

Architecture (ARCH)

Courses

ARCH 11A Introduction to Visual Representation and Drawing 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

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.

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

ARCH 11B Introduction to Design 5 Units

Terms offered: Spring 2025, Spring 2024, Summer 2023 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.

Rules & Requirements

Prerequisites: ARCH 11A with C- or better

Hours & Format

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

Summer: 8 weeks - 4 hours of lecture, 6 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

ARCH 24 Freshman Seminars 1 Unit

Terms offered: Fall 2022, Spring 2022, Fall 2021

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.

Rules & Requirements

Repeat rules: 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.

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.

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.

ARCH 84 Sophomore Seminar 1 or 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

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.

Rules & Requirements

Prerequisites: At discretion of instructor

Repeat rules: 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.

ARCH 98 Special Group Study 1 - 4 Units

Terms offered: Spring 2021, Fall 2020, Spring 2020

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.

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.

ARCH 98BC Berkeley Connect 1 Unit

Terms offered: Fall 2025, Spring 2025, Fall 2024

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.

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.

ARCH 99 Supervised Independent Study and Research 1 - 4 Units

Terms offered: Not yet offered

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

Rules & Requirements

Repeat rules: Course may be repeated for credit up to a total of 4 units.

Hours & Format

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

Summer: 12 weeks - 1-4 hours of independent study per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

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

ARCH 100A Fundamentals of Architectural Design 6 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

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.

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.

ARCH 100B Fundamentals of Architectural Design 6 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

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.

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.

ARCH 100C Architectural Design III 5 Units

Terms offered: Fall 2025, Summer 2025 10 Week Session, Fall 2024

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.

Rules & Requirements

Prerequisites: Arch 100B with a C- or better

Repeat rules: Course may be repeated for credit with instructor consent.

Hours & Format

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

Summer: 10 weeks - 12 hours of studio per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

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

ARCH 100D Architectural Design IV 5 Units

Terms offered: Summer 2025 10 Week Session, Spring 2025, Summer 2024 10 Week Session

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 relevant and pertinent social, cultural, and technological issues facing architecture and design.

Rules & Requirements

Prerequisites: Arch 100B with a C- or better

Repeat rules: Course may be repeated for credit with instructor consent.

Hours & Format

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

Summer: 10 weeks - 12 hours of studio per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

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

ARCH 102A Capstone Project Preparation Seminar 3 Units

Terms offered: Fall 2023, Fall 2021, Fall 2020

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.

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.

ARCH 102B Architecture Capstone Project 5 Units

Terms offered: Spring 2025, Spring 2024, Spring 2022

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.

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.

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.

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

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.

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

ARCH 108 Architectural Internship 5 Units

Terms offered: Summer 2025 8 Week Session, Summer 2023 8 Week Session, Summer 2022 8 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.

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

ARCH 109 Special Topics in Architectural Design 1 - 4 Units

Terms offered: Spring 2022, Summer 2020 8 Week Session, Fall 2019
Selected topics in the theories and concepts of architectural design. For current offerings, see department website.

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: 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.

ARCH 110AC The Social and Cultural Processes in Architecture & Urban Design 3 Units

Terms offered: Fall 2020, Fall 2019, Fall 2018

This class focuses on the significance of the physical environment in human life as citizens and as future design professionals and it introduces students to the field of human-environment studies. It shows how the social sciences and design can be mutually engaged, enriching the context for design evaluation and critique. Berkeley has long been known for attention to the social perspective on architecture, and this course falls in that tradition.

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: 10 weeks - 3 hours of lecture and 1.5 hours of discussion per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

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

Instructor: Chiesi

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.

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.

ARCH 112 The Social Life of Building 3 Units

Terms offered: Fall 2024, Fall 2023, Fall 2022

How do buildings form and inform the ways in which we live — as individuals and as part of different communities? This course explores the multiple ways in which people and buildings interact. Our cultural and economic practices shape the form of our environment which in turn shapes social constructions of gender, race and class. At the same time, as individuals, we are always making choices about how we use our spaces. Intended as a gateway to advanced architectural humanities classes, the course is organized around three themes that highlight ways of thinking about individual actions, social constructions of gender, race and class, and cultural associations of the built environment.

