley

Rukamathu, Mark (https://experts.colorado.edu/display/fisid_174660/)
Teaching Associate Professor; MArch, Harvard Graduate School of Design

Sabinson, Elena (https://experts.colorado.edu/display/fisid_173948/)
Assistant Professor; PhD, Cornell University

Samper, Jota (https://experts.colorado.edu/display/fisid_157949/)
Assistant Professor; PhD, MIT-DUSP

Sancar, Fahriye Hazer
Professor Emeritus

Schulte, Stacey (https://experts.colorado.edu/display/fisid_146819/)
Teaching Professor; MURP, University of Colorado Denver

Tabatabaie, Sara (https://experts.colorado.edu/display/fisid_164969/)
Teaching Assistant Professor; Ph.D., University of Colorado Boulder

Van Horne, Jesse (https://experts.colorado.edu/display/fisid_166162/)
Teaching Assistant Professor; MLA, University of Colorado Denver

Van Vliet, Willem K.T.
Professor Emeritus

Xu, Ping (https://experts.colorado.edu/display/fisid_101140/)
Professor; PhD, Harvard University

Courses

ARCH 2100 (6) Studio 1: Foundations of Architecture

The beginning of the architectural specialization sequence, this course introduces students to the basic strategies and techniques of architectural design. This studio focuses on concepts of medium-scale building design, siting, and climate. Through multiple design exercises, students learn how these factors assist in shaping buildings.

Requisites: Requires prerequisite course of ENVD 1120 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

Recommended: Corequisite ARCH 2115.

ARCH 2115 (3) Architecture Materials and Methods

An introduction to both standard and innovative building materials this course exposes students to the elements and processes used to in constructing buildings. Through lecture, technical drawing, material research and exposure to practicing professionals, students build a foundation of knowledge necessary to approach the specification and design of materials as well as to foster a curiosity in the innovative frontiers of assembly, aesthetics and sustainable life-cycle considerations.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Recommended: Corequisite ARCH 2100.

ARCH 3100 (6) Studio 2: Intermediate Architecture

Dealing with problems at an intermediate level of complexity this architecture studio emphasizes the interaction of form, programmatic use, human behavior and context in creating structure. Studio options may include a client-based community engaged project, real world applications, and/or result in a physical product. Students work across analog and digital platforms to produce high quality and portfolio-worthy work.

Repeatable: Repeatable for up to 12.00 total credit hours.

Requisites: Requires prerequisite course of ARCH 2100 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

Recommended: Corequisite ARCH 3114.

ARCH 3114 (3) History and Theory of Architecture 1

Focusing on buildings, this lecture is a survey of the built environment starting with some of the first structures built by humans and moving through time to the Industrial Revolution. The course focuses on the development of major styles, influential people, and the drivers of building form.

Requisites: Requires prerequisite course of ENVD 1024 (minimum grade C-) and restricted to Program in Environmental Design (ARPLU) students or restricted to Architectural Engineering (AREN) majors only with 57-180 credits (Junior or Senior).

Recommended: Corequisite ARCH 3100.

ARCH 3214 (3) History and Theory of Architecture 2

Picking up after the Industrial Revolution and continuing through to today's Contemporary Architecture this course is the sequel to History and Theory I. History be taught thematically and cover important structures, key figures, and movements that have shaped our modern world.

Requisites: Requires prerequisite course of ENVD 1024 (minimum grade C-) and restricted to Program in Environmental Design (ARPLU) students or restricted to Architectural Engineering (AREN) majors only with 57-180 credits (Junior or Senior).

Recommended: Prerequisite ARCH 3114 with a C- or better.

ARCH 4010 (5) Architectural Appreciation and Design

Introduces basic processes and principles of architectural design. Provides a basis for understanding and evaluating architecture.

Requisites: Restricted to students with 57-180 credits (Junior or Senior) Architectural Engineering (AREN) majors only.

