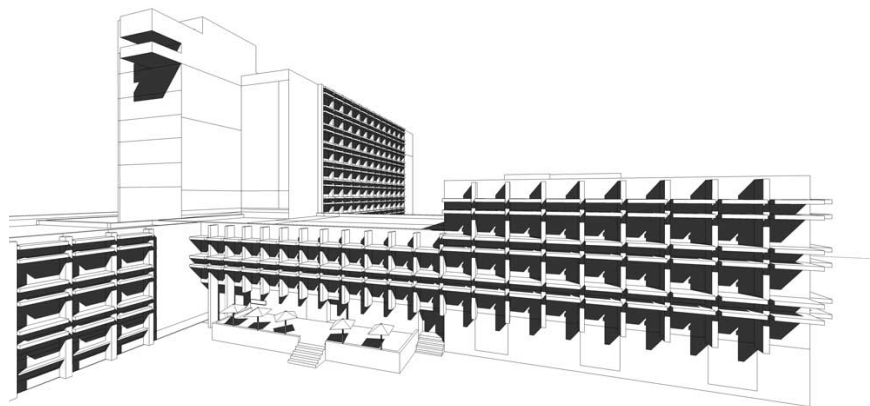**Berkeley** | College of Environmental Design

Sustainable Environmental Design Major Handbook
2023-24

College of Environmental Design
University of California Berkeley

For Students Admitted to University of California Berkeley Fall 2023 - Spring 2024

Download this handbook at: ced.berkeley.edu/advising/undergraduate-advising/undergraduate-students/major-minor-requirements

SUSTAINABLE ENVIRONMENTAL DESIGN AT BERKELEY

The Sustainable Environmental Design (SED) major recognizes that the emergent field of sustainability is growing rapidly in cross-sector activities from product design and manufacturing to governance and social equity. As the world population grows and urbanizes, the planning and design of systems that produce outcomes that are resilient, resource-efficient, healthy and socially just is profoundly important. The College of Environmental Design, with its long-standing, multidisciplinary focus on innovation and social equity is an ideal setting for an undergraduate major in SED, with a strong focus on *systems*.

The major offers students a critical understanding of the sustainability challenges facing regions in California and around the globe, and equips them with the technical and analytical tools key to solving sustainability problems that affect *people, products and places*. Graduates have many career paths and fields of graduate study open to them as a function of the diversity of topics and tools they will encounter and engage in SED. Students who complete this major will:

- Understand the features and functions of systems that drive sustainability challenges.

- Analyze the relationships between technological systems, systems of governance, and production systems.

- Identify interactions between sustainability, equity and social justice.

- Use quantitative analysis to understand the potential of sensors and information dashboards to produce innovation in design and management approaches.

- Leverage the potential of strategy, policy, business and institutions to adapt to and influence environmental, social and economic trends.

Core Classes designed exclusively for SED students will include :
• **The *Gateway Course*, ENV DES 110,** is taken by all incoming SED first years and transfer students. The course is an opportunity to meet your cohort and explores varying interpretations of sustainability through the fields of design, economics, policy, law, and advocacy. Exploration of case studies and the core, *systematic aspects of sustainability* and its implications for environmental and design challenges are considered. Guest speakers will walk students through various career and life paths in the field of sustainability, and demonstrate how the field is being constructed and professionally explored and defined in diverse ways.

• **A *Design Frameworks course,* ENV DES 104** introduces SED majors to various aspects and approaches of the design process as it relates to socioenvironmental aspects of sustainability. Students will develop their skills to recognize and utilize design as both a thought process and set of communication tools and techniques. Topics of interest will include understanding and representing life cycles, material flows, spatial articulations, system processes and intervention strategies aimed at regime shifts and large-scale spatiotemporal phenomena. Students will develop skills in representing complex topics and dynamics through approaches ranging from hand drawing to the use of specialized software.

• **A *Capstone Workshop,* ENV DES 106** builds student abilities to synthesize their knowledge and skills applied to real-world challenges that they scope, define and execute as a capstone project. Linking sustainability science and technology with urban form and social dynamics, the workshop requires independent and collaborative research towards an innovative capstone project, which students gain confidence developing and refining this project for use by (and/or in collaboration with) a professional partner or client.

