Architecture

Bachelor of Arts (BA)

Berkeley's undergraduate program in Architecture leads to the bachelor of arts (BA) degree. The program 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; and architectural history, society and culture. In addition to offering a sound and well-rounded education, undergraduate studies can also provide preprofessional competency for entry level employment in architecture, the option for graduate work in architecture, or further studies in a related environmental design field.

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

Course of Study Overview

All undergraduates follow the same path through their junior year. In the first two years, students take a breadth of lower division courses and the introductory environmental design courses. The junior year is architecture-intensive. In the fall semester, students take a design studio and a history and humanities option. In the spring, the required courses include another studio, a course in history, and a technology option.

Program Tracks

During the spring semester of the junior year, students choose either a design research track or a studio track for the senior year.

- Design Research Track: The design research track option explores
 a particular theme for both the fall and spring semesters of the senior
 year. This theme changes each year, and is taught by a group of
 faculty members on a subject of their shared interest. For the fall
 semester, students enroll in a project preparation seminar, and for the
 spring semester, students take a studio—led by the same faculty—in
 which they develop their research and explorations, culminating in a
 final project.
- Studio Track: The studio track option is studio intensive, with more
 architecture courses required in addition to a design studio each
 semester. Studio track students enroll in a structures course in the
 fall, and choose between an energy and environment or construction
 course in the spring.

Accreditation/Licensure

The BA degree is a preprofessional degree and provides the foundation for entry to a Master of Architecture program, the most widespread professional degree program in architecture in the United States. The BA degree can also be applied toward licensing requirements in the State of California. See the National Architectural Accrediting Board (http://www.naab.org) (NAAB) for more information on accreditation. See the California Architects Board (http://www.cab.ca.gov) and

the National Council of Architectural Registration Boards (http://www.ncarb.org) (NCARB) for more information on licensing.

Admission to the Major

Students must declare one of the CED majors at the time of application to the college; however, current UC Berkeley students may apply to change into CED. Transfer applicants must complete two years worth of lower division coursework to be considered for admission to CED. For information regarding admission to the major for freshman, transfer students, and current students who wish to change majors or colleges, please see the College of Environmental Design (CED) page (http://guide.berkeley.edu/archive/2017-18/undergraduate/colleges-schools/environmental-design/#choosingamajortext) in this Guide, or the CED website (http://ced.berkeley.edu/admissions/undergraduate).

Architecture Minor

The Architecture minor introduces students to the conceptual, technical, and design aspects of architecture. A letter grade of C- or higher is required in ENV DES 1 to declare the minor. To declare, students must submit the CED Request to Add Minor Form (https://ced.berkeley.edu/students/undergraduate-advising/forms-documents), available on the CED website. When completing the final requirements for the minor, submit the CED Minor Completion Form (https://ced.berkeley.edu/students/undergraduate-advising/forms-documents). Other minors offered by the Department of Architecture are listed below:

Other Minors Offered by the Department of Architecture

Environmental Design and Urbanism in Developing Countries (http://guide.berkeley.edu/archive/2017-18/undergraduate/degree-programs/environmental-design-urbanism-developing-countries) (Minor) History of the Built Environment (http://guide.berkeley.edu/archive/2017-18/undergraduate/degree-programs/history-built-environment) (Minor)

Social and Cultural Factors in Environmental Design (http://guide.berkeley.edu/archive/2017-18/undergraduate/degree-programs/social-cultural-factors-environmental-design) (Minor)
Sustainable Design (http://guide.berkeley.edu/archive/2017-18/undergraduate/degree-programs/sustainable-environmental-design) (Minor)

In addition to the University, campus, and college requirements outlined on the College Requirements tab, students must fulfill the following requirements specific to the major program.

General Guidelines

- All lower division courses taken in fulfillment of major requirements 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.
- A minimum grade point average (GPA) of 2.0 must be maintained in upper and lower division courses used to fulfill the major requirements.
- A minimum overall GPA of 2.0 for all courses taken at UC Berkeley is required for graduation.
- Courses used to fulfill an upper division major requirement may not simultaneously fulfill a breadth requirement.

6. Up to two upper division courses taken at another institution, including an approved study abroad program, may be applied to the major requirements below (if transferable and approved in advance).

For information regarding residence and unit requirements, please see the College Requirements tab.

Lower Division Major Requirements, Freshman and Sophomore Year

ARCH 11A	Introduction to Visual Representation and Drawing (formerly ENV DES 11A)	4
ARCH 11B	Introduction to Design (formerly ENV DES 11B)	5
ARCH 98BC	Berkeley Connect (recommended)	1
MATH 16A	Analytic Geometry and Calculus	3
or MATH 1A	Calculus	
PHYSICS 8A	Introductory Physics	4
or PHYSICS 7A	Physics for Scientists and Engineers	

Upper Division Major Requirements, Junior Year

Architectural Design & Representation:

ARCH 100A	Fundamentals of Architectural Design	6			
ARCH 100B	Fundamentals of Architectural Design	6			
Architectural Hi	story, Culture, & Society:				
ARCH 170A	An Historical Survey of Architecture and Urbanism	4			
ARCH 170B	An Historical Survey of Architecture and Urbanism	4			
ARCH 110AC	The Social and Cultural Processes in Architecture & Urban Design	4			
or ARCH 130	Introduction to Architectural Design Theory and Criticism				
Architectural Technologies & Building Performance:					
ARCH 140	Energy and Environment ¹	4			
or ARCH 160	Introduction to Construction				

Both ARCH 140 and ARCH 160 are required for studio track.

Berkeley Connect

Upper Division Requirements, Senior Year

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

Senior Year, Design Research Track

ARCH 198BC

ARCH 102A	Capstone Project Preparation Seminar	3				
ARCH 102B	Architecture Capstone Project	5				
Ü	Track Elective 1 of 3 (see below for list, applying to nic year 2017-2018)	2-4				
Design Research	Track Elective 2 of 3	2-4				
Design Research	Track Elective 3 of 3	2-4				
Senior Year, Studio Track ¹						
ARCH 100C	Architectural Design III	5				
ARCH 100D	Architectural Design IV	5				
ARCH 140	Energy and Environment (whichever not chosen above) ¹	4				
or ARCH 160	Introduction to Construction					

ARCH 150 Introduction to Structures

Both ARCH 140 and ARCH 160 are required for studio track.

4

Upper Division Design Research Track Electives for Seniors in Academic Year 2017-18 with Professor Darell Fields

In addition to the seminar, two electives for fall 2017 are required. Electives relate to seminar readings and discussions. Depending on design topic, students may propose one elective alternate not listed. Instructor review and approval is required.

In addition to the studio, one elective for spring 2018 is required. The elective supports the intellectual and/or technical realization of the design proposal. Instructor review and approval is required.

approvar is required.		
AFRICAM 5A	African American Life and Culture in the United States	4
AFRICAM 5B	African American Life and Culture in the United States	4
AFRICAM 111	Race, Class, and Gender in the United States	3
AMERSTD 101	Examining U.S. Cultures in Time	4
AMERSTD 101A0	CExamining U.S. Cultures in Time	4
AMERSTD 102	Examining U.S. Cultures in Place	4
AMERSTD C134	Information Technology and Society	4
ANTHRO 121AC	American Material Culture	4
ANTHRO 150	Utopia: Art and Power in Modern Times	4
ART 12	The Language of Drawing	4
ART N12	The Language of Drawing	3
ART 13	Language of Painting	4
ART N13	Language of Painting	3
ART 14	The Language of Sculpture	4
ART 16	Introduction to Printmaking: Relief & Intaglio	4
ART 21	Beginning Digital Photography	4
ART 26	Moving Image Media Production	4
ART N171	Digital Video: The Architecture of Time	4
ASAMST 20A	Introduction to the History of Asians in the United States	4
ASAMST 128AC	Muslims in America	4
CHICANO 50	Introduction to Chicano History	4
CHICANO 130	Mexican and Chicano Art History	3
FILM 20	Film and Media Cultures	4
FILM 50	Introduction to Film for Nonmajors	4
FILM 129	History of Avant-Garde Film	4
FILM 186	Advanced Digital Video	4
GWS 10	Introduction to Gender and Women's Studies	4
GWS 50AC	Gender in American Culture	3
PHILOS 7	Existentialism in Literature and Film	4
PHILOS 18	Confucius for Today	4
PHILOS 25A	Ancient Philosophy	4

Note that upper division major courses cannot be used to fulfill multiple requirements. For example, a course cannot be used for both the Architecture Design Research Track elective and the upper division CED outside major requirement; A separate course must fulfill each requirement.