ARCH 4100 (6) Studio 3: Capstone in Architecture

The capstone of the studio sequence, this course investigates building technology, structural systems, user experience, and environmental sustainability. Studio options may include a client-based community engaged project, real world applications, and/or result in a physical product. Outcomes include well developed structures designed with a high level of craft, resulting in sophisticated and exhibit-worthy presentations.

Requisites: Requires prerequisite course of ARCH 3100 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

Recommended: Corequisite ARCH 4115.

ARCH 4115 (3) Architecture Building Technology

Through experimentation and testing, the fundamentals of building physics and climate science are taught in this interactive seminar. Students learn the concepts related to structural and mechanical systems necessary for proper building function by first studying and then implementing the key systems through hypothetical building assignments. This class covers active and passive green building systems that are necessary when designing structures for an evolving climate.

Requisites: Requires prerequisite course of ARCH 2115 or ENVD 3115 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

ENVD 1001 (1) ENVD First-Year Seminar

Transitions first-year ENVD students into college through the process of discovering their path to educational success. Provide opportunities to facilitate learning through peer support groups and curricular integration with the ENVD core classes.

Requisites: Restricted to Program in Environmental Design (ARPLU) majors only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Social Factors

ENVD 1002 (2) Technology 1: Applications for Environmental Design

Introduces technological competencies to support studio work including design representation and presentation. Students develop fundamental competencies in sketching, graphic design, file management and 3D modeling.

Requisites: Restricted to Program in Environmental Design (ARPLU) majors only.

ENVD 1004 (3) Introduction to Environmental Design

Introduces methods, principles and philosophies that guide environmental design. Explores ways of thinking about, and accomplishing, the act of design. Students contemplate the processes and motivations behind design decisions including discussions of environmental sustainability and social responsibility. Required for Program in Environmental Design (ARPLU) majors.

Additional Information: Departmental Category: History and Theory

ENVD 1010 (3) Studio 1: Introduction to Environmental Products of Design

The first of four introductory studios introduces students to concepts and techniques related to the design of products at a human scale. In an immersive project-based studio environment students develop the foundation of design communication and thinking through a series of hands-on projects with physical outcomes.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: History and Theory

ENVD 1012 (2) Technology 2: Visual Communications

Explores the basic visual communication skills necessary for environmental design through image manipulation, vector and raster graphics, and composite renderings. Students will explore concepts in visual hierarchy, composition, and color theory to inform graphics within each environmental design major.

Requisites: Requires prerequisite course of ENVD 1002 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 1020 (3) Studio 1: Introduction to Architecture

The second of four introductory studios introduces students to strategies and techniques of architectural design and communication in a hands-on studio environment. Students design a small-scale architectural project that responds to environmental, contextual and programmatic needs while developing the necessary skills for iterative design processes.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

ENVD 1022 (2) Technology 3: Intermediate Applications for Environmental Design

Building on the technological competencies developed in Technology 1 and 2, students explore more advanced competencies in graphic design, 3D modeling, and diagramming.

Requisites: Requires prerequisite course of ENVD 1012 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

ENVD 1024 (3) History of the Built Environment

Develops design appreciation through the historical narratives that link people and the built environment. Explores traditions that demonstrate how design has evolved over time to respond to cultural and environmental conditions.

Requisites: Requires prerequisite course for ARPLU students of ENVD 1004 (minimum grade C-) or restricted Architectural Engineering (AREN) students with 80+ credits.

ENVD 1030 (3) Studio 1: Introduction to Landscape Architecture

The third of four introductory studios exposes students to concepts and strategies inherent to the practice of landscape architecture. Students analyze and design ecological related systems within an urban context in this immersive studio environment.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

ENVD 1040 (3) Studio 1: Introduction to Planning and Urban Design

The fourth of four introductory studios in which students learn concepts and strategies related to urban planning and design. Students collaboratively develop a design solution to a small-scale problem within an urban fabric using basic skills of analysis and design iteration.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

ENVD 1052 (3) Design and Communication 1

Using both lectures and drawing exercises, this class extends understandings of the representational conventions used by the design professions through its introduction to the possibilities offered by emerging digital techniques for the depiction of designed artifacts and environments, allowing students to extend and enhance their understandings of advanced practices for design visualization, representation and communication.