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.

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

Terms offered: Spring 2025, Fall 2024, Fall 2019

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

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: 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.

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.

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

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.

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

ARCH 124A Introduction to Digital Design Methods 2 Units

Terms offered: Summer 2025 Second 6 Week Session, Summer 2024 Second 6 Week Session, Summer 2023 Second 6 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.

Hours & Format

Summer:

6 weeks - 4 hours of laboratory, 2 hours of discussion, and 1 hour of lecture per week

6 weeks - 4 hours of laboratory, 2 hours of discussion, and 1 hour of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

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

Formerly known as: 133B

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.

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

ARCH 125A Building Information Technology 2 Units

Terms offered: Summer 2025 First 6 Week Session, Summer 2023 First 6 Week Session, Summer 2023 Second 6 Week Session

This course explores conceptual and practical issues surrounding the Building Information Model (BIM), a widely-used approach in the Architecture Engineering and Construction (AEC) industry for the management of digital representations of the physical characteristics of buildings, their functions, and the process by which they are built. By completing this course, students develop an understanding of the concepts underlying BIM, and build competencies in creating BIM models in practice.

Hours & Format

Summer:

6 weeks - 4 hours of laboratory, 2 hours of discussion, and 1 hour of lecture per week

6 weeks - 4 hours of laboratory, 2 hours of discussion, and 1 hour of lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

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

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 (MUEs), 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.

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.

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

Terms offered: Spring 2025, Fall 2024, Spring 2022

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

Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: 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.

ARCH 130 Introduction to Architectural Design Theory and Criticism 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

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.

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

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 distinctive 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.

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

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.

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

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

Terms offered: Spring 2025, Fall 2024, Spring 2024

Topics cover contemporary and historical issues in architectural design theory and criticism. For current offerings, see department website.

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.

ARCH 140 Energy and Environment 4 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

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 recognizing 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.

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

ARCH 142 Sustainability Colloquium 1 or 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

Presentations on a variety of topics related to sustainability, offering perspectives from leading practitioners: 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).

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Undergraduate

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

Instructor: Brager

ARCH 144 Introduction to Acoustics 1 Unit

Terms offered: Fall 2025, Fall 2024, Fall 2023

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.

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

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

Terms offered: Fall 2025, Fall 2024, Spring 2024

Special topics include climatic design, heating, ventilating, air-conditioning systems, lighting, and acoustics. For current offerings, see department website.

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.

ARCH 150 Introduction to Structures 4 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

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

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

ARCH 154 Design and Computer Analysis of Structure 3 Units

Terms offered: Spring 2020, Spring 2018, Spring 2017

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

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

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 through 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 is geared to help students integrate construction and structural issues into their architectural design, so that they can maintain control of the entire design process.

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

ARCH 159 Special Topics in Building Structures 1 - 4 Units

Terms offered: Spring 2025, Spring 2020, Spring 2018

Special topics such as experimental structures and architectural preservation. For current offerings, see department website.

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 lecture per week

Additional Details

Subject/Course Level: Architecture/Undergraduate

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

ARCH 160 Introduction to Construction 4 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

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.

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

ARCH 169 Special Topics in Construction Materials 1 - 4 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

For current offerings, see department website.

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

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

Terms offered: Fall 2025, Fall 2024, Fall 2023

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.

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.

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

Terms offered: Spring 2025, Spring 2024, Spring 2023

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.

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.

ARCH 173 Case Studies in Modern Architecture 3 Units

Terms offered: Fall 2010, Fall 2009, 1974

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.

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

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.

Rules & Requirements

Repeat rules: 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

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.

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: Cryslar

ARCH 176 American Architecture 3 Units

Terms offered: 1974

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.

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

ARCH 177 California Architecture 3 Units

Terms offered: Spring 2025, Fall 2023, Fall 2021

Many California architects came from other places: Maybeck from New York via the

Ecole des Beaux Arts; Schindler and Neutra from Vienna; Frank Gehry from Chicago.