Students who have a strong interest in an area of study outside their major often decide to complete a minor program. When completing the final requirements for the minor, students must submit the CED Minor Completion Form (https://ced.berkeley.edu/students/undergraduate-advising/forms-documents), available on the CED website.

General Guidelines

- A letter grade of C- or higher is required in ENV DES 1 to declare the minor. To declare, submit the CED Request to Add Minor Form (https://ced.berkeley.edu/students/undergraduate-advising/formsdocuments), available on the CED website.
- All courses used to fulfill minor requirements must be completed with a letter grade of C- or above.
- Students must earn a 2.0 GPA in the upper division requirements for the minor.
- Any course used in fulfillment of minor requirements 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 minor requirements.
- Students may apply the non-CED version of a CED cross-listed course towards the minor.
- Students may use up to two courses taken abroad to fulfill upper division minor requirements, with faculty approval of the individual courses.

Requirements

Lower Division (3 Courses)

ENV DES 1	Introduction to Environmental Design (A letter grade of C- or higher is required to declare the minor.)	
ARCH 11A	Introduction to Visual Representation and Drawing (formerly ENV DES 11A)	4
ARCH 11B	Introduction to Design (formerly ENV DES 11B)	5
Upper Division	(5 Courses)	
ARCH 100A	Fundamentals of Architectural Design	6
ARCH 170A	An Historical Survey of Architecture and Urbanism	4
or ARCH 170B	An Historical Survey of Architecture and Urbanism	
ARCH 110AC	The Social and Cultural Processes in Architecture & Urban Design	4
or ARCH 130	Introduction to Architectural Design Theory and Criticism	
ARCH 140	Energy and Environment	4
or ARCH 150	Introduction to Structures	
or ARCH 160	Introduction to Construction	
One additional u	pper division Architecture course (must be at least 3	

units, taken for a letter grade)

For College Requirements, please refer to the College of Environmental Design (http://guide.berkeley.edu/archive/2017-18/undergraduate/colleges-schools/environmental-design/#collegerequirementstext).

Each student's plan will vary, depending on interests. See your adviser if you are interested in applying for graduate school, studying abroad, attending summer school, pursuing a minor or second major, or anything else.

Note that students must complete a minimum of 12 units per term, with a total of 120 units needed to graduate.

For more detailed information regarding the courses listed below (e.g., elective information, GPA requirements, etc.), please see the Major Requirements tab.

Studio Track

				Freshman
	Fall	Units	Spring	Units
ENV DES 1		3	ENV DES 4A, 4B, or 4C (2 of 3 required to graduate)	3
Reading & Composition A		4-6	Reading & Composition B	4
MATH 16A or 1A		3-4	ARCH 98BC (Recommende	1 d)
ARCH 98BC (Recommended)		1	Breadth #1	3-4
Elective, if needed to reach 12 units		1	Breadth #2	3-4
		12-15		14-16
				Sophomore
	Fall	Units	Spring	Units
ARCH 11A (formerly ENV DES 11A)		4	ARCH 11B (formerly ENV DES 11B)	5
PHYSICS 7A or 8A (Breadth #3)		4	Breadth #5	3-4
ENV DES 4A, 4B, or 4C (2 of 3 required to gra	aduate)	3	Breadth #6	3-4
Breadth #4		3-4	Breadth #7	3-4
		14-15		14-17
				Junior
	Fall	Units	Spring	Units
ARCH 100A		6	ARCH 100B	6
ARCH 110AC or 130		4	ARCH 170B	4
ARCH 170A		4	ARCH 140 or 160	4
ARCH 198BC (Recommended)		1	ARCH 198BC (Recommende	1
		15		15
				Senior
	Fall	Units	Spring	Units
ARCH 100C		5	ARCH 100D	5
ARCH 150		4	ARCH 140 or 160	4
				0.4
CED Upper Div Non-Major #1		2-4	CED Upper Div Non- Major #2	2-4
CED Upper Div Non-Major #1 Elective, if needed to reach 12 units			Div Non-	2-4

Total Units: 109-124

Design Research Track

ENV DES 1	Fall	Units 3 Re	Spring eading &	Freshman Units
			omposition	·
Reading & Composition A		4E of	NV DES 4A, 3, or 4C (2 3 required graduate)	3

MATH 16A or 1A	3-4	ARCH 98BC (Recommende	1 d)
ARCH 98BC (Recommended)	1	Breadth #1	3-4
Elective, if needed to reach 12 units	1	Breadth #2	3-4
	12-15		14-16
			Sophomore
Fa	II Units	Spring	Units
ARCH 11A (formerly ENV DES 11A)	4	ARCH 11B (formerly ENV DES 11B)	5
ENV DES 4A, 4B, or 4C (2 of 3 required to graduate	9) 3	Breadth #5	3-4
PHYSICS 7A or 8A (Breadth #3)	4	Breadth #6	3-4
Breadth #4	3-4	Breadth #7	3-4
	14-15		14-17
Fa		0	Junior Units
-		-1 3	
ARCH 100A ARCH 170A		ARCH 100B ARCH 170B	6
ARCH 110AC or 130			4
ARCH 110AC 07130	4	ARCH 140 or 160	4
ARCH 198BC (Recommended)	1	ARCH 198BC (Recommende	1
	15		15
			Senior
Fa	II Units	Spring	Units
ARCH 102A	3	ARCH 102B	5
Design Research Track Elective #1 (choose from lis	t) 2-4	Design Research Track Elective #3 (choose from list)	2-4
Design Research Track Elective #2 (choose from lis	t) 2-4	CED Upper Div Non- Major #2	2-4
CED Upper Div Non-Major #1	2-4	CED Upper Div Non- Major #3	2-4
Elective, if needed to reach 12 units	3	Elective, if needed to reach 12 units	1
	12-18		12-18

Total Units: 108-129

Students must complete a total of 120 units to graduate.

Undergraduate Student Learning Initiative (USLI)

The Undergraduate Student Learning Initiative (USLI) is a campuswide initiative to support departments in establishing educational goals and evaluation procedures for all undergraduate programs. As a result of the initiative, faculty and students have a shared understanding of the purpose of the major and what graduating seniors are expected to know or to be able to do at the end of their course of study. The initiative is in keeping with the fundamental principle at Berkeley that the evaluation of student achievement should be locally defined, discipline specific, and faculty-driven.

Department of Architecture Statement of Goals

The Underlying Goals of a Liberal Arts Undergraduate Education

In its recent curriculum discussions, the faculty strongly supports a liberal arts education for undergraduates that teaches students to develop their intellectual capacities: how to research topics independently, how to ask penetrating questions, how to analyze problems, how to construct arguments based on critical thinking, how to make well-founded judgments, how to identify issues of importance for the future. The intent of the department is that all courses are framed with this perspective. In addition to this goal, the department is introducing students to the discipline specific areas of knowledge that are needed by students who apply for graduate school in architecture.