Recommended: Corequisites ENVD 1004 and ENVD 2001.

Additional Information: Departmental Category: Methods and Techniques

ENVD 1102 (4) Design and Communication 2

Using both lectures and drawing exercises, this class extends understandings of the representational conventions used by the design professions through its introduction to the possibilities offered by traditional techniques for the advanced practices for design visualization, representation, and communication.

Requisites: Requires prerequisite course of ENVD 1052 (minimum grade C-). Restricted to Program in Environmental Design major or minor students only.

Recommended: Corequisites ENVD 1104 and ENVD 2003.

Additional Information: Departmental Category: Methods and Techniques

ENVD 1110 (3) Studio 2: Fundamentals of Environmental Products of Design

Building on the foundation introduced in EPoD Studio 1, this studio introduces students to more advanced methodologies and techniques related to the design of products at a human scale while considering the interdisciplinary nature of the other specializations. Using complementary skills in 3D modeling, drawing, diagramming, and through physical making and fabrication, students explore imaginative and innovative design solutions of small-scale products.

Requisites: Requires prerequisite courses of ENVD 1010 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

ENVD 1120 (3) Studio 2: Fundamentals of Architecture

Focusing on the languages of design, as well as on traditional and digital methods of visualizing architectural ideas and forms, this course builds on the skills learned in Studio 1 and begins incorporating the dynamic forces that shape our buildings.

Requisites: Requires prerequisite courses of ENVD 1020 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

ENVD 1130 (3) Studio 2: Fundamentals of Landscape Architecture

Building on skills learned from the introductory studio, this course expands the skills and knowledge needed for the practice of landscape architecture. With a focus on resilient design and an exploration through multiple scales, students design ecological systems in an urban context.

Requisites: Requires prerequisite courses of ENVD 1030 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

ENVD 1140 (3) Studio 2: Fundamentals of Planning and Urban Design

Through a small-scale urban planning and design project, students explore solutions to challenges in dynamic urban systems. Builds on knowledge and skills gained in the introductory studios to explore the human and environmental dimensions of intertwined systems within the built environment.

Requisites: Requires prerequisite course of ENVD 1040 (all minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

ENVD 1150 (3) First Year Writing for Environmental Design

Introduces students to fundamentals of effective academic and professional communication with an emphasis in Environmental Design. Projects are designed to develop strong written and oral communication skills as well as building knowledge of research techniques, while classroom activities and discussions challenge students to become more critical and flexible thinkers.

Requisites: Restricted to Environmental Design (ENVD) majors only.

ENVD 1976 (1) Colloquium - Exploring Careers, Research and Practice

Inspiration in the design profession can be found through a series of faculty and professional lectures. Students develop an understanding of the breath of environmental design careers, research and practice.

Repeatable: Repeatable for up to 3.00 total credit hours.

Requisites: Restricted to Program in Environmental Design (ARPLU) majors only.

ENVD 2001 (3) Human Behavior and Design

Examines reciprocal relationships between people and the built and natural environments and the ways that human well-being is impacted by the built environment. Traces major issues and approaches in design research to understand how people are influenced by the environment and how they can create healthy, just, and livable places.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Social Factors

ENVD 2003 (3) Ecological Systems in Design

Introduces the essential principles and concepts of ecology as they relate to the design and understanding of the built environment. Students explore interactions between people and nature, the design of resilient ecological systems and ways that the built world is influenced by its environment.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Physical Factors

ENVD 2011 (1-6) Special Topics: Social Factors in Environmental Design for non-majors

Addresses variable topics in the relationship of human experience and behavior to the built environment.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to non-Program in Environmental Design majors with 0-56 credits (Freshmen or Sophomores).