But, once they arrived, their encounters with the Golden State produced new and original

forms of architecture. This seminar will examine the qualities of the state's environment,

culture, economy, and population that have produced unique buildings and landscapes

during the 20th century. It will look at both Northern and Southern California architecture,

starting with canonical designers then moving beyond them to consider lesser-known

regional architects whose work embodies local characteristics.

Rules & Requirements

Prerequisites: A previous architectural history class. For undergraduates, ARCH 170B or equivalent

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.

Instructor: Crawford

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 in-depth, 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 cliché, and the role of play in cultural production.

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

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

Terms offered: Fall 2025, Spring 2025, Fall 2024

Special topics in Architectural History. For current section offerings, see departmental announcement.

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.

ARCH 188 Utopian Freehand Drawing and Painting: Architecture and the City 3 Units

Terms offered: Prior to 2007

The intention of this class is to keep alive this type of free (irrational, exploratory, open and playful) passion and make us realize that on the one hand the interdependence between Design and Drawing, and on the other hand, that any of our artistic productions may contain architectural ideas that are nascent, not yet fully developed but useful seeds for our future practice. With this objective in mind, each week, besides producing a single (large) drawing-painting, students will reflect on this process and on the architectural design lessons learned, in the form of an itemized list of condensed realizations.

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.

Instructor: Bourdier

ARCH 198 Special Group Study 1 - 4 Units

Terms offered: Fall 2025, Fall 2018, Spring 2018

Studies developed to meet needs.

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.

ARCH 198BC Berkeley Connect 1 Unit

Terms offered: Fall 2025, Spring 2025, Fall 2024

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.

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.

ARCH 199 Supervised Independent Study and Research 1 - 4 Units

Terms offered: Summer 2021 8 Week Session, Summer 2020 8 Week Session, Summer 2016 Second 6 Week Session

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

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.

ARCH 200A Introduction to Architecture Studio 1 6 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

Introductory course in architectural design and theories for graduate students. Problems emphasize the major format, spatial, material, tectonic, social, technological, and environmental determinants of building form. Studio work is supplemented by lectures, discussions, readings, and field trips.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

ARCH 200B Introduction to Architecture Studio 2 6 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

Introductory course in architectural design and theories for graduate students. Problems emphasize the major format, spatial, material, tectonic, social, technological, and environmental determinants of building form. Studio work is supplemented by lectures, discussions, readings, and field trips.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 200C Representational Practice in Architectural Design 3 Units

Terms offered: Fall 2024, Fall 2023, Fall 2022

This course will address three distinct levels of representational practice in architectural design: 1) cultivate an understanding of the foundational discourse and diversity of approaches to architectural representation; 2) develop a fluency in the canonical methods found in architectural practice; 3) encourage the development of a personal relationship to forms of modeling and formats of drawing.

Rules & Requirements

Credit Restrictions: 200C must be taken in conjunction with 200A.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Steinfeld

ARCH 200D Representational Practice in Architectural Design II 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

ARCH 200D is the second part in a two-part sequence of classes that introduces students to techniques of architectural representation as well as the concepts and precedents that surround them. Building on the concepts and techniques introduced in ARCH 200C, this class will expand students' technical knowledge to include rendering, notation, and graphic design. Each topic will be broken into a separate module and be supported with lectures, discussions, tutorials, workshops and presentations. Additionally, the class is closely linked with ARCH 200B, Introduction to Architecture Studio 2 and will provide much of the technical skill-building for that class.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 201 Architecture & Urbanism Design Studio 6 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

The design of buildings or communities of advanced complexity. Each section deals with a specific topic such as housing, public and institutional buildings, and local or international community development. Studio work is supplemented by lectures, discussions, readings, and field trips.

