Berkeley | College of Environmental Design
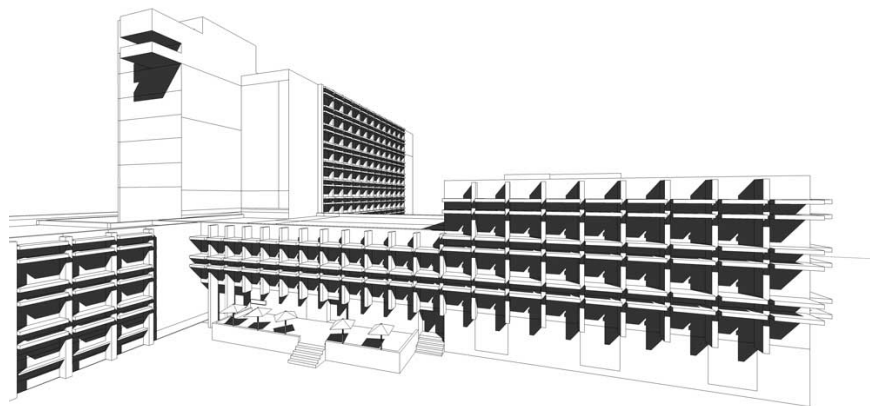
Architecture
Major Handbook
2023-24

Department of Architecture
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

ARCHITECTURE AT BERKELEY

The undergraduate program in architecture leads to the Bachelor of Arts (BA) degree. It combines required courses in environmental design and architecture with opportunities for highly varied individual programs. Through its core courses, the program offers a broad introduction to the field of architecture, and through studies in the various areas it provides opportunities to prepare for specialization in the field in the areas of architectural design and representation, architectural technologies and building performance, architectural history, society and culture.

In addition to offering a sound and well-rounded education, undergraduate studies can also provide pre-professional competency for entry-level employment in architecture, the option for graduate work in architecture, or further studies in a related environmental design field.

Some graduates go on to obtain professional degrees in architecture or in other related fields; many others work in architectural offices, construction, government, or industry. Employment opportunities exist also at the community level, particularly in those communities which traditionally have not been served by professional architectural practice. The overall aim of the undergraduate program is to establish a strong foundation for a diversity of careers and to provide for mobility and flexibility to suit changing individual opportunities.

Accreditation and Licensing. The BA degree is a pre-professional degree and provides the foundation for entry to a Master of Architecture program, the most widespread professional degree program in Architecture in the US. The BA degree can also be applied toward licensing requirements in the State of California. *See the National Architectural Accrediting Board naab.org for more information on accreditation. See the California Architect's Board cab.ca.gov/ and the National Council of Architectural Registration Board ncarb.org for more information on licensing.*

Minors*.* See the CED website for information on undergraduate minors offered by the Department of Architecture, as well as other minors available to architecture majors.

UNDERGRADUATE ADVISING

FACULTY ADVISORS

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ARCH BA Director and Major Head

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CED Associate Dean for Undergraduate Studies, Associate Professor of Architecture, Associate Director of M.Des.

Professor Kyle Steinfeld
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STAFF ADVISORS

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Architecture Advisor

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Architecture Graduate Program

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College Evaluator

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CED Career Counseling

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DEGREE REQUIREMENTS

Student Status

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

"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. Architecture 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 Requirement
- 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)
   - Historical Studies (HIST ST Breadth)
   - International Studies (INTL ST Breadth)
   - Philosophy and Values (PHIL & VAL Breadth)
   - Social and Behavioral Sciences (SOC & BHV SCI Breadth)
   - 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 either an Upper Division Major Requirement or the Upper Division CED Outside of Architecture 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 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. Lower Division Environmental Design (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. Upper Division College of Environmental Design Courses Outside of Architecture (3 courses total). *Must be completed with a letter grade of C- or better.*

   Three upper division CED courses must be taken outside the architecture 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 Environmental Design, Visual Studies, Landscape Architecture, and City and Regional Planning. 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. Architecture Major Requirements

1. Lower Division Major Requirements:

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.

- ARCH 11A Introduction to Visual Representation and Drawing (FL)
- ARCH 11B Introduction to Design (SP)
- ARCH 98BC: Berkeley Connect in Architecture (recommended, not required)
- MATH 16A *or* Math 1A: Calculus
- PHYSICS 8A or 7A (course also completes Physical Science breadth requirement)

Students who have matriculated as first year students (not transfer students), must complete ARCH 11A & ARCH 11B at UC Berkeley.