ENVD 2012 (1-6) Special Topics: Computer Methods and Graphic Applications for non-majors

Addresses variable topics in design communications, animation and environmental simulation, and computational methods of technical evaluation and optimization.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to non-Program in Environmental Design majors with 0-56 credits (Freshmen or Sophomores).

ENVD 2013 (1-6) Special Topics: Physical Factors in Environmental Design for non-majors

Addresses variable topics in appropriate technology, public policy and natural hazards, organization of the designing and building process, and physical elements of urban development.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to non-Program in Environmental Design majors with 0-56 credits (Freshmen or Sophomores).

ENVD 2014 (1-6) Special Topics: Theory, History and Historiography of Environmental Design for non-majors

Addresses variable topics in theory and criticism, history and historiography of environmental design.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to non-Program in Environmental Design majors with 0-56 credits (Freshmen or Sophomores).

ENVD 2015 (1-6) Special Topics: Technology and Practice for non-majors

Addresses variable topics in the new technologies and issues of professional practice in the environmental design professions.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to non-Program in Environmental Design majors with 0-56 credits (Freshmen or Sophomores).

ENVD 2101 (3) Context of Design: Planning and Implementation

Explores the regulatory and procedural context in which design decisions are made and implemented. Includes an examination of finance, policy, and development procedures necessary in bringing conceptual designs to life.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

ENVD 2120 (6) Environmental Design Studio 1

Exposes students to a sequence of design investigations that lead to the development of design concepts for critical evaluation and discussion. The intent of this introductory design studio is to expose students to the fundamental design practices that are common to the disciplines of environmental design, planning, urban design and landscape design - that share the responsibility for shaping the designed environment.

Requisites: Requires prerequisite course of ENVD 1102 (minimum grade C-). Restricted to Program in Environmental Design major or minor students only.

Recommended: Corequisite ENVD 3115.

Additional Information: Departmental Category: Studios

ENVD 2130 (6) Environmental Design Studio 2

Exposes students to a sequence of design investigations that lead to the development of design concepts for critical evaluation and discussion.

The intent of this introductory design studio is to expose students to the fundamental design practices that are common to the disciplines of architecture, urban design and landscape design - disciplines that share the responsibility for shaping the designed environment.

Requisites: Requires prerequisite course of ENVD 2120 (minimum grade C-). Restricted to Program in Environmental Design major or minor students only.

Recommended: Corequisite ENVD 3003.

Additional Information: Departmental Category: Studios

ENVD 2352 (3) Beginning Digital Applications

Foundation level computing skills for design analytics and representation.

Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

ENVD 3002 (3) INTRO BIM (Revit)

This introductory course introduces students to BIM modeling through the Revit platform. Fundamental skills will be taught to help students understand technical and practical aspects of this software to both support academic projects and gain early exposure to expectations in professional practice. Emphasis throughout the course will be placed on the most successful ways to utilize this powerful program whether in early design stages or later stage production. This course is not intended to evaluate design skills but advance knowledge of the presented software.

Requisites: Requires prerequisite course of ENVD 1022 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) majors and minors only.

Additional Information: Departmental Category: Methods and Techniques

ENVD 3003 (3) Site Planning

Introduces the site planning process including: site analysis and its relationship to building program and site concept, and preparation of site plans. Emphasis is placed on the planning of the physical site through a thorough understanding of process, land use, site constraints and synthesis of ecological, functional and aesthetic considerations in the site planning process.

Recommended: Corequisite ENVD 2130.

Additional Information: Departmental Category: Physical Factors

ENVD 3009 (1-6) Special Topics in Environmental Design

Provides a seminar or design lab on special issues in environmental design, including study abroad. Variable topic class.

Repeatable: Repeatable for up to 21.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Miscellaneous

ENVD 3011 (1-6) Special Topics: Social Factors in Environmental Design for non-majors and ENVD students

Addresses variable topics in the relationship of human experience and behavior to the built environment.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to students with 57-180 credits (Juniors or Seniors).