Additionally, SED students will gain _technical skills_ related to various disciplines and coursework across CED departments. Classes stressing a technical orientation include:

• **A _methods and technology course_**, LD ARCH 188/GEOG C188 _Geographic Information Systems_. GIS has become a basic tool for a wide range of analytic tasks across all environmental design fields. The course addresses both GIS theory and applications, offering a dynamic analytical framework for gathering, integrating, interpreting and manipulating temporal and spatial data at various scales.

• **A hands-on applied methods course** LD ARCH 12_, Environmental Science for Sustainable Development,_ introduces students to the scientific basis of sustainability as explored through the study of energy, water, food, natural resources and the built environment, with a focus on the application of scientific insights to sustainable development strategies. The course emphasizes hands-on learning through field-based exercises such as measurement of atmospheric particulate matter, micro-climates, channel form, aquatic insects and water quality, and direct observations of green infrastructure, green building methods, and urban agriculture.

• **A performance-oriented technology and design course** ARCH 140_, Energy and Environment,_ examines building technologies, design strategies, best practices and standards related to building materials and processes, and presents the fundamentals of building science while recognizing the evolving nature of building technologies, energy efficiency, ecology, and responsible design.

SED students will also engage coursework geared towards understanding _social systems_ and design insights related to environmental justice and equity, including_:_

• **Examination of the values and experiential dimensions of design,** LDARCH 140, _Social and Psychological Factors in Open Space Design_**,** considers ways that various processes and projects involving public space come to matter in individual lives and the communities and societies in which they exist. The course critically examines issues related to design as a nexus of communication, social equity and the environmental needs of various communities.

• **Urban sustainability-focused coursework**, including CYPLAN 119, _Planning for Sustainability_, examines how the concept of sustainable development applies to cities and urban regions and gives students insight into a variety of contemporary urban planning issues. The course combines lectures, discussions, student projects, and guest appearances by leading practitioners in Bay Area sustainability efforts. Ways to coordinate goals of environment, economy, and equity at different scales of planning are addressed, including the region, the city, the neighborhood, and the site.

NOTE: SED majors do not have access to Architecture studio courses (ARCH 11A, 11B, 100A-D, 102A-B). Architecture studio courses are reserved for Architecture majors only.

Minors. See the CED website for information on undergraduate minors offered by the College of Environmental Design

UNDERGRADUATE ADVISING

FACULTY ADVISORS

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Members, Sustainable Environmental Design Committee

Professor Gail Brager
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STAFF ADVISORS

Office of Undergraduate Advising

250 Bauer Wurster Hall
510-642-4943
For general advising questions email:
cedadvising@berkeley.edu

Website:
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Sustainable Environmental Design Advisor

Heather Grothjan (Peng)
250 Bauer Wurster
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Director of CED Undergraduate Advising

Omar Ramirez
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oramirez@berkeley.edu

College Evaluator (transfer work evaluation)

Heather Grothjan (Peng)
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heather.grothjan@berkeley.edu

CED Career Counseling

Dinorah Meyer
703 Bauer Wurster Hall

DEGREE REQUIREMENTS

Student Status
- Students are admitted to UC Berkeley as a First-year student or a Transfer student
- First-year student
  - "First-year" refers to students who have graduated high school and have taken no college coursework past the summer immediately following high school.
- Transfer student
  - "Transfer" refers to students who have graduated high school and have taken college coursework past the summer immediately following high school.

Summary of Degree Requirements

- **A.** University and Berkeley Campus Requirements
- **B.** CED College Requirements
- **C.** Sustainable Environmental Design Major Requirements
- **D.** General Electives (optional to reach 120 units)
- **E.** Unit and Semester Requirements

A. University and Berkeley Campus Requirements
All undergraduate students at UC Berkeley must complete:
- Entry-Level Writing
- American History and Institutions
- American Cultures

B. CED College Requirements
1. <u>Reading & Composition A & B.</u> See the CED Advising website for more information on R&C course placement. Must be completed with a letter grade of C- or better. All undergraduates must complete the R&C requirement by the end of their fourth semester, or their enrollment will be blocked for the following semester.