2. Upper Division Major Requirements, *(10-11 courses):*
You must earn 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.

Students must complete the following six courses junior year:

Architectural Design and Representation (*two required courses*)

- ARCH 100A Fundamentals of Architectural Design (FL)
- ARCH 100B Fundamentals of Architectural Design (SP)

Architectural History, Culture, and Society (*three required courses*)

- ARCH 170A An Historical Survey of Architecture and Urbanism (Part 1) (FL) and
- ARCH 170B An Historical Survey of Architecture and Urbanism (Part 2) (SP) plus
- Either ARCH 130 Introduction to Design Theories and Criticism (FL) or ARCH 112: Social Life of Buildings (FL)

Architectural Technologies and Building Performance (*one of the following two courses*)

- Either ARCH 140 Energy and Environment (SP) or ARCH 160 Introduction to Construction (SP)

Prior to course enrollment early in the spring semester of the junior year, students must select one of the following two tracks for the senior year.

Senior Year Research Track (RT) (5 courses total, in addition to the 6 above):
- ARCH 102A Capstone Preparation Seminar (FL)
- ARCH 102B Capstone Project (SP)
- Capstone Electives. Choose three from list that will be provided each year by the instructors. Note that courses used to fulfill this major elective requirement cannot also be used to fulfill the Upper Division College of Environmental Design Courses Outside of Architecture requirement.

Senior Year Studio Track (4 courses total, in addition to the 6 above):
- ARCH 100C Architectural Design (FL)
- ARCH 100D Architectural Design (SP)
- ARCH 140 Energy and Environment or ARCH 160 Introduction to Construction (both are required for Studio Track) (SP)
- ARCH 150 Introduction to Structures (FL)

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.

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 the 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 students 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 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 (on hiatus; not available for students declared in the Architecture major)
- City 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

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.

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

> Let's Talk Drop-In Consultations (for ALL UC Berkeley students and for Specific Populations): 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
In following pages are the graduation plans for First-year students and Transfer students.

Note the following regarding the Graduation Plans:
- **"First-year"** refers to students who have graduated high school and have taken no college coursework past the summer immediately following high school.
- **"Transfer"** refers to students who have graduated high school and *have* taken college coursework past the summer immediately following high school.
- 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 during the term listed. If you plan to take these courses in a different term, connect with a CED advisor to discuss your options.
- Students must complete 120 units to graduate.
- 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 sophomore year.*

GRADUATION PLAN
FOR FIRST-YEAR STUDENTS

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
MATH 16A	3	Reading & Composition A	4-6
Breadth #1	3-4	Breadth #2	3-4
ARCH 98BC: Berkeley Connect (Recommended)	1	Breadth #3	3-4
University Electives	2-3	ARCH 98BC: Berkeley Connect, if needed	1
TOTAL	12-14	TOTAL	13-16

SOPHOMORE

Fall Semester	Units	Spring Semester	Units
ARCH 11A: Introduction to Visual Representation and Drawing	4	ARCH 11B: Introduction to Design	5
Reading & Composition B	4	PHYS 8A (Breadth #6: PHYS SCI)	4
Breadth #4	3-4	Breadth #7	3-4
Breadth #5	3-4	University Elective, if needed	0-2
TOTAL	14-16	TOTAL	12-15

JUNIOR

Fall Semester	Units	Spring Semester	Units
ARCH 100A: Fundamentals of Architectural Design	6	ARCH 100B: Fundamentals of Architectural Design	6
ARCH 170A: Historical Survey of Architecture and Urbanism (Part 1)	4	ARCH 170B: Historical Survey of Architecture and Urbanism (Part 2)	4
ARCH 130: Intro to Design Theories & Criticism *or* ARCH 112: Social Life of Buildings	3-4	ARCH 140: Energy and Environment (Physics 8A is prerequisite) *or* ARCH 160: Introduction to Construction	4
ARCH 198BC: Berkeley Connect (Recommended for transfer students)	1	ARCH 198BC: Berkeley Connect, if needed	1
TOTAL	14-15	TOTAL	15