ENVD 3012 (1-6) Special Topics: Computer Methods and Graphic Applications for non-majors and ENVD students

Addresses variable topics in design communications, animation and environmental simulation, and computational methods of technical evaluation and optimization.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to students with 57-180 credits (Juniors or Seniors).

ENVD 3014 (1-6) Special Topics: Theory, History and Historiography of ENVD for non-majors and ENVD students

Addresses variable topics in theory and criticism, history and historiography of environmental design.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to students with 57-180 credits (Juniors or Seniors).

ENVD 3052 (3) Digital Tools LAND/PLAN

In this course, students weave together digital tools used in the landscape design and city planning profession into a cohesive project. Emphasis is on the exploration of design, 3D modeling, analysis, and how to use and present data. Tools covered include ArcGIS (mapping), Microsoft Excel (data analysis), InDesign (layout), and SketchUp (3D modeling). This self-paced, asynchronous class will be taught through a combination of pre-recorded tutorials and virtual class sessions for collaboration and discussion.

Requisites: Requires prerequisite course of ENVD 1022 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students and minor students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 3100 (6) ENVD Interdisciplinary Design Studio

This studio exposes students to a sequence of design investigations that lead to the development of design concepts for critical evaluation and discussion. Students will explore fundamental design practices that are common to the disciplines of architecture, planning, urban design, landscape architecture, and product design. Students will work on a project that provides an opportunity to integrate the various disciplines of environmental design. ENVD 3100 fulfills the Pick One studio requirement for ENVD majors. It does not fulfill the ENVD major-specific 3100 studio requirement.

Repeatable: Repeatable for up to 12.00 total credit hours.

Requisites: Restricted to Program in Environmental Design (ARPLU) students and minor students only with 40 credits or more.

Additional Information: Departmental Category: Studios

ENVD 3102 (3) Revit II

Provides students a learning and practice environment to deepen and expand their skills within the Revit software. The experiential nature of this software benefits from repetitive use and expansion of skills, which this course provides. More attention will be given to presentation techniques, family building and templates which support project advancement and production. This course may also integrate plug-ins and other software compatible within and alongside Revit.

Requisites: Requires prerequisite course of ENVD 3002 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students and minor students.

ENVD 3122 (3) Research Issues and Methods in Design and Planning

Explores topics of current interest in planning. Looks at the development and social consequences of the neighborhood movement, forms of municipal and regional governments, regional settlement patterns, and new communities. Introduces selected methods from the social sciences used by planners and urban designers.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 3150 (3) Professional Communication for Design Students

Building on First Year Writing, this class prepares students for the kinds of projects they will undertake as design professionals. Enriches students' awareness of writing as a life-long tool and communicates the importance of writing well. Emphasizes effective written and oral communication skills. Projects explore the many ways in which writing is a powerful tool in the world of design.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

ENVD 3152 (3) Geographic Info Systems

Focuses on construction and use of computer-based information systems to represent and manipulate geographic data. Emphasizes the recording, mapping, and transforming of data for analysis and use by planners.

Requisites: Requires prerequisite course of ENVD 1022 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) majors and minors only.

Additional Information: Departmental Category: Methods and Techniques

ENVD 3200 (1-6) Advanced ENVD Studio

Design studio dealing with problems at an intermediate level of complexity; emphasis is on the interaction of form, use, and multiple values and technologies in conjunction with issues and techniques drawn from other content area courses of the curriculum.

Repeatable: Repeatable for up to 18.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Recommended: Prerequisite ENVD 2130.

Additional Information: Departmental Category: Studios

ENVD 3212 (3) Color Theory

Illustrates color media techniques for the preparation, composition, and presentation of landscape and built environment drawings.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 3252 (3) Intro 3-D Modeling RHINO

Teaches the student fundamental to intermediate skills and design practices around 3d modeling using Rhino 3d software. 3D modeling is the process of developing a mathematical representation of any three-dimensional surface or object (either inanimate or living) via specialized software that can be used for representation, calculations, fabrication, visualization etc.. Learning strategies around how to see your world in 3d models, and learning when/how/where to use these techniques will make students confident designers and marketable.