2. <u>Seven Course Breadth Requirement.</u> Up to two CED courses or courses cross-listed with CED may be used to complete Seven Course Breadth. See paragraph below for detail.
   - Arts and Literature (A&L Breadth)
   - Biological Science (BIO SCI Breath)— LD ARCH 12 (also fulfills Lower Division Major Requirement). Must be taken for a letter grade.
   - Historical Studies (HIST ST Breadth)
   - International Studies (INTL ST Breadth)
   - Philosophy and Values (PHIL&VAL Breadth)
   - Social and Behavioral Sciences (SOC & BHV SCI Breadth) — ECON C3 Intro to Environmental Economics & Policy, also fulfills Lower Division Major Requirement.
   - Physical Science (PHYS SCI Breadth)— Physics 7A *or* 8A (also fulfills Lower Division Major Requirement). Must be taken for a letter grade.

   Only Lower Division ENV DES courses (ENV DES 1, ENV DES 5) and Lower Division Major Requirements may simultaneously fulfill Seven Course Breadth. A course used to fulfill an Upper Division Major Requirement may not also satisfy Seven Course Breadth. Upper Division CED courses that are not fulfilling another upper division requirement may fulfill Seven Course Breadth.

No more than two CED courses or courses cross-listed with CED may be used to complete Seven Course Breadth. No more than two courses from any one academic department may be used to satisfy breadth requirements.

A Seven Course Breadth class that is also being used to complete another CED requirement must be completed with a letter grade of C- or better.

Only one of the remaining Seven Course Breadth may be taken on a Passed/Not Passed basis.

You can see the breadth courses available on classes.berkeley.edu by using the "Breadth Requirements" filter on the left-hand side of the page.

International Studies breadth may be satisfied by participation in the UC Education Abroad Program or a recognized equivalent program.

CED students may apply high school exam credit (Advanced Placement, International Baccalaureate, A-Level Exam) towards many of the above requirements. See the CED website section on High School Exam Credit for more information: https://ced.berkeley.edu/advising/forms-documents

3. <u>Lower Division Environmental Design</u> (2 courses total) Must be completed with a letter grade of C- or better.
   - ENV DES 1 People and Environmental Design
   - ENV DES 5 Cities and Sites

   Students who have matriculated as first year students (not transfer students), must complete ENVDES 1 and ENVDES 5 at UC Berkeley.

   Lower Division ENV DES courses (ENV DES 1, ENV DES 5) and Lower Division Major Requirements may simultaneously fulfill Seven Course Breadth. However, no more than two CED courses or courses cross-listed with CED may be used to complete Seven Course Breadth.

   Transfer students are exempt from the ENV DES 5 requirement.

4. <u>Upper Division College of Environmental Design Courses Outside SED</u> (3 courses total). *Must be completed with a letter grade of C- or better.*

   Three upper division CED courses must be taken outside the SED major (nine units minimum). Each of the three courses must be at least two units and must be within the 100-299 course number range (197, 198, 199 are excluded). This requirement can be fulfilled with courses in Architecture, Environmental Design, Visual Studies, Landscape Architecture, and City and Regional Planning but may not be one of the "Upper Division Sustainable Environmental Design Core" courses listed. A course used to fulfill this requirement may *not* also be used to fulfill Seven Course Breadth.

Note: Students who have been away from the University for five or more years are held to the college and major requirements that are in place when they re-enroll at UCB.

C. Sustainable Environmental Design Major Requirements

1. Lower Division Major Requirements (6 courses total):
   These courses must be completed with a letter grade of C- or better. Courses taken to fulfill Lower Division Major Requirements may also be used to fulfill Seven Course Breadth. Please note, some courses are only offered Fall (FL) or Spring (SP) semester as shown below.

   > ENVDES 110: Designing Sustainability (FL)
   > LD ARCH 12: Environmental Science for Sustainable Development (FL)
   > MATH 16A or 1A: Analytic Geometry and Calculus
   > STAT 2, C8 or higher: Introduction to Statistics
   > PHYS 7A or 8A: Introductory Physics
   > ENVECON C1/ ECON C3: Introduction to Economics or Introduction to Environmental Economics and Policy (FL)

   Students who have matriculated as first-year students (not transfer students), must complete LD ARCH 12 at UC Berkeley.