The Discipline-Specific Knowledge of Architecture

The discipline of architecture covers a wide range of discipline-specific subject areas that are integrated in the process of design.

The goal of the undergraduate major is to make students familiar with and curious about engagement in and production of the built environment in historical, critical, technical, and social dimensions. The possibilities open to graduates in the major are broad, and this challenges the department to locate the terrain that is common to various aspects of the discipline as a formulation of the core lower division courses, and then to offer at the upper division a set of "streams" of study, each of which inspires and prepares students to pursue a future endeavor. As these future endeavors cover a wide range of possibilities, there are several ways to view the undergraduate major: as a liberal arts education through the lens of architecture, perhaps leading to another course of study; as preparation for work in the profession with only an undergraduate degree; and as preparation for follow-up study at the graduate level in the discipline of architecture. Acceptance into strong graduate architecture programs requires a high level of proficiency in the core areas of the curriculum. In recent debates on the undergraduate curriculum, the faculty decided that the undergraduate major should continue to provide courses appropriate for students on each of these paths.

The curriculum exposes students to five aspects of architecture and the broader field of environmental design:

1. The Language of Architecture

In essence, the language most particular to architecture is a graphic vocabulary that is the currency of exploration in the design studio. The mastery of this language, like the learning of any language, begins with vocabulary and grammar, and then moves on to the construction of meaning. This latter aspect is rigorously pursued in the design studio, and for those planning to go on to graduate study in architecture, a number of these upper level studios offer an increasingly complex set of design challenges.

In the Language of Architecture, students should learn to:

- Understand the conventions of plan, section, elevation, and axonometric and their relationship to each other;
- Understand and become proficient in hand drawings and the use of digital media in the production of these conventions;
- Understand and become proficient in three or four digital programs that allow a facile exploration of design ideas;
- Become proficient in the production of design iterations; and
- · Apply critical discussion to design solutions and representation.

2. The History and Theory of Architecture

Courses in history and theory are intended to familiarize students with the development of the built environment in both western and eastern traditions, and to introduce recent and current theories of local and global importance. The introductory surveys in architectural history test students to both recognize and classify architectural styles; these courses are complemented by others that focus on the intersection of history and theory, and for which the writing of papers is the primary means of evaluation.

In the History and Theory of Architecture, students should learn to:

- Articulate the theoretical concepts within the design studio projects;
- · Understand the major periods and styles in architectural history;
- Understand the modern period, and its current debates; and
- Write critical papers comparing and contrasting both buildings and ideas.

3. The Humanistic Applications of Architecture

Many students enter this field of study in hopes of improving the conditions of the built environment as it relates to the daily life of individuals and communities. An emphasis in these aspects of the major can lead to graduate work in other disciplines, including environmental studies, law, global development and planning, and anthropology, or to a PhD program in architecture.

In the Humanistic Applications of Architecture, students should learn to:

- Understand the roles and responsibilities of the environmental professions;
- Understand the art and science of interpreting the social context of design;
- Identify the major issues of environmental design in the national and global setting; and
- Recognize the value of addressing sustainability at all levels of design.

4. The Science and Technology of Architecture

How buildings stand up, how they operate to distribute and control light and air, and the materials and connections with which they are made bring the understanding of the discipline from its paper representations of design and theory into the physical world. A set of core courses introduces students to the fundamentals of these areas, and a set of upper division seminars allows more in-depth explorations of aspects of each, including the testing of structural ideas through design, current attitudes and goals for a sustainable building culture, and construction practices particular to certain materials or cultures.

In the Science and Technology of Architecture, student should learn to:

- Evaluate building performance through modes of calculation;
- Familiarize themselves with the major groups of construction systems;
- Integrate these concepts into the design studio; and
- Familiarize themselves with the major debates in the literature of these areas

5. Research Methods

Students should become proficient in the processes of academic research, learning to:

- Undertake library and on-line research and follow source threads to both books and periodicals;
- · Construct bibliographies to academic standards;

- · Document various methods of research; and
- Understand taxonomies of knowledge and organize information.

The CED Office of Undergraduate Advising provides a wide array of programmatic and individual advising services to prospective and current students, as well as to students in other colleges who are pursuing CED minors or taking CED courses. Our professional advising team assists students with a range of issues including course selection, academic decision-making, achieving personal and academic goals, and maximizing the Berkeley experience.

Advising Staff

Architecture Major Adviser Rhommel Canare 250 Wurster Hall rhommel.canare@berkeley.edu (rachelk@berkeley.edu) 510-642-4944

Landscape Architecture Major Adviser Omar Ramirez 250 Wurster Hall oramirez@berkeley.edu (rachelk@berkeley.edu) 510-642-0926

Sustainable Environmental Design Major Adviser Nancy Trinh 250 Wurster Hall nantrinh@berkeley.edu (rachelk@berkeley.edu) 510-642-0928

Urban Studies Major Adviser Omar Ramirez 250 Wurster Hall oramirez@berkeley.edu (rachelk@berkeley.edu) 510-642-0926

College Evaluator Nancy Trinh 250 Wurster Hall nantrinh@berkeley.edu (worrell@berkeley.edu) 510-642-0928

Undergraduate Advising Director Susan Hagstrom 250 Wurster Hall hagstrom@berkeley.edu 510-642-0408

Associate Dean for Undergraduate Studies Renee Chow 382D Wurster Hall rychow@berkeley.edu (rychow@berkeley.edu)

Advising Hours

Fall/Spring: Monday through Friday, 10 a.m. to noon (office opens at 9 a.m.) & 1 to 4 p.m.

Summer: Monday through Friday, 10 a.m. to noon & 1 to 3 p.m.

Address

Office of Undergraduate Advising College of Environmental Design 250 Wurster Hall #1800 University of California Berkeley, CA 94720-1800 510-642-4943

CED Career Services

The CED Career Services Center (CSC) offers personalized career counseling, a yearly CED Career Fair, and a wide variety of professional-

development workshops on topics such as licensure, internships, and applying for graduate school. To schedule an appointment with the Career Counselor or for more information on CED CSC, please click here (http://ced.berkeley.edu/ced/students/career).

Office of Undergraduate Advising (http://ced.berkeley.edu/ced/students/undergraduate-advising)

- Newly-Admitted Students (http://ced.berkeley.edu/ced/students/ undergraduate-advising/newly-admitted-students)
- Current Students (http://ced.berkeley.edu/ced/students/ undergraduate-advising/continuing-students)
- Graduation and Commencement (http://ced.berkeley.edu/ced/ students/undergraduate-advising/graduation-commencement)
- Services and Contract (http://ced.berkeley.edu/ced/students/ undergraduate-advising/services-contract)
- Articulation (http://ced.berkeley.edu/ced/students/undergraduateadvising/articulation)
- Policies and Resources (http://ced.berkeley.edu/ced/students/ undergraduate-advising/policies-resources)
- Forms and Documents (http://ced.berkeley.edu/ced/students/undergraduate-advising/forms-documents)

Our Mission

The College of Environmental Design (CED) Office of Undergraduate Advising helps students graduate in a timely way with a meaningful educational experience at Berkeley. In alignment with the college's Vision and Principles, we collaborate with CED faculty, deans, and student service units across campus toward the common objective of supporting students as they achieve their educational and career goals. We seek to:

- · Attract a highly motivated and diverse pool of applicants;
- Connect students with resources that match their goals and aspirations;
- Support the development and transformation of our undergraduates as they become educated, active, and socially just citizens of the world; and
- Prepare graduates who are uniquely qualified and highly sought after in their field of choice.

Our Advising Values

Student Success. Above all, we dedicate ourselves to maximizing student potential and to helping students succeed in their university experiences. We encourage students to explore their minds and their hearts, challenge them to do their best work, and help them realize their talents and passions and achieve their goals.