Requisites: Requires prerequisite course of ENVD 1022 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students and minor students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 3300 (3-6) Special Topics: Intermediate Design Lab

Design lab exploring new and emerging themes in environmental design.

Repeatable: Repeatable for up to 9.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Studios

ENVD 3314 (1-6) Special Topics: History of Design

Provides a lecture exploring various topics of design history of the built environment. The focus of this course is directed to all majors.

Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to students with 27-180 credits (Sophomores, Juniors or Seniors) only.

ENVD 3352 (3) Intermediate Digital Applications

Intermediate level computing skills for design analytics and representation.

Repeatable: Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 3909 (1-6) Independent Study

By special arrangement with instructor.

Repeatable: Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Miscellaneous

ENVD 3919 (1-6) Teaching Assistant

By special arrangement with instructor.

Repeatable: Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students with 87 -180 credits (Seniors).

Recommended: Prerequisite 3.00 GPA.

Additional Information: Departmental Category: Miscellaneous

ENVD 3929 (1) Peer Leadership and Mentorship and Transitioning Students

Designed to explore the student transition to university life and engage students in active leadership and mentoring capacity-building activities.

Examines the role peers play in leading students through transitional development. Students will learn the theoretical basis for understanding student transition and develop their mentoring capacities as well as examine personal identity and values and its intersection with leadership and mentorship.

Repeatable: Repeatable for up to 3.00 total credit hours.

Requisites: Restricted to Program in Environmental Design (ARPLU) students with 27-180 credits (Sophomore, Junior, or Senior).

Recommended: 3.00 GPA.

Additional Information: Departmental Category: Miscellaneous

ENVD 3939 (1-3) Exploratory Internship

Offers professional experiences allowing students to discover a variety of design-related environments such as community engagement, non-profit work or assisting research. In addition to the internship experience, students attend four classroom sessions providing professional development exercises.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to Program in Environmental Design (ARPLU) students with 27-180 credits (Sophomore, Junior, or Senior).

Additional Information: Departmental Category: Miscellaneous

ENVD 3972 (3) Advanced Writing in Environmental Design

Prepares students for researching, planning, and writing a Senior Honors thesis and for professional life. Enriches students' awareness of writing as a life-long tool and communicates the importance of writing well. Emphasizes clear, persuasive, and effective written and oral communication skills. Projects explore the many ways in which writing is a powerful tool in the world of design. Environmental Design majors only.

Requisites: Restricted to Program in Environmental Design (ARPLU) students. Must have 57 credit hours and a cumulative GPA of 3.0 or higher.

Grading Basis: Letter Grade

ENVD 4009 (1-6) Special Topics in Environmental Design

Provides a seminar or design lab on special issues in environmental design, including study abroad. Variable topics.

Repeatable: Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Miscellaneous

ENVD 4023 (3) Environmental Impact Assessment

Provides a field-oriented seminar in current environmental impact controversies. Gives attention to history, theory, and application of impact analysis at state levels for designers, land-use planners, and others involved in resource decision making. By instructor consent, open to nonmajors on a space available basis.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Physical Factors

ENVD 4035 (3) Solar and Sustainable Design

Introduces aspects of solar technology relevant to the environmental design professions. Includes readings and lectures on the nature of energy limitations, energy needs, and the potential role of solar energy in meeting these needs.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Technology and Practice

ENVD 4052 (3) Graphic Communication for Design Professionals

The course is an exploration of topics related to graphic design and visual communication as they relate to constructing your own professional identity. Topics will include layout, composition, fonts, color theory, printing, publication and web-based presence. We will work on visual communication strategies to develop graphically compelling and clear portfolios in both web-based and print formats for use in applications for graduate school and professional practice. A comprehensive and fluid approach to the use of the Adobe Creative Suite for all design tasks will be stressed. Comprehend the fundamentals of graphic design and their application in visual communication. Be able to speak about visual communication in your own language and evaluate critically the visual design surrounding us. Construct a comprehensive personal and professional identity through print and digital mediums. Be able to synthesize the inherent strengths of various different software tools into a fluid digital design process.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 4100 (3-6) Advanced Design Lab 1

Design lab exploring new and emerging themes in design.