Rules & Requirements

Prerequisites: 100A-100B or 200A-200B

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 202 Graduate Option Studio 6 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

Focused design and research for graduate students.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 203 Integrated Design Studio 6 Units

Terms offered: Fall 2025, Fall 2024, Fall 2021

The Integrated Design Studio is the penultimate studio where students incorporate their accumulated knowledge into architectural solutions. The students demonstrate the integrative thinking that shapes complex architectural design and technical solutions. Students will possess an understanding to classify, compare, summarize, explain and/or interpret information. The students will also become proficient in using specific information to accomplish a task, correctly selecting the appropriate information and accurately applying it to the solution of a specific problem while also distinguishing the effects of its implementation.

Rules & Requirements

Prerequisites: Graduate standing

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 204 Final Project Studio: Studio Thesis Option 5 Units

Terms offered: Spring 2011, Spring 2010

Focused design research as the capstone project for graduate students.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Formerly known as: 202A

ARCH 204A Thesis Seminar 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2022

Focused design research as the capstone project for graduate students.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 204B Thesis Studio 6 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

Focused design research as the capstone project for graduate students.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Formerly known as: 204

ARCH 205A Studio One, Fall 6 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

The first semester of a one-year, post-professional design studio intended for those students who have a professional architecture degree and wish to explore current design issues in a stimulating, rigorous, and highly experimental studio setting.

Rules & Requirements

Prerequisites: Consent of Chair or graduate advisors during fall semester

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 205B Studio One, Spring 6 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

This course is the second semester of a one-year, post-professional studio intended for those students who have a professional architecture degree and wish to explore current design issues in a stimulating, rigorous, and highly experimental studio setting.

Rules & Requirements

Prerequisites: Consent of chair or graduate advisors

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Formerly known as: 205

ARCH 207A Architecture Lectures Colloquium 1 Unit

Terms offered: Fall 2025, Fall 2024, Fall 2023

This course accompanies the required introductory design studio in the three-year option of the Master of Architecture program. It is the first in a series of three one-unit colloquia, scheduled consecutively for the first three semesters of the program. Students will attend all Wednesday evening lectures of the College of Environmental Design lecture series. Every third week, they will meet with the instructor for a one-hour discussion.

Rules & Requirements

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

ARCH 207B Architecture Research Colloquium 1 Unit

Terms offered: Fall 2025, Fall 2024, Fall 2023

This course accompanies the second year of the required architecture and urbanism design studio in the three-year option of the Master of Architecture program. It is the second in a series of three one-unit colloquia, scheduled consecutively in the fall for the first three years of the program. For a one-hour session each week, faculty in the department of architecture, other departments of the College of Environmental Design, and global guest speakers will present lectures on their research and design practices in urbanism.

Rules & Requirements

Prerequisites: Co-requisite with Architecture 201

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Chow

ARCH 207C Professional Practice Colloquium 1 Unit

Terms offered: Fall 2025, Fall 2024, Fall 2023

This course accompanies the required comprehensive design studio in the three-year option of the Master of Architecture program. It is the third in a series of three one-unit colloquia, scheduled consecutively for the first three semesters of the program.

Rules & Requirements

Prerequisites: Concurrent enrollment in Arch 203 Integrated Design Studio

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

ARCH 207D The Cultures of Practice 3 Units

Terms offered: Fall 2025, Fall 2024, Spring 2024

The nature of architectural practice, how it has evolved and how it is changing in today's world is the theme of the class. The course considers how diverse cultures--both anthropological and professional--contribute to practice, and how the culture of practice evolves. The class has three five-week modules, devoted to the following themes: traditions of practice, research in the culture of the profession, and innovations in practice.

Rules & Requirements

Prerequisites: 201

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructors: Comerio, Cranz

ARCH 209 Special Topics in Architectural Design 1 - 4 Units

Terms offered: Spring 2025, Spring 2024, Spring 2022

Topics deal with major problems and current issues in architectural design. For current offerings, see departmental website.

Rules & Requirements

Prerequisites: Second- or third-year graduate standing

Repeat rules: 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:

6 weeks - 2.5-10 hours of lecture per week

8 weeks - 2-8 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Formerly known as: 209X

ARCH 211 Theory and Methods in the Social and Cultural Basis of Design 3 - 4 Units

Terms offered: Spring 2017, Spring 2013, Spring 2011

Explores a variety of theories which explain and document the relationship between humans and the environment they build; outlines the research methods appropriate to each theory.