Equity & Inclusion. We are committed to creating an inclusive environment in which any individual or group can be and feel welcomed, respected, supported, and valued. We aspire to provide fair treatment, access, opportunity, and advancement for all students and to identify and eliminate barriers that prevent the full participation of all.

Health & Well-Being. We collaborate with campus partners to keep our CED community healthy by helping students balance the physical, intellectual, emotional, social, occupational, spiritual, and environmental aspects of life.

Advising Excellence. In all that we do, we strive to deliver personalized advising services of the highest quality. We seek to continuously educate

ourselves on developments in our field and to evaluate, improve, and streamline our services to support students in obtaining the best education and experience possible.

Berkeley Connect in Architecture

Berkeley Connect in Architecture pairs students with architecture graduate student mentors in a one semester, 1-unit program that includes individual advising, small group discussions, special events and excursions. Through this program, you will become part of a community of like-minded faculty, mentors, and students that will provide a supportive environment in which to exchange and discuss ideas and goals. Berkeley Connect will help you to make the most of your time at the University as you learn more about the major in Architecture. For further information, please see the Berkeley Connect website (http://www.berkeleyconnect.berkeley.edu).

Student Groups and Organizations

The college provides opportunities for students to be involved in student chapters of professional organizations, such as the American Institute of Architects (AIAS), as well as other student groups like the Chican@/Latin@ Architecture Student Association (CASA), Global Architecture Brigades, and more. For information regarding student groups, please see the Getting Involved page (http://ced.berkeley.edu/ced/students/undergraduate-advising/getting-involved/#orgs) of the CED website.

Study Abroad

The College of Environmental Design (CED) encourages all undergraduates in the college to study abroad. Whether you are interested in fulfilling general education requirements, taking courses related to your major/career, or simply living and studying in a country that is of interest to you, we will work with you to make it happen. For information about Study Abroad programs, please see the Berkeley Study Abroad website (http://studyabroad.berkeley.edu).

CED Career Services

At the CED Career Services Center (CSC), we offer personalized career counseling, a yearly CED Career Fair, and a wide variety of professional-development workshops on topics such as licensure, internships, and applying for graduate school. For further information, please see the CED Career Services website (http://ced.berkeley.edu/ced/students/career).

Prizes and Awards

CED offers a number of annual prizes, awards, scholarships, fellowships, and grants to its currently enrolled students. Some of these prizes and awards are college-wide, and some are geared toward students in specific majors. For general information regarding CED prizes and awards, including application instructions and a deadline calendar, please click here (http://ced.berkeley.edu/ced/students/prizes).

CED Events and Exhibits Calendar

CED and Wurster Hall is home to a variety of events, lectures, and exhibitions that welcome professors, professionals, and friends to the college to discuss and celebrate the community and professions. Through events and media CED is constantly creating ways to keep the college connected and up-to-date. To view this calendar, please click here (http://ced.berkeley.edu/events-media/events).

CED on Facebook (https://www.facebook.com/ groups/59611725522)

CED on Twitter (https://twitter.com/CEDNews) Cal Design Lab

The Cal Design Lab at Wurster Hall is an experimental studio space to promote hands-on, interdisciplinary design activities. Faculty and students from UC Berkeley's many schools and departments can come together at the Cal Design Lab to work on critical design challenges. The goal of the lab is to be a nexus for design research and practice, and to facilitate discourse that transcends different design disciplines. For further information, please see the Cal Design Lab's website (http:// ced.berkeley.edu/research/cal-design-lab).

CED Lecture Series

The Departments of Architecture, City and Regional Planning, and Landscape Architecture and Environmental Planning each sponsor lecture series, which offer students the opportunity to hear internationallyacclaimed speakers. These speakers often also participate in classes and seminars as part of their visit to campus. For a schedule of speakers and events in these lecture series, please see the CED website (http:// ced.berkeley.edu/events-media/lecture-series).

CED Connects

CED CONNECTS (http://ced.berkeley.edu/students/ced-connects) is an online LinkedIn networking resource connecting CED students with alumni who might provide advice, information, and support. As a student, you can gain perspective on your long-term career goals; acquire advice on balancing education, career, and extracurricular activities; and receive honest feedback and encouragement.

Architecture

ARCH 11A Introduction to Visual Representation and Drawing 4 Units

Terms offered: Fall 2018. Summer 2018 8 Week Session. Fall 2017 Introductory studio course: theories of representation and the use of several visual means, including freehand drawing and digital media, to analyze and convey ideas regarding the environment. Topics include contour, scale, perspective, color, tone, texture, and design. Introduction to Visual Representation and Drawing: Read More [+] **Rules & Requirements**

Prerequisites: Env Des 1 with C- or better

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 6 hours of studio

per week

Summer: 8 weeks - 3.5 hours of lecture and 11 hours of studio per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Formerly known as: Environmental Design 11A

Introduction to Visual Representation and Drawing: Read Less [-]

ARCH 11B Introduction to Design 5 Units

Terms offered: Summer 2018 8 Week Session, Spring 2018, Summer 2017 8 Week Session

Introduction to design concepts and conventions of graphic representation and model building as related to the study of architecture, landscape architecture, urban design, and city planning. Students draw in plan, section, elevation, axonometric, and perspective and are introduced to digital media. Design projects address concepts of order, site analysis, scale, structure, rhythm, detail, culture, and landscape.

Introduction to Design: Read More [+]

Rules & Requirements

Prerequisites: 11A with C- or better

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture, 2 hours of laboratory, and 6 hours of studio per week

Summer: 8 weeks - 6 hours of lecture, 3.5 hours of laboratory, and 11 hours of studio per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Formerly known as: Environmental Design 11B

Introduction to Design: Read Less [-]

ARCH 24 Freshman Seminars 1 Unit

Terms offered: Spring 2018, Spring 2017, Spring 2016 The Berkeley Seminar Program has been designed to provide new students with the opportunity to explore an intellectual topic with a faculty member in a small-seminar setting. Berkeley Seminars are offered in all campus departments, and topics vary from department to department and semester to semester.

Freshman Seminars: Read More [+]

Rules & Requirements

Repeat rules: Course may be repeated for credit when topic changes. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 1 hour of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: The grading option will be decided by the instructor when the class is offered. Final exam required.

Freshman Seminars: Read Less [-]

ARCH 39A Freshman/Sophomore Seminar 2 - 4 Units

Terms offered: Fall 2012, Fall 2003, Fall 2002

Freshman and sophomore seminars offer lower division students the opportunity to explore an intellectual topic with a faculty member and a group of peers in a small-seminar setting. These seminars are offered in all campus departments; topics vary from department to department and from semester to semester.

Freshman/Sophomore Seminar: Read More [+]

Rules & Requirements

Prerequisites: Priority given to freshmen and sophomores

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 2-4 hours of seminar per week

Summer: 8 weeks - 4-8 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: The grading option will be decided by the instructor when the class is offered. Final exam not required.

Freshman/Sophomore Seminar: Read Less [-]

ARCH 84 Sophomore Seminar 1 or 2 Units

Terms offered: Fall 2012, Spring 2012, Fall 2011

Sophomore seminars are small interactive courses offered by faculty members in departments all across the campus. Sophomore seminars offer opportunity for close, regular intellectual contact between faculty members and students in the crucial second year. The topics vary from department to department and semester to semester. Enrollment limited to 15 sophomores.

Sophomore Seminar: Read More [+]

Rules & Requirements

Prerequisites: At discretion of instructor

Repeat rules: Course may be repeated for credit when topic changes. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:

5 weeks - 3-6 hours of seminar per week 10 weeks - 1.5-3 hours of seminar per week 15 weeks - 1-2 hours of seminar per week

Summer:

6 weeks - 2.5-5 hours of seminar per week

8 weeks - 1.5-3.5 hours of seminar and 2-4 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: The grading option will be decided by the instructor when the class is offered. Final exam required.