Repeatable: Repeatable for up to 18.00 total credit hours. Allows multiple enrollment in term.

Requisites: Requires prerequisite course of ENVD 3300 (minimum grade C-).

Additional Information: Departmental Category: Studios

ENVD 4112 (3) Architectural Graphics 1

Illustrates techniques of graphics communication and presentation for architectural design. Includes advanced delineation and use of color.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 4122 (3) Digital Photo for Designers

Explores digital photographic workflow from capture to exhibition. Students gain the ability to document their projects and utilize photography as a means of creative expression. Topics include: using DSLRs, Adobe Lightroom, retouching with Adobe Photoshop, time-lapse photography, Adobe Premier, professional printing, landscape and architectural photography, sharing work through blogs and social media, and submitting work for publication and exhibition.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 4152 (3) Digital Design and Fabrication

Teaches the student basic to intermediate concepts, strategies, materialities and lots of other interesting things around the topic of digital design and fabrication. In the last decade or so, DD+F (DigiFab) has evolved from a novel, boutique approach towards design to a critical component of design + making especially in Architecture, Landscape Architecture and Product design. Students will use 3d modeling (Rhino) and parametric plugins(i.e. Grasshopper) to investigate new ways of making using 3d printing, CNC machining, laser cutting and other digital fabrication processes. Learning strategies and concepts around DigiFab as well as looking at materiality in digifab and learning when/how/where to use these techniques will make students confident designers and marketable.

Requisites: Requires prerequisite course of ENVD 1022 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students and minor students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 4212 (3) Architectural Graphics 2

Covers development of an architectural set of construction documents combined with job administration, field observation, and guest speakers from related construction and architectural disciplines.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 4252 (3) Advanced Digital Design and Fabrication

This course teaches the student intermediate to advanced concepts, strategies, technologies and joinery around ways to make objects and systems using computer software, analytical software and machines such as 3d printers, laser cutters, CNC machines and robot arms etc... In this follow up course (students need to take intro to Digifab first) we will explore more personal driven object typologies around furniture, building skins and small structures/folies tailored around performance and optimizations around materiality, manufacturing tolerances, embodied energies and sustainability.

Requisites: Requires prerequisite course of ENVD 4152 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) majors and minors only.

ENVD 4300 (3-6) Advanced Design Lab 2

Design lab exploring new and emerging themes in design.

Repeatable: Repeatable for up to 18.00 total credit hours. Allows multiple enrollment in term.

Requisites: Requires prerequisite course of ENVD 4100 (minimum grade C-). Restricted to Program in Environmental Design major or minor students only.

Additional Information: Departmental Category: Studios

ENVD 4311 (3) Housing Policies and Practices

A seminar providing students with a descriptive knowledge and analytical understanding of the use and development of residential settings in different political economies, globally divided into advanced capitalist nations, collectivist economies, and the third world.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Social Factors

ENVD 4322 (1-6) Special Topics: Graphics

Provides an advanced seminar on special issues in design communications.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Methods and Techniques

ENVD 4340 (4-6) Landscape Design Studio

Studio in landscape design.

Requisites: Requires prerequisite course of ENVD 3300 (minimum grade C-). Restricted to Program in Environmental Design major or minor students only.

Additional Information: Departmental Category: Studios

ENVD 4352 (1-6) Special Topics: Computer Methods

Topics include animation and environmental simulation, computational methods of technical evaluation and optimization, and computational mapping and analysis. May be repeated for credit by petition.