Rules & Requirements

Prerequisites: 110 or consent of instructor

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Cranz

ARCH 212 Body-Conscious Design: Shoes, Chairs, Rooms, and Beyond 3 Units

Terms offered: Spring 2018, Spring 2017, Spring 2016

This seminar prepares students to evaluate and design environments from the point of view of how they interact with the human body. Tools and clothing modify that interaction. Semi-fixed features of the near environment, especially furniture, may have greater impact on physical well being and social-psychological comfort than fixed features like walls, openings, and volume. Today, designers can help redefine and legitimize new attitudes toward supporting the human body by, for example, designing for a wide range of postural alternatives and possibly designing new kinds of furniture.

Hours & Format

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

Summer: 8 weeks - 5 hours of seminar per week

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Cranz

ARCH 215 Landscape, Architecture, Infrastructure, and Urbanism 3 Units

Terms offered: Spring 2014, Spring 2013, Spring 2012

This seminar aims to explore how the physical and conceptual understanding of landscape can enrich current forms of architectural and urban design practice. At the junction of landform, infrastructure, urban design, and architecture lies a rich field of possibilities that is increasingly superseding the narrower field of each of the disciplines by themselves. In the past century, contemporary culture and technology—automobiles, televisions, cell phones, and the internet have socially, culturally, environmentally, and physically reshaped the urban fabric, calling into question the very definition of urbanity. The course will explore the implications for public space in an era of increased security and risk mitigation and how designers may direct the various invisible forces which give form to the world around us.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Davids

ARCH 216 The Sociology of Taste in Environmental Design 3 Units

Terms offered: Fall 2016, Fall 2012, Fall 2011

Taste is at work in the way we display our things as much as in the qualities of things themselves. A performance-oriented model of taste observes that objects fall into two broad categories: pragmatic (that support behavior) and symbolic (that identify a person). People visually organize these two categories of objects using both explicit and subconscious aesthetic rules to produce visually unified displays. Depending on how it is used, how it is placed in relation to other things, an object's meaning can vary. The display of taste is where objects take on--and shed--meanings, depending on how they are combined with one another. This seminar reviews the extensive body of 20th-century theory and empirical research on taste and considers the implications of theories about taste for design creation, design education, and for client-professional relations.

Rules & Requirements

Prerequisites: 110, or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Cranz

ARCH 217 Social Aspects of Housing Design: Mid-Rise Urbanism 3 Units

Terms offered: Fall 2012, Fall 2011

The course explores strategies to bring coherence and continuity back to the city focusing on mid-rise, higher density urbanism and the potential and difficulties of this scale of urban fabric to contribute to the form of cities, without losing the potential of choice and diversity. The seminars are organized in case studies revolving around four cities: Amsterdam, Barcelona, Beijing, and New York. Design exercises parallel the case studies as a way to test and challenge the potentials of mid-rise urbanism.

Rules & Requirements

Prerequisites: Consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Chow

ARCH 218 Housing, Urbanization, and Urbanism: Design, Planning, and Policy Issues in Developing Countries 4 Units

Terms offered: Prior to 2007

This seminar is concerned with the study of housing, urbanization, and urbanism in developing countries, studying not only the physical landscapes of settlements, but also the social, economic, political, and cultural dimensions. This course's focus will be on housing, its lens will be their processes of urbanization, and its intent will be to investigate the space for action by the professionals of the "urban" in the arena of housing. While the emphasis of the course will be on the diverse trajectories of developing countries, "First World" experiences will also be used to illuminate the specific transnational connections and their use in the making of housing theory and policy. The seminar complements the series of lectures offered in 111 and City Planning 111.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: AlSayyad

ARCH 219 Special Topics in the Social and Cultural Basis of Design 1 - 4 Units

Terms offered: Spring 2025, Fall 2024, Fall 2019

Topics include the sociology of taste, personal and societal values in design, participatory design, semantic ethnography, environments for special populations such as the elderly, and building types such as housing, hospitals, schools, offices, and urban parks. For current offerings, see departmental website.