Sophomore Seminar: Read Less [-]

ARCH 98 Special Group Study 1 - 4 Units

Terms offered: Spring 2018, Spring 2017, Fall 2016

This is a special topics course intended to fulfill the individual interests of students, and provide a vehicle for professors to instruct students based on new and innovative developments in the field of architecture.

Special Group Study: Read More [+]

Rules & Requirements

Credit Restrictions: Enrollment is restricted; see the section on Academic Policies-Course Number Guide in the Berkeley Bulletin.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of directed group study per

week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Special Group Study: Read Less [-]

ARCH 98BC Berkeley Connect 1 Unit

Terms offered: Fall 2018, Spring 2018, Fall 2017

Berkeley Connect is a mentoring program, offered through various academic departments, that helps students build intellectual community. Over the course of a semester, enrolled students participate in regular small-group discussions facilitated by a graduate student mentor (following a faculty-directed curriculum), meet with their graduate student mentor for one-on-one academic advising, attend lectures and panel discussions featuring department faculty and alumni, and go on field trips to campus resources. Students are not required to be declared majors in order to participate.

Berkeley Connect: Read More [+]

Rules & Requirements

Credit Restrictions: Enrollment is restricted; see the section on Academic Policies-Course Number Guide in the Berkeley Bulletin.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1 hour of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Berkeley Connect: Read Less [-]

ARCH 100A Fundamentals of Architectural Design 6 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

Introductory courses in the design of buildings. Problems emphasize conceptual strategies of form and space, site relationships and social, technological and environmental determinants. 100A focuses on the conceptual design process.

Fundamentals of Architectural Design: Read More [+]

Rules & Requirements

Prerequisites: Arch 11A & 11B With a C- or better. Must be taken in

sequence

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture, 2 hours of laboratory,

and 6 hours of studio per week

Summer: 8 weeks - 4 hours of lecture, 3 hours of laboratory, and 12

hours of studio per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Fundamentals of Architectural Design: Read Less [-]

ARCH 100B Fundamentals of Architectural Design 6 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016 Introductory courses in the design of buildings. Problems emphasize conceptual strategies of form and space, site relationships and social, technological and environmental determinants. 100B stresses tectonics, materials, and energy considerations. Studio work is supplemented by lectures, discussions, readings and field trips.

Fundamentals of Architectural Design: Read More [+]

Rules & Requirements

Prerequisites: Arch 100A with a C- or better. Must be taken in sequence

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture, 2 hours of laboratory,

and 6 hours of studio per week

Summer: 8 weeks - 4 hours of lecture, 3 hours of laboratory, and 12

hours of studio per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Fundamentals of Architectural Design: Read Less [-]

ARCH 100C Architectural Design III 5 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

This is a studio course in architectural design. Students work on individual and group design projects that build on topics from Architecture 100B with additional integration of conditions pertinent to architectural production that may include architectural precedents, context, landscape and urban issues, envelope, performance, structure, and tectonics in the design of buildings.

Architectural Design III: Read More [+]

Rules & Requirements

Prerequisites: Arch 100B with a C- or better

Hours & Format

Fall and/or spring: 15 weeks - 8 hours of studio per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Architectural Design III: Read Less [-]

ARCH 100D Architectural Design IV 5 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016 Students work on individual and/or group design projects that build on topics from previous studios with additional integration of conditions pertinent to architectural production that may include architectural precedents, context, landscape and urban issues, envelope, structure, and tectonics in the design of buildings. It may also include relevent and pertinent social, cultural, and technological issues facing architecture and design.

Architectural Design IV: Read More [+]

Rules & Requirements

Prerequisites: Arch 100B with a C- or better

Hours & Format

Fall and/or spring: 15 weeks - 8 hours of studio per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Architectural Design IV: Read Less [-]

ARCH 102A Capstone Project Preparation Seminar 3 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

This course is a course in architectural research methods with an emphasis on collaborative work. Students will work on individual facets of a collective topic of critical importance to the contemporary discipline of architecture within areas of faculty expertise. These include: architectural history and theory, structures, materials and methods of construction, building performance, energy and environment, and social factors and human behavior in architecture and the environment. The goal of Capstone Preparation is to develop a coherent research proposal that will be used as a topic for the Capstone Project course taken the following semester.

Capstone Project Preparation Seminar: Read More [+] Objectives Outcomes

Course Objectives: Ability to communicate research findings through oral, written and graphic modes of presentation to a variety of audiences. Comprehension of the ethics and professional responsibilities of research and how they relate to the discipline of architecture.

Develop a research proposal of scholarly significance, identifying and effectively communicating the information sources, skill sets, and research process required to pursue the project.

Formulate clear and precise questions, interpret information using abstract ideas, consider culturally diverse points of view, and reach well-reasoned conclusions.

Gather, record, evaluate and apply information relevant to a research problem.

Identify and critically assess the knowledge base and body of literature relevant to a specific research project.

Understand the role of applied research in environmental design and its impact on human conditions, behavior and impact on the environment. Work with others to coordinate individual research ventures addressing a larger collective topic, and to learn to work in a supervised collaborative team.

Rules & Requirements

Prerequisites: Architecture 100A, Architecture 100B

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Capstone Project Preparation Seminar: Read Less [-]

ARCH 102B Architecture Capstone Project 5 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016
Through individual and collective efforts, students will address topics selected in the previous semester under the guidance of faculty mentors. Topics in the field which may serve as a basis for capstone projects include: the history and theory of architecture; structures; the materials and methods of construction; building performance; energy and the environment; and social factors and human behavior. This course is aimed at students who wish to strengthen their understanding of the research methods used by the discipline of architecture and related disciplines (e.g., engineering or history), and is not solely design oriented. Architecture Capstone Project: Read More [+]

Objectives Outcomes

Course Objectives: Communicate complex research questions, ideas and findings clearly, both orally and in writing, to a broad community. Demonstrate a critical understanding of how resources, including literature and data, are used in critical study and how these resources can be assessed for their validity and reliability.

Demonstrate analytic skills. Understand the nature of research questions in the field, and how to choose appropriate architectural research methods given time, cost and skill constraints.

Demonstrate critical thinking. Analyze, compare and critique information gathered. Organize a coherent argument. Derive objective conclusions based on the information and inquiry.

Learn how to work in a supervised, collaborative research team, drawing on the diverse skills and knowledge of peers and faculty mentors. Understand the ethics and professional responsibilities of research and how this relates to the discipline of architecture.

Rules & Requirements

Prerequisites: Architecture 102A

Hours & Format

Fall and/or spring: 15 weeks - 4 hours of seminar and 4 hours of studio

per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Architecture Capstone Project: Read Less [-]

ARCH 105 Deep Green Design 4 Units

Terms offered: Spring 2014, Fall 2013

This course explores the issues and practices of green architectural design through critical readings of seminal and current texts, lectures, films, field trips and projects that use both design and analysis as means of inquiry. The course examines varied approaches to sustainable design including using nature and wilderness as models, biophilia, biomimicry, material sources and reuse, accounting systems such as LEED, Zero Net Carbon and the 2030 Challenge, and the Living Building Challenge.

Deep Green Design: Read More [+]

Rules & Requirements

Prerequisites: Completion of a minimum of one design studio, two

studios preferred

Hours & Format

Fall and/or spring: 15 weeks - 4 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Instructor: Ubbelohde

Deep Green Design: Read Less [-]

ARCH 107 Introduction to the Practice of Architecture 3 Units

Terms offered: Prior to 2007

Introduction to the business of architecture including client, developer and contractor relations, design proposals, competitions, and other marketing approaches as well as ethical issues of professional practice.