   CED students may apply high school exam credit (Advanced Placement, International Baccalaureate, A-Level Exam) towards some of the above lower division major requirements. See the CED website section on High School Exam Credit for more information: https://ced.berkeley.edu/advising/forms-documents

2. Upper Division Sustainable Environmental Design Core – Inside College of Environmental Design courses (9 courses total):
   You must earn letter grade and a 2.0 average in Upper Division Major Requirements. A course used to fulfill an Upper Division Major Requirement may not also be used to fulfill Seven Course Breadth. Please note, most courses are only offered Fall (FL) or Spring (SP) semester as shown below.

   - ARCH 140: Energy and Environment (SP)
   - ARCH 142 or 242: Sustainability Colloquium; must take for 2 units (FL)
   - CY PLAN 119: Planning for Sustainability (FL) or CY PLAN 140: Urban Design: City Building & Place-Making (FL)
   - ENV DES 100: The City: Theories and Methods (SP)
   - ENV DES 102: Climate Changes and City Planning: Adaptation and Resilience (FL)
   - ENV DES 104: Design Frameworks (SP)*
   - ENV DES 106: Sustainable Environmental Design Workshop (SP)
   - LD ARCH 140: Social and Psychological Factors in Open Space Design (SP)
   - LD ARCH /GEOG C188: Geographic Information Systems (FL)

Note:
- Upper Division Sustainable Environmental Design Core course listed above **may not** be used for the Upper Division College of Environmental Design Courses Outside SED requirements.
- Students who have been away from the University for five or more years are held to the college and major requirements that are in place when they re-enroll at UCB.
- *ENVDES 104 must be completed prior to ENVDES 106. ENVDES 104 cannot be taken concurrently with ENVDES 106.

D. General Electives
   Students may need to take additional courses to reach the 120 units required for graduation.

E. Unit and Semester Requirements
   The Bachelor of Arts degree in the College of Environmental Design requires the successful completion of at least 120 semester units of courses subject to certain rules:

   - A maximum of 16 units of Special Studies coursework (courses numbered 97, 98, 99, 197, 198, or 199) is allowed towards the 120 units; a maximum of four is allowed in a given semester; only upper division students (60 or more units completed) may enroll in 197, 198, or 199 coursework.
   - A maximum of 4 units of Physical Education from any school attended will count towards the 120 units.
   - Students may receive unit credit for courses graded P (including P/NP units taken through EAP) up to a limit of one-third of the total units taken and passed on the Berkeley campus at the time of graduation.
   - No more than 60 units from a single department can be used towards this 120 minimum.

   Unit Minimum
   CED students must enroll in at least 12 units each fall and spring semester. *(Students entering UCB with no prior units would need to complete 15 units per semester to graduate in four years.)*

   Semester Limit
   Students admitted as first-year must graduate within eight fall/spring semesters at UC Berkeley. Students admitted as transfer students must graduate within four fall/spring semesters at UC Berkeley. EAP and UCDC count towards this semester limit; summer session, UC Extension, and study abroad through non-UC programs do not. Students approved for simultaneous degrees in two colleges may be granted an additional semester.

   Senior Residence Requirement
   After reaching senior status (with 90 semester units earned), students must be registered in the College of Environmental Design and must complete at least 24 of the remaining 30 units in at least two semesters in residence at UC Berkeley as CED students. To count as residence, a semester must consist of at least six passed units.

   Students may use Berkeley Summer Sessions to satisfy one semester of the Senior Residence Requirement, provided that six units of course work are completed. Units completed through UC Berkeley "W" web-based courses do apply towards Senior Residence.

   Excluded from Senior Residence: Intercampus Visitor Program, Education Abroad Program (UCEAP), UC Berkeley-Washington Program (UCDC), Berkeley Summer Sessions completed abroad, UC Berkeley Extension courses (X and XB), and non-UC Berkeley online classes.

   Modified Senior Residence Requirement
   Participants in the UC Berkeley-Washington Program (UCDC); a fall, spring or summer UC Education Abroad Program (UCEAP); Berkeley Summer Abroad; or the Berkeley Global Internship program may meet the Modified Senior Residence Requirement by completing 24 of their final 60 semester units (excluding EAP or UC Extension) in residence. Note that these programs must consist of at least six passed units to meet the requirement. At least 12 of the 24 units must be completed after senior status (90 units) is reached.