Rules & Requirements

Prerequisites: Consent of instructor

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 220A Technologies of Representation 1 2 Units

Terms offered: Fall 2025

This course in particular focuses on the principles of architectural drawing and three-dimensional modeling, emphasizing precision in projection-based representation and digital modeling workflows. Students develop fluency in constructing and editing spatial representations through technical drawing, surface modeling, and volumetric exploration using professional tools (e.g., Rhino, Illustrator). Through structured exercises, students refine their ability to generate clear, communicative drawings and models that serve as foundational design representations.

Hours & Format

Fall and/or spring: 8 weeks - 1 hour of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 220B Technologies of Representation 2 - Imaging & Rendering 1 Unit

Terms offered: Fall 2025

As a part of this larger sequence, this particular course explores the production of architectural imagery, focusing on digital rendering, compositing, and visual communication. Students engage with methods for simulating material properties, lighting conditions, and atmospheric effects to produce compelling visualizations that support design narratives. Emphasizing both technical precision and aesthetic considerations, the course equips students with the skills necessary to develop evocative architectural imagery for design presentation and critique.

Hours & Format

Fall and/or spring: 8 weeks - 1 hour of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 221 Graduate Seminar in Digital Design Theories and Methods 3 Units

Terms offered: Spring 2013, Spring 2010, Fall 2009

This seminar is intended to help graduate students develop a coherent research agenda in the area of digital design theories and methods. In addition, it is intended to serve as a forum for the exchange of ideas (e.g., work in progress, potential directions for research, etc.) in the area of shared interest. The course provides students with a set of questions as guides, readings, and guest lectures.

Rules & Requirements

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Formerly known as: 235

ARCH 222 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 (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 a REVIT, a state-of-the-art architectural software, including drafting, modeling, rendering, and building information modeling. This course is co-listed with 122. Graduate students will have a discussion section instead of the laboratory that 122 students undertake.

Rules & Requirements

Prerequisites: Consent of instructor

Hours & Format

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

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 226 Collaboration by Digital Design 3 Units

Terms offered: Prior to 2007

This project-based seminar studies the problem of multi-disciplinary and cross-cultural collaboration in the building industry. It employs two complementary approaches: 1) a theoretical approach, which examines the nature of collaboration in general and in architecture in particular, looks at the methods that have been used to foster and support it, and interrogates their advantages and shortcomings; and 2) a practical approach, which use a web-based multi-person design 'game' that allow students to play different roles (architect, clients, engineer, builder, etc.) while collaborating in the design of a building.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 227 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.

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/Graduate

Grading: Letter grade.

ARCH 229 Special Topics in Digital Design Theories and Methods 1 - 4 Units

Terms offered: Spring 2025, Fall 2024, Spring 2024

Selected topics in digital design theories and methods. For current offerings, see departmental website.

Rules & Requirements

Prerequisites: 210 or consent of instructor

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 229A Introduction to Construction Law 1 - 4 Units

Terms offered: Spring 2009, Spring 2008, Spring 2007

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Formerly known as: 229F

ARCH 230 Advanced Architectural Design Theory and Criticism 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

Seminar in the analysis and discussion of contemporary and historical issues in architectural design theory and criticism.

Rules & Requirements

Prerequisites: 130A or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 231 Research Methods in Architectural Design Theory and Criticism 2 Units

Terms offered: Spring 2004, Spring 2003, Spring 2002

Seminar in methods and use of research in contemporary and historical architectural design theory and criticism. Required for doctoral students in this study area.

Rules & Requirements

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 233 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 distinctive 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 nation-states; 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.

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/Graduate

Grading: Letter grade.

Instructor: Crysler

ARCH 236 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 key 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.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Stoner

ARCH 237 Ulterior Speculation: Monographs and Manifestos 3 Units

Terms offered: Spring 2013, Spring 2012, Spring 2011

An examination and analysis of architectural manifestos and monographs from the first half of the 20th century to today. The class analyzes the possibilities and limits of grounding a discourse in practice as well as theory. The seminar complements thesis preparation or can serve as an introduction to critical thinking in architecture.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Fernau

ARCH 238 The Dialectic of Poetics and Technology 3 Units

Terms offered: Spring 2020, Spring 2019, Spring 2017

This seminar examines the relationship between technology and design philosophy in the work of architects through analysis of individual buildings within the context of the complete oeuvre and an examination of the architect's writings and lectures. The seminar poses questions such as: What is the role of technology in the design philosophy of the architect and how is this theoretical position established in the architect's writings, lectures, and interviews? A series of lectures explores these questions in relation to the architect and a set of required readings introduces the work of the architect and explores the relationship between technology and design philosophy.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Ubbelohde

Formerly known as: 209A

ARCH 239 Special Topics in Architecture Design Theory and Criticism 1 - 4 Units

Terms offered: Spring 2025, Fall 2024, Spring 2024

Selected topics in contemporary and historical architectural design theory and criticism. For current offerings, see departmental website.

Rules & Requirements

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 240 Advanced Study of Energy and Environment 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

Minimizing energy use is a cornerstone of designing and operating sustainable buildings, and attention to energy issues can often lead to greatly improved indoor environmental quality. For designers, using computer-based energy analysis tools are important not only to qualify for sustainability ratings and meet energy codes, but also to develop intuition about what makes buildings perform well. This course will present quantitative and qualitative methods for assessing energy performance during design of both residential and commercial buildings. Students will get hands-on experience with state-of-the-art software -- ranging from simple to complex -- to assess the performance of building components and whole-building designs.

Rules & Requirements

Credit Restrictions: Students will receive no credit for Architecture 240 after taking Architecture 240A.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 241 Research Methods in Building Sciences 3 Units

Terms offered: Fall 2024, Fall 2022, Fall 2020

This class provides training in research skills and critical thinking in the field of Architecture, Building Science, Engineering with a focus on energy use, indoor environmental quality, and human well-being. Readings will cover both building science and technology theory and research methods, and classes will be organized around a series of individual and group homework. Topics will include literature review, design of experiments/simulations, physical measurements, post-occupancy evaluation, statistical analysis, data visualization, and spreading of scientific results.

Rules & Requirements

Prerequisites: The class is targeted towards Building Science MS/ PhD, MArch, BA in Architecture, and MS/PhD in Engineering students or consent of instructor

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Schiavon

ARCH 242 Sustainability Colloquium 1 or 2 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Instructor: Brager

ARCH 243 Natural Cooling: Sustainable Design for a Warming Planet 3 Units

Terms offered: Fall 2016, Fall 2014, Fall 2013

Climate-responsive, person-centered design can reduce energy use, create experiential delight and connection to nature, and be more sustainable. This course covers design and operational strategies, low- and high-tech solutions, material choices, dynamic high-performance facades, natural ventilation, and a range of other integrated climate-control strategies most relevant to warm climates. Students will use interactive and experiential exercises, simulation tools, case studies, design exercises. Depending on the semester offered, students may also use the Building Science Wind Tunnel to test design solutions for natural ventilation.

Rules & Requirements

Prerequisites: ARCH 140 or 240 or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructors: Brager, Betti

ARCH 244 Mechanical Systems Design for Sustainable Buildings 3 Units

Terms offered: Fall 2011, Fall 2010, Fall 2009

This class will focus on how to design integrated mechanical systems for sustainable buildings. The building sector plays an important role in global warming, and it is critically important to reduce building energy use in order to reduce greenhouse gas emissions. Roughly one-third of the primary energy consumed in buildings is used for controlling the indoor environment through Heating, Ventilating and Air Conditioning (HVAC) and lighting systems. Achieving net-zero or positive energy or carbon buildings demands the integration of architecture, structure, and building systems to optimize both passive and active systems.

Rules & Requirements

Prerequisites: Arch 140 or Arch 240 or consent of the instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Schiavon

ARCH 245 Daylighting in Architecture 