*STUDENTS WILL CHOOSE EITHER RESERCH OR STUDIO TRACK

SENIOR YEAR: *RESEARCH TRACK

Fall Semester	Units	Spring Semester	Units
ARCH 102A: Capstone Seminar	3	ARCH 102B: Capstone Studio	5
Capstone Elective #1 (choose from list)	3-4	Capstone Elective #3 (choose from list)	3-4
Capstone Elective #2 (choose from list)	3-4	CED Upper Div Non-Major #2	2-4
CED Upper Div Non-Major #1	3-4	CED Upper Div Non-Major #3	3-4
TOTAL	12-15	TOTAL	13-17

OR

SENIOR YEAR: *STUDIO TRACK

Fall Semester	Units	Spring Semester	Units
ARCH 100C: Architectural Design	5	ARCH 100D: Architectural Design	5
ARCH 150: Introduction to Structures (Physics 8A is prerequisite)	4	ARCH 140: Energy and Environment (Physics 8A is prerequisite) *or* ARCH 160: Introduction to Construction	4
CED Upper Div Non-Major #1	2-4	CED Upper Div Non-Major #3	3-4
CED Upper Div Non-Major #2	3-4	University Electives, if needed	2-4
TOTAL	14-17	TOTAL	13-17

GRADUATION PLAN
FOR TRANSFER STUDENTS

<u>JUNIOR</u>

Fall Semester	Units	Spring Semester	Units
ARCH 100A: Fundamentals of Architectural Design	6	ARCH 100B: Fundamentals of Architectural Design	6
ARCH 170A: Historical Survey of Architecture and Urbanism (Part 1)	4	ARCH 170B: Historical Survey of Architecture and Urbanism (Part 2)	4
ARCH 130: Intro to Design Theories & Criticism *or* ARCH 112: Social Life of Buildings	3-4	ARCH 140: Energy and Environment (Physics 8A is prerequisite) *or* ARCH 160: Introduction to Construction	4
ARCH 198BC: Berkeley Connect (Recommended for transfer students)	1	ARCH 198BC: Berkeley Connect, if needed	1
TOTAL	14-15	TOTAL	15

*STUDENTS WILL CHOOSE EITHER RESERCH OR STUDIO TRACK

SENIOR YEAR: *RESEARCH TRACK

Fall Semester	Units	Spring Semester	Units
ARCH 102A: Capstone Seminar	3	ARCH 102B: Capstone Studio	5
Capstone Elective #1 (choose from list)	3-4	Capstone Elective #3 (choose from list)	3-4
Capstone Elective #2 (choose from list)	3-4	CED Upper Div Non-Major #2	2-4
CED Upper Div Non-Major #1	3-4	CED Upper Div Non-Major #3	3-4
TOTAL	12-15	TOTAL	13-17

<u>*OR*</u>

SENIOR YEAR: *STUDIO TRACK

Fall Semester	Units	Spring Semester	Units
ARCH 100C: Architectural Design	5	ARCH 100D: Architectural Design	5
ARCH 150: Introduction to Structures (Physics 8A is prerequisite)	4	ARCH 140: Energy and Environment (Physics 8A is prerequisite) *or* ARCH 160: Introduction to Construction	4
CED Upper Div Non-Major #1	2-4	CED Upper Div Non-Major #3	3-4
CED Upper Div Non-Major #2	3-4	University Electives, if needed	2-4
TOTAL	14-17	TOTAL	13-17

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 SOPHOMORE YEAR STUDY ABROAD

First-year students planning to study abroad in their sophomore year are responsible for making sure their program does not conflict with the start date of ARCH 11B during the summer at UC Berkeley.

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
MATH 16A	3	Reading & Composition A	4-6
Breadth #1	3-4	Breadth #2	3-4
ARCH 98BC: Berkeley Connect (Recommended)	1	Breadth #3	3-4
University Electives	2-3	ARCH 98BC: Berkeley Connect, if needed	1
TOTAL	12-14	TOTAL	13-16

SOPHOMORE

Fall Semester	Units	Spring Semester (ABROAD)	Units	Summer Session	Units
ARCH 11A: Introduction to Visual Representation and Drawing	4	Breadth #5	3-4	ARCH 11B: Introduction to Design	5
Reading & Composition B	4	Breadth #6	3-4		
PYS 8A Breadth #4 (PHY SCI)	4	Breadth #7 (International Studies – no course)	-	TOTAL	5
University Electives	0-3	University Electives	4-6		
TOTAL	12-15	TOTAL	12		