Most students automatically fulfill the residence requirement by attending classes here for four years. In general, there is no need to be concerned about this requirement, unless you go abroad for a semester or year or want to take courses at another institution or through University Extension during your senior year. In these cases, you should make an appointment to see an advisor to determine how you can meet the Senior Residence Requirement.

Fulfilling Requirements with Transfer Coursework

Students may use transfer work, including courses taken via Study Abroad, to fulfill CED requirements, within the following limits (please consult your major advisor for more information):

- Upper Division **Major** Requirements: Up to two courses taken elsewhere may be applied, if deemed transferable by the UC Berkeley Central Evaluation Unit and approved by the faculty advisor for your major.
- Upper Division **CED Outside the Major**: Up to two courses taken elsewhere may be applied, if deemed transferable by the UC Berkeley Central Evaluation Unit and approved by the college.
- Upper Division **CED Minor** Requirements: Up to two courses taken elsewhere may be applied, if deemed transferable by the UC Berkeley Central Evaluation Unit and approved by the faculty advisor for your minor.
- **CED Breadth Requirements**: All requirements can be potentially fulfilled by courses taken elsewhere, if deemed transferable by the UC Berkeley Central Evaluation Unit and approved for breadth by the college (courses must be at least three units each).

To submit a request, please refer to the [CED Forms & Documents](#) page and complete the form located under Transfer Credit Evaluation: "CED Course Substitution Process-Current Students (Including Study Abroad)."

Concurrent Enrollment

Concurrent enrollment for enrolled Berkeley students is defined as a student being enrolled in courses at UC Berkeley during a Fall or Spring semester, while also being enrolled in courses at another school such as a California community college. Students who wish to take courses concurrently must seek approval from CED Advising **four weeks prior to the first day of instruction**. Students who do not have approval from CED Advising will not be approved to post transferrable units to their UC Berkeley academic transcript. Only summer session enrollment does not require approval from CED Advising.

GRADE REQUIREMENTS

- A 2.0 UC GPA is required for graduation.
- A 2.0 GPA within the major is required at time of graduation.

GRADUATING WITH HONORS

To graduate with distinction, you must meet the grade-point average (GPA) requirement and complete at least 50 units in residence at Berkeley (this may include UCB Extension XB units and up to 20 units from UCDC or EAP), of which 43 units must be letter-graded (not including physical education activities courses). *Transfer students must make sure they complete 50 units at Berkeley to qualify for honors.*

Your GPA in all letter-graded courses taken at Berkeley must be equal to or higher than the GPA established for honors in the year in which you graduate. These GPA cut-offs change slightly each year and are posted on the CED website.

DEADLINES AND POLICIES
See the CED advising website for the most up-to-date information:
https://ced.berkeley.edu/advising/undergraduate-advising

CED MINORS
Minors offered by the College of Environmental Design include:

- Architecture
- City & Regional Planning
- Environmental Design and Urbanism in Developing Countries
- Geospatial Information Science and Technology (College of Natural Resources for paperwork and advising)
- History & Theory of Landscape Architecture & Environmental Planning
- History of the Built Environment
- Social & Cultural Factors in Design
- Sustainable Design (not available for students declared in the SED major)

Minors generally consist of five upper division courses plus any lower division prerequisites to those courses. Any course taken for your CED minor 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 a CED minor requirement.

The "CED Minor Declaration Form" is available in the Minors section of Major & Minor Requirement of the CED website. The form is required to declare a minor. You must add/declare your minor no later than the term before your final semester. CED students may pursue minors in any of the other undergraduate schools and colleges at UC Berkeley.

ACADEMIC PROGRESS REPORT (APR)
Track your degree progress via your Academic Progress Report in CalCentral (calcentral.berkeley.edu). If you notice any errors in your Academic Progress Report, notify your CED advisor immediately.

RESOURCES

HEALTH AND WELLNESS
CED values the health and wellness of our students. We encourage all students to take care of themselves as they learn and progress through the academic rigor of their respective majors. To take advantage of personal counseling or coaching services, students can meet with mental health counselors at the following on-campus offices:

University Health Services (Tang Center): https://uhs.berkeley.edu/counseling

Drop-In Counseling at EOP: https://uhs.berkeley.edu/counseling/satellite/chavez

COST OF ATTENDANCE ADJUSTMENT (FINANCIAL AID BUDGET APPEALS)
Students are allowed to submit a request to the Financial Aid Office to increase the size of their standard budget for certain expenses that are above the standard amounts: housing, a computer (once every three years), uninsured medical/dental/optical expenses, and child care.