Introduction to the Practice of Architecture: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Formerly known as: 120

Introduction to the Practice of Architecture: Read Less [-]

ARCH 108 Architectural Internship 5 Units

Terms offered: Summer 2016 10 Week Session, Summer 2015 10 Week Session. Summer 2014 10 Week Session

An intensive and structured exposure to the professional practice, using the resources of practicing architects' offices as the "laboratory." The seminar discussion focus on understanding how design happens, how projects are managed and how buildings are constructed.

Architectural Internship: Read More [+]

Rules & Requirements

Prerequisites: 100B or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 10.5 hours of

internship per week

Summer: 8 weeks - 4 hours of lecture and 21 hours of tutorial per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Instructor: Comerio

Formerly known as: 128

Architectural Internship: Read Less [-]

ARCH 109 Special Topics in Architectural Design 1 - 4 Units

Terms offered: Spring 2018, Spring 2017, Fall 2016

Selected topics in the theories and conceopts of architectural design. For

current offerings, see department website.

Special Topics in Architectural Design: Read More [+]

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit when topic changes.

Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of seminar per week

Summer: 8 weeks - 2-7.5 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Special Topics in Architectural Design: Read Less [-]

ARCH 110AC The Social and Cultural Processes in Architecture & Urban Design 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

Architecture 110AC focuses on the significance of the physical environment in human life as citizens and as future design professionals. This course is an introduction to the field of human-environment studies. Its objectives include:

- 1. Working knowledge of the concepts in person-environment relations,
- 2. Understanding how these concepts vary by subculture, primarily Anglo-, Hispanic-, and Chinese-American,*
- 3. Learning to use the methodological skills needed to conduct architectural programming and evaluation research,
- 4. Thinking critically about the values embedded in design and the consequences for people, their behavior, and feelings.

The Social and Cultural Processes in Architecture & Urban Design: Read More [+]

Rules & Requirements

Credit Restrictions: Students will receive no credit for Architecture 110AC after completing Architecture 110.

Requirements this course satisfies: Satisfies the American Cultures requirement

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Instructor: Cranz

The Social and Cultural Processes in Architecture & Urban Design: Read Less [-]

ARCH 111 Housing: An International Survey 3 Units

Terms offered: Spring 2014, Spring 2013, Spring 2012 Introduction to international housing from the Architectural and City Planning perspective. Housing issues (social, cultural, and policy) ranging from micro-scale (house) to macro-scale (city) presented with a comparison of housing situations in developed and developing countries. Housing: An International Survey: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Housing: An International Survey: Read Less [-]

ARCH 119 Special Topics in the Social and Cultural Basis of Design 1 - 4 Units

Terms offered: Fall 2014, Spring 2014, Fall 2013

Selected topics in the social and cultural basis of design. For current offerings, see departmental website.

Special Topics in the Social and Cultural Basis of Design: Read More [+] Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit when topic changes. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of seminar per week

Summer: 8 weeks - 2-8 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Special Topics in the Social and Cultural Basis of Design: Read Less [-]

ARCH 122 Principles of Computer Aided Architectural Design 4 Units

Terms offered: Fall 2009

This course introduces students to Architecture's New Media; why and how computers are being used in architecture, and what are their current and expected impacts on the discipline and practice of architecture. Topics include presentation and re-presentation (including sketching, drafting, modeling, animating, and rendering); generating design solutions (including generative systems, expert systems, genetic algorithms, and neural networks); evaluation and prediction (using examples from structures, energy, acoustics, and human factors); and the future uses of computers in architectural design (including such topics as construction automation, smart buildings, and virtual environments). The laboratories introduce students to REVIT, a state-of-the-art architectural software, including drafting, modeling, rendering, and for building information modeling. This course is co-listed with 222.

Principles of Computer Aided Architectural Design: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1.5 hours of laboratory per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Formerly known as: 132

Principles of Computer Aided Architectural Design: Read Less [-]

ARCH 123 2-D Computer Technology 2 Units

Terms offered: Summer 2012 8 Week Session, Summer 2011 10 Week Session, Summer 2011 8 Week Session

The course provides students with practical hands-on experience in using professional architectural drafting software (e.g., Autocad). The course covers the process of creating, manipulating, and communicating through digital drawings.

2-D Computer Technology: Read More [+]

Hours & Format

Summer:

6 weeks - 5 hours of laboratory per week 8 weeks - 3.5 hours of laboratory per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Formerly known as: 133A

2-D Computer Technology: Read Less [-]

ARCH 124A 3-D Computer Technology 2 Units

Terms offered: Summer 2018 8 Week Session, Summer 2017 8 Week Session, Summer 2016 8 Week Session

The course provides students with practical hands-on experience in using professional architectural modeling software (e.g., 3DStudioMax, Maya, Rhino, etc.). The course covers the process of creating, manipulating, and communicating through digital architectural models.

3-D Computer Technology: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of laboratory per week

Summer:

6 weeks - 5 hours of laboratory per week 8 weeks - 3.5 hours of laboratory per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Formerly known as: 133B

3-D Computer Technology: Read Less [-]

ARCH 124B 3-D Computer Technology 2 Units

Terms offered: Summer 2017 8 Week Session, Summer 2016 10 Week Session, Summer 2016 8 Week Session

The course provides students with practical hands-on experience in using professional architectural modeling software (e.g., 3DStudioMax, Maya, Rhino, etc.). The course covers the process of creating, manipulating, and communicating through digital architectural models.

3-D Computer Technology: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of laboratory per week

Summer:

6 weeks - 5 hours of laboratory per week 8 weeks - 3.5 hours of laboratory per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Formerly known as: 133B

3-D Computer Technology: Read Less [-]

ARCH 127 Workshop in Designing Virtual Places 4 Units

Terms offered: Spring 2010

This course introduces students to designing web-accessible, Multi User, Virtual Environments (MUVEs), inhabited through avatars. Such worlds are used in video games and web-based applications, and are assuming their role as alternative 'places' to physical spaces, where people shop, learn, are entertained, and socialize. Virtual worlds are designed according to the same principles that guide the design of physical spaces, with allowances made for the absence of gravity and other laws of nature. The course combines concepts from architecture, film studies, and video game design. It uses a game engine software and a modeling software to build, test, and deploy virtual worlds.

Workshop in Designing Virtual Places: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar and 1.5 hours of laboratory per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Workshop in Designing Virtual Places: Read Less [-]

ARCH 129 Special Topics in Digital Design Theories and Methods 1 - 4 Units

Terms offered: Summer 2018 8 Week Session, Spring 2018, Summer 2017 8 Week Session

Topics cover advanced and research-related issues in digital design and New Media, related to architecture. For current offerings, see department website.

Special Topics in Digital Design Theories and Methods: Read More [+] Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit when topic changes. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Summer: 8 weeks - 2-8 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Special Topics in Digital Design Theories and Methods: Read Less [-]

ARCH 130 Introduction to Architectural Design Theory and Criticism 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

This class introduces students to the history and practice of design theory from the late 19th century to the present, with emphasis on developments of the last four decades. Readings and lectures explore specific constellations of theory and practice in relation to changing social and historical conditions. The course follows the rise of modernist design thinking, with particular emphasis on the growing influence of technical rationality across multiple fields in the post World War II period. Systematic approaches based in cybernetics and operations research (amongst others) are examined in the context of wider attempts to develop a science of design. Challenges to modernist design thinking, through advocacy planning and community-based design, the influence of social movements and countercultures, and parallel developments in postmodernism within and beyond architecture, provide the critical background for consideration of recent approaches to design theory, including those informed by developments in digital media and technology, environmental and ecological concerns, questions surrounding the globalization of architectural production, and the development of new materials.