Repeatable: Repeatable for up to 99.00 total credit hours. Allows multiple enrollment in term.

Additional Information: Departmental Category: Methods and Techniques

ENVD 4361 (1-6) Special Topics: Social Factors in Design

Addresses variable topics in the relationship of human experience and behavior to the built environment, e.g., social research methods in environmental design.

Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Social Factors

ENVD 4363 (1-6) Special Topics: Physical Factors in Environmental Design

Includes such topics as appropriate technology, public policy and natural hazards, organization of the designing and building process, and physical elements of urban development.

Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Physical Factors

ENVD 4364 (1-6) Special Topics: History and Historiography of Environmental Design

Provides an advanced seminar on history and historiography of environmental design, e.g., American dwellings.

Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: History and Theory

ENVD 4365 (1-6) Special Topics: Technology and Practice

Provides an advanced seminar on new technologies and issues of professional practice in the environmental design professions.

Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Technology and Practice

ENVD 4420 (3) Senior Capstone Seminar

Advanced seminar focuses on theoretical concerns and practical issues inherent in environmental design and planning. Views concerns and issues in terms of setting, processes, and planning and design outcomes. Provides a critical synthesis of the inherently interdisciplinary nature of planning and design education.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Studios

ENVD 4440 (3-6) Landscape Design Studio 2

A preprofessional studio in landscape architecture.

Requisites: Requires prerequisite course of ENVD 4340 (minimum grade C-). Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: Studios

ENVD 4764 (1-6) Special Topics: Theory and Criticism in Environmental Design

Provides an advanced seminar on theory and criticism in environmental design, e.g., architecture now and introduction to design theory and criticism. May be repeated for credit by petition.

Repeatable: Repeatable for up to 12.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: History and Theory

ENVD 4794 (3) History of Urban Design and Planning

Examines history of European and American planning and urban design in the late 19th and 20th centuries.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Additional Information: Departmental Category: History and Theory

ENVD 4909 (1-6) Independent Study

By special arrangement with instructor.

Repeatable: Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Recommended: Prerequisite 3.00 GPA.

Additional Information: Departmental Category: Miscellaneous

ENVD 4919 (1-6) Teaching Assistant

By special arrangement with instructor.

Repeatable: Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Recommended: Prerequisite 3.00 GPA.

Additional Information: Departmental Category: Miscellaneous

ENVD 4929 (1-6) Research Assistant

By special arrangement with instructor.

Repeatable: Repeatable for up to 6.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Program in Environmental Design (ARPLU) students.

Recommended: Prerequisite 3.00 GPA.

Additional Information: Departmental Category: Miscellaneous

ENVD 4939 (3) Professional Design Internship

Allows students to develop design and professional skills outside of the curriculum while working for an architecture, landscape architecture or planning firm. In addition to the internship experience, students attend four classroom sessions providing professional development exercises.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to Program in Environmental Design (ARPLU) students with 57-180 credits (Juniors or Seniors).

Recommended: Prerequisite 3.00 GPA.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Miscellaneous

ENVD 4972 (1-3) Honors Research Methods and Thesis Preparation

To prepare students for undertaking an independent research or design project in Environmental Design, this asks students to engage with existing literature in the field. Students will understand how research and design projects are conducted, and how their own work fits within a long tradition of scholarship. Department consent required.

Repeatable: Repeatable for up to 3.00 total credit hours.

Requisites: Restricted to Program in Environmental Design (ARPLU) students with 57-180 credits (Juniors or Seniors).

Grading Basis: Letter Grade

Additional Information: Departmental Category: Miscellaneous

ENVD 4979 (1-3) Honors Thesis

Working with an advisor, students prepare, complete, and defend an honors thesis project, either written or creative.

Repeatable: Repeatable for up to 3.00 total credit hours.

Requisites: Restricted to Program in Environmental Design (ARPLU) students with 57-180 credits (Juniors or Seniors).

Grading Basis: Letter Grade

Additional Information: Departmental Category: Miscellaneous