In addition, CED students who are enrolled in a studio course may submit **a Cost of Attendance Adjustment request ("budget appeal")** for additional loan or work-study to help cover studio-related expenses. To request additional financial aid to help with studio expenses, you will need to include with your appeal the "Estimated Undergrad Studio Expenses for Financial Aid Appeals" document, available on the CED website: https://ced.berkeley.edu/advising/forms-documents
For more information on the Cost of Attendance Adjustment, see http://financialaid.berkeley.edu/cost-attendance-adjustment.

CED FEE WAIVERS
CED has a limited amount of funding available for facility access fee waivers each year. CED students who are eligible to receive either a Pell Grant or Dream Act Scholarship may apply for a waiver by the established deadlines. Questions regarding facility access fee waivers about email CED advising (cedadvising@berkeley.edu).

UC BERKELEY FOOD PANTRY
The Food Pantry provides emergency nonperishable food to UC Berkeley students while they explore campus food security resources. http://pantry.asuc.org/

CED PRIZES AND AWARDS
One of the many financial resources available to CED students is the Prizes and Awards program. For more information see https://ced.berkeley.edu/resources/awards-scholarships-and-fellowships

GRADUATION PLAN
FIRST-YEAR

"First-year" refers to students who have graduated high school and have taken no college coursework past the summer immediately following high school.

First-Year

Fall Semester	Units	Spring Semester	Units
ENV DES 1: People and Environmental Design	3	**ENV DES 5: Designing Cities and Landscapes for Equity and Ecology**	4
ENV DES 110: Designing for Sustainability	3	Reading & Composition A	4-6
LD ARCH 12: Env Science for Sustainable Development/ (Breadth #1: BIO SCI)	4	Breadth #2 or PHYS 8A (prereq Math 16A)	3-4
MATH 16A or 1A	3-4	University Elective, if needed	1-4
TOTAL	13-14	TOTAL	12-17

SOPHOMORE

Fall Semester	Units	Spring Semester	Units
Econ C1 or C3/ (Breadth #3: SOC-BHV SCI)	4	**ENV DES 104: Design Frameworks**	3
Reading & Composition B	4	STAT 2	4
Breadth #4	3-4	PHYS 8A (Breadth #6: PHYS SCI) or Breadth	4
Breadth #5	3-4	Breadth #7	3-4
TOTAL	14-16	TOTAL	14-15

JUNIOR

Fall Semester	Units	Spring Semester	Units
ARCH 142 or 242: Sustainability Colloquium	2	ARCH 140: Energy and Environment (Physics 8A is prerequisite)	4
LDARCH/GEOG C188: Geographic Information Systems	4	LD ARCH 140: Social and Psychological Factors in Open Space Design	3
CY PLAN 119: Planning for Sustainability **or** CY PLAN 140: Urban Design: City Building & Place-Making	3-4	CED Upper Div Non-Major #1	2-4
Elective, if needed	3-4	Elective, if needed	1-4
TOTAL	12-14	TOTAL	12-15

SENIOR

Fall Semester	Units	Spring Semester	Units
ENV DES 102: Climate Changes and City Planning: Adaptation and Resilience	3	**ENV DES 106 (Capstone): Sustainable Environmental Design Workshop**	4
CED Upper Div Non-Major #2	3-4	ENV DES 100: the City: Theories and Methods in Urban Studies	4
CED Upper Div Non-Major #3	3-4	Elective	2-4
Elective	3-4	Elective	2-4
TOTAL	12-15	TOTAL	12-16

NOTE: Students must complete 120 units to graduate.

While each student's plan will vary depending on interests, we recommend student's follow the plan above. To make academic progress towards your degree, **take the courses in bold during the term listed**. If you plan to take these courses in a different term, connect with a CED advisor to discuss your options.

See your advisor if you are interested in applying for graduate school, studying abroad, attending summer school, pursing a minor or second major, etc. See end of Major Handbook for sample plan including study abroad -junior year.

GRADUATION PLAN
TRANSFER

"Transfer" student refers to students who have graduated high school and have taken college coursework past the summer immediately following high school.