Introduction to Architectural Design Theory and Criticism: Read More [+] Rules & Requirements

Prerequisites: Open to upper division undergraduates

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of

discussion per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Crysler

Formerly known as: 130A

Introduction to Architectural Design Theory and Criticism: Read Less [-]

ARCH 133 Architectures of Globalization: Contested Spaces of Global Culture 3 Units

Terms offered: Fall 2010, Fall 2009

This seminar examines the relationship between architecture and the processes associated with globalization. The social and spatial changes connected to the global economic restructuring of the last four decades are explored in relation to disctinctive national conditions and their connection to historical forces such as colonization and imperialism. Theoretical arguments about international urban political economy, uneven development, deindustrialization, and the growth of tourism and service industries, are grounded in specific urban and architectural contexts. Case studies explore issues such as urban entrepreneurialism and the branding of cities and nationstates; heritage practices and the postcolonial politics of place; border cities, and the urbanism of transnational production; cities, terrorism, and the global architecture of security; critical regionalism, localism, and other responses to debates on place and placelessness. Readings and class discussions examine course themes in a comparative framework and consider their implications for architectural design, education, and professional practice. Architectures of Globalization: Contested Spaces of Global Culture: Read More [+]

Rules & Requirements

Prerequisites: This course is open to all graduate students and upper division undergraduates

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Crysler

Architectures of Globalization: Contested Spaces of Global Culture: Read

Less [-]

ARCH 136 The Literature of Space 3 Units

Terms offered: Spring 2012, Spring 2011, Spring 2010

The concept of space as it is applied to the fields of architecture, geography and urbanism can be understood as a barometer of the condition that we call "modernity." This course explores connections between the larger cultural frameworks of the past century, and the idea of space as it has been perceived, conceived and lived during this period. Readings include essays from the disciplines of philosophy, geography, architecture, landscape, and urbanism, and short works of fiction that illustrate and elucidate the spatial concepts. The readings are grouped according to themes that form the foundation for weekly seminar discussions. Chronological and thematic readings reveal the force of history upon the conceptualization of space, and its contradictions.

The Literature of Space: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Stoner

The Literature of Space: Read Less [-]

ARCH 139 Special Topics in Architectural Design Theory and Criticism 1 - 4 Units

Terms offered: Fall 2017, Spring 2017, Fall 2016

Topics cover contemporary and historical issues in architectural design theory and criticism. For current offerings, see department website. Special Topics in Architectural Design Theory and Criticism: Read More [+]

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Summer: 8 weeks - 2-8 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Special Topics in Architectural Design Theory and Criticism: Read Less [-]

ARCH 140 Energy and Environment 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016
This course provides undergraduates and graduates with an introduction to issues of physical building performance including building thermodynamics, daylighting, and solar control. The course presents the fundamentals of building science while recongnizing the evolving nature of building technologies, energy efficiency, ecology, and responsible design. The course begins with a detailed explication of the thermal properties of materials, heat transfer through building assemblies, balance point temperature, solar geometry, and shading analysis. Students apply these principles later in the course to a design project. The latter part of the course also provides a survey of broader building science topics including mechanical system design, microclimate, and current developments in energy-efficient design.

Energy and Environment: Read More [+]

Rules & Requirements

Prerequisites: Physics or equivalent, or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 3 hours of

discussion per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructors: Brager, Schiavon

Energy and Environment: Read Less [-]

ARCH 142 Sustainability Colloquium 1 or 2 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016
Presentations on a variety of topics related to sustainability, offering perspectives from leading practioners: architectural designers, city planners, consultants, engineers, and researchers. Students can enroll for one unit (required attendance plus reading) or two units (with additional writing assignments.

Sustainability Colloquium: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 1.5 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

 $\label{lem:grading-final-exam} \textbf{Grading/Final-exam status:} \ \text{Offered for pass/not pass grade only.} \ \text{Final-exam-status:} \ \text{Offered for pass/not pass grade only.} \ \text{Final-exam-status:} \ \text{Offered for pass/not pass grade only.} \ \text{Final-exam-status:} \ \text{Offered for pass/not pass grade only.} \ \text{Final-exam-status:} \ \text{Offered for pass/not pass grade only.} \ \text{Final-exam-status:} \ \text{Offered for pass/not pass grade only.} \ \text{Final-exam-status:} \ \text{Offered for pass/not pass grade only.} \ \text{Final-exam-status:} \ \text{Offered for pass/not pass grade only.} \ \text{Final-exam-status:} \ \text{Offered for pass/not pass grade only.} \ \text{Offered for pass/not pass$

exam required.

Instructor: Brager

Sustainability Colloquium: Read Less [-]

ARCH 144 Introduction to Acoustics 1 Unit

Terms offered: Fall 2018, Fall 2017, Fall 2016

This course focuses on what architects need to know about acoustics. The first part deals with the fundamentals of acoustics including how sound levels are described and measured, and human response to sound. The course then covers building acoustics, mechanical equipment noise and vibration control, office acoustics, design of sound amplification systems, and environmental acoustics.

Introduction to Acoustics: Read More [+]

Hours & Format

Fall and/or spring: 5 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final

exam required.

Instructor: Salter

Introduction to Acoustics: Read Less [-]

ARCH 149 Special Topics in Energy and Environment 1 - 4 Units

Terms offered: Summer 2018 8 Week Session, Spring 2018, Fall 2017 Special topics include climatic design, heating, ventilating, airconditioning systems, lighting, and acoustics. For current offerings, see department website.

Special Topics in Energy and Environment: Read More [+]

Rules & Requirements

Prerequisites: 140 and consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Summer: 8 weeks - 2-8 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Special Topics in Energy and Environment: Read Less [-]

ARCH 150 Introduction to Structures 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

Study of forces, materials, and structural significance in the design of buildings. Emphasis on understanding the structural behavior of real

building systems.

Introduction to Structures: Read More [+]

Rules & Requirements

Prerequisites: Physics 8A

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of

discussion per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Black

Introduction to Structures: Read Less [-]

ARCH 154 Design and Computer Analysis of Structure 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2015

Design and analysis of whole structural building systems with the aid of finite element analytical methods. Advanced structural concepts explored in a laboratory environment.

Design and Computer Analysis of Structure: Read More [+]

Rules & Requirements

Prerequisites: 150

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 3 hours of

laboratory per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Black

Design and Computer Analysis of Structure: Read Less [-]

ARCH 155 Structure, Construction, and Space 3 Units

Terms offered: Fall 2009

In profound buildings, the structural system, construction materials, and architectural form work together to create an integrated work of art. Current practice segregates these three areas by assigning separate and rigid roles to 1) an engineer, 2) a contractor, and 3) an architect. The goal of this class is to blur these traditional boundaries and erase the intellectual cleft though hands-on experience. Students are given weekly assignments which focus on one or more of the three areas. They may be asked to analyze a structure, to construct something from actual materials, or research a case study and present it to the class. Each assignment to geared to help students integrate construction and structural issues into their architectural design, so that they can maintain control of the entire design process.

Structure, Construction, and Space: Read More [+]

Rules & Requirements

Prerequisites: 150

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Instructor: Black

Structure, Construction, and Space: Read Less [-]

ARCH 159 Special Topics in Building Structures 1 - 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016 Special topics such as experimental structures and architural preservation. For current offerings, see department website. Special Topics in Building Structures: Read More [+]

Rules & Requirements

Prerequisites: 150 and consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Summer: 8 weeks - 2-8 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Special Topics in Building Structures: Read Less [-]

ARCH 160 Introduction to Construction 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016
This introduction to the materials and processes of construction takes architecture from design to realization. The course will cover four material groups commonly used in two areas of the building assembly (structure and envelope): wood, concrete, steel, and glass. You will understand choices available and how materials are conventionally used. By observing construction, you'll see how our decisions affect the size of materials, connections, and where they are assembled. Architects must understand not only conventions, but also the potential in materials, so we will also study unusual and new developments.

Introduction to Construction: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 3 hours of

laboratory per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Black

Introduction to Construction: Read Less [-]

ARCH 169 Special Topics in Construction Materials 1 - 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016 For current offerings, see department website.

Special Topics in Construction Materials: Read More [+]

Rules & Requirements

Prerequisites: 160 and consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Summer: 8 weeks - 2-8 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Formerly known as: 169X

Special Topics in Construction Materials: Read Less [-]

ARCH 170A An Historical Survey of Architecture and Urbanism 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2016

The first part of this sequence studies the ancient and medieval periods; the second part studies the period since 1400; the aim is to look at architecture and urbanism in their social and historical context.

An Historical Survey of Architecture and Urbanism: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

An Historical Survey of Architecture and Urbanism: Read Less [-]

ARCH 170B An Historical Survey of Architecture and Urbanism 4 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

The first part of this sequence studies the ancient and medieval periods; the second part studies the period since 1400; the aim is to look at architecture and urbanism in their social and historical context.

An Historical Survey of Architecture and Urbanism: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

An Historical Survey of Architecture and Urbanism: Read Less [-]

ARCH 173 Case Studies in Modern Architecture 3 Units

Terms offered: Fall 2010, Fall 2009

This course examines developments in design, theory, graphic representation, construction technology, and interior programming through case studies of individual buildings. Our survey technique will be highly focused rather than panoptic. Each lecture will delve deeply into one or two buildings to examine program, spatial organization, graphic representation, critical building details, construction technology, and the relationship of the case study building with regard to other contemporary structures and the architect's overall body of work. From this nucleus, we will spiral outward to consider how the case study is embedded within a constellation of social and economic factors crucial to its design and physical realization. This survey of "modernism's built discourses" provides multiple perspectives on the variety of architectural propositions advanced to express the nature of modernity as a way of life.

Case Studies in Modern Architecture: Read More [+]

Rules & Requirements

Prerequisites: 170A-170B and consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Formerly known as: 173A

Case Studies in Modern Architecture: Read Less [-]

ARCH C174 Architecture in Depression and War 4 Units

Terms offered: Spring 2010

The Great Depression and World War II are arguably the two most influential events for the development of the built environment in the 20th century. Not only did they alter the socio-economic and political landscape on which architecture and urban planning depend, but they also led to technological innovations and vital debates about the built environment. This course examines the 1930's and 1940's topically, studying the work of the New Deal, corporate responses to the Depression and war, the important connections between architecture and advertising, the role of the Museum of Modern Art in the promotion of Modernism, the concept of the ideal house, and key tests, theories, and projects from the period.

Architecture in Depression and War: Read More [+]

Rules & Requirements

Repeat rules: Course may be repeated for credit when topic changes. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 3-4 hours of lecture and 0-1 hours of discussion per week

Summer: 6 weeks - 7.5 hours of lecture and 0-2.5 hours of discussion per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Shanken

Also listed as: AMERSTD C111A

Architecture in Depression and War: Read Less [-]

ARCH 175 Introduction to Architectural Theory 1945-Present 3 Units

Terms offered: Prior to 2007

This seminar provides an introduction to architectural theory since 1945, with emphasis on developments over the last three decades. Class readings and discussions explore the post-World War II crisis within modernism, postmodernism within and beyond architectural culture, and more recent developments around issues such as rapid urbanization, sustainability, the politics of cultural identity, and globalization. Transformations in architectural theory are examined in relation to historical forces such as the economy, the growth and transformation of cities, and the changing relationship between design professions and disciplines. The influences of digital media, new materials and production techniques on architectural education and practice are explored and the implications for architectural theory assessed. Key issues are anchored in case studies of buildings, urban spaces, and the institutions and agents of architectural culture.

Introduction to Architectural Theory 1945-Present: Read More [+] Rules & Requirements

Prerequisites: Open to upper division undergraduates and graduate

students

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Instructor: Crysler

Introduction to Architectural Theory 1945-Present: Read Less [-]

ARCH 176 American Architecture 3 Units

Terms offered: Prior to 2007

The first half of this course surveys American architecture from Colonial times to contemporary trends. Stylistic and spatial analysis is linked with the socioeconomic, political, and environmental influences on architecture, issues on originality, American exceptionalism, the influence from abroad, regionalism, and the role of technology. The second half delves more deeply into the history of specific building types--house, church, museum, library--grafting the earlier themes onto a history of modern institutions as they took shape in the United States.

American Architecture: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Instructor: Shanken

American Architecture: Read Less [-]

ARCH 178 Visionary Architecture 3 Units

Terms offered: Prior to 2007

This course explores architectural visions as historical windows, examining them from a number of angles. Using a variety of case studies drawn from different media (architectural theory, film, advertisements, architectural projects, and so on) and periods (turn of the century, the Modern Movement, Depression, World War II, 1960's, etc.) it provides a sampling of possibilities and models for the final student project, an indepth, original research paper. Several themes thread their way through the course, including the role of the "unbuilt" in architectural practice; the uses of the future in the construction of national and personal identities, cultural narratives, and modern mythologies; and the importance of the future as cliche, and the role of play in cultural production.

Visionary Architecture: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Instructor: Shanken

Visionary Architecture: Read Less [-]

ARCH 179 Special Topics in the History of Architecture 1 - 4 Units

Terms offered: Fall 2018, Spring 2018, Fall 2017

Special topics in Architectural History. For current section offerings, see $\label{eq:current} % \begin{center} \begin{cente$

departmental announcement.

Special Topics in the History of Architecture: Read More [+]

Rules & Requirements

Prerequisites: 170A-170B and consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Summer:

6 weeks - 2.5-10 hours of lecture per week 8 weeks - 1.5-7.5 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Special Topics in the History of Architecture: Read Less [-]

ARCH 198 Special Group Study 1 - 4 Units

Terms offered: Fall 2018, Spring 2018, Spring 2017

Studies developed to meet needs.

Special Group Study: Read More [+]

Rules & Requirements

Credit Restrictions: Enrollment is restricted; see the section on Academic Policies-Course Number Guide in the Berkeley Bulletin.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of directed group study per

week

Summer: 8 weeks - 1.5-7.5 hours of directed group study per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final

exam not required.

Special Group Study: Read Less [-]

ARCH 198BC Berkeley Connect 1 Unit

Terms offered: Fall 2018, Spring 2018, Fall 2017

Berkeley Connect is a mentoring program, offered through various academic departments, that helps students build intellectual community. Over the course of a semester, enrolled students participate in regular small-group discussions facilitated by a graduate student mentor (following a faculty-directed curriculum), meet with their graduate student mentor for one-on-one academic advising, attend lectures and panel discussions featuring department faculty and alumni, and go on field trips to campus resources. Students are not required to be declared majors in order to participate.

Berkeley Connect: Read More [+] Rules & Requirements

Credit Restrictions: Enrollment is restricted; see the section on Academic Policies-Course Number Guide in the Berkeley Bulletin.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1 hour of seminar per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final

exam not required.

Berkeley Connect: Read Less [-]

ARCH 199 Supervised Independent Study and Research 1 - 4 Units

Terms offered: Summer 2016 Second 6 Week Session, Spring 2016, Fall 2015

Enrollment is restricted by regulations in the General Catalog. Studies developed to meet individual needs.

Supervised Independent Study and Research: Read More [+]

Rules & Requirements

Credit Restrictions: Enrollment is restricted; see the section on Academic Policies-Course Number Guide in the Berkeley Bulletin.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of independent study per week

Summer:

6 weeks - 2.5-10 hours of independent study per week 8 weeks - 2-7.5 hours of independent study per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Supervised Independent Study and Research: Read Less [-]