JUNIOR

Fall Semester	Units	Spring Semester	Units
ENV DES 110: Designing Sustainability (transfer students)	3	**ENV DES 104: Design Frameworks**	3
ARCH 142 or 242: Sustainability Colloquium	2	ARCH 140: Energy and Environment (Physics 8A is prerequisite)	4
LDARCH/GEOG C188: Geographic Information Systems	4	LD ARCH 140: Social and Psychological Factors in Open Space Design	3
CY PLAN 119: Planning for Sustainability **or** CY PLAN 140: Urban Design: City Building & Place-Making	3-4	CED Upper Div Non-Major #1	2-4
TOTAL	12-13	TOTAL	12-14

SENIOR

Fall Semester	Units	Spring Semester	Units
ENV DES 102: Climate Changes and City Planning: Adaptation and Resilience	3	**ENV DES 106 (Capstone): Sustainable Environmental Design Workshop**	4
CED Upper Div Non-Major #2	3-4	ENV DES 100: The City: Theories and Methods in Urban Studies	4
CED Upper Div Non-Major #3	3-4	Elective	2-4
Elective	3-4	Elective	2-4
TOTAL	12-15	TOTAL	12-16

NOTE: Students must complete 120 units to graduate.

While each student's plan will vary depending on interests, we recommend student's follow the plan above. In order to make academic progress towards your degree, **take the courses in bold during the term listed.** If you plan to take these courses in a different term, connect with a CED advisor to discuss your options.

See your advisor if you are interested in applying for graduate school, studying abroad, attending summer school, pursing a minor or second major, etc. See end of Major Handbook for sample plan including study abroad -junior year.

STUDY ABROAD

View the CED Study Abroad Academic Planning website to learn more about studying abroad:
https://ced.berkeley.edu/academics/ced-study-abroad/academic-planning

If you intend to study abroad, connect with a CED advisor to determine feasibility and to create an academic plan.

SAMPLE ACADEMIC PLAN FOR JUNIOR YEAR STUDY ABROAD

Sample plan below for First-year students planning to study abroad in their junior year. Transfer students planning to study abroad are highly encouraged to discuss an academic plan with a CED advisor.

FIRST-YEAR

Fall Semester	Units	Spring Semester	Units
ENV DES 1: People and Environmental Design	3	**ENV DES 5: Designing Cities and Landscapes for Equity and Ecology**	4
ENV DES 110: Designing for Sustainability	3	Reading & Composition A	4-6
LD ARCH 12: Env Science for Sustainable Development/ (Breadth #1: BIO SCI)	4	PHYS 8A (prereq Math 16A) (Breadth #2: PHYS SCI)	4
MATH 16A or 1A	3-4		
TOTAL	13-14	TOTAL	12-17

SOPHOMORE

Fall Semester	Units	Spring Semester	Units
Econ C1 or C3/ (Breadth #3: SOC-BHV SCI)	4	**ENV DES 104: Design Frameworks**	3
Reading & Composition B	4	STAT 2	4
Breadth #4	3-4	ENVDES 100: The City: Theories and Methods in Urban Studies	4
Breadth #5	3-4	Elective	1-3
TOTAL	14-16	TOTAL	14-15

JUNIOR

Fall Semester	Units	Spring Semester	Units
ARCH 142 or 242: Sustainability Colloquium	2	ABROAD	
LDARCH/GEOG C188: Geographic Information Systems	4		
CY PLAN 119: Planning for Sustainability **or** CY PLAN 140: Urban Design: City Building & Place-Making	3-4		
ENV DES 110: Designing Sustainability (transfer students)	3-4	CED Upper Div Non-Major #1	
TOTAL	12-14	TOTAL	12-16

SENIOR

Fall Semester	Units	Spring Semester	Units
ENV DES 102: Climate Changes and City Planning: Adaptation and Resilience	3	**ENV DES 106 (Capstone): Sustainable Environmental Design Workshop**	4
CED Upper Div Non-Major #2	3-4	ARCH 140: Energy and Environment (Physics 8A is prerequisite)	4
CED Upper Div Non-Major #3	3-4	LD ARCH 140: Social and Psychological Factors in Open Space Design	3-4
Elective	1-3	Elective, if needed	1-3
TOTAL	12-14	TOTAL	12-15

NOTE: Students must complete 120 units to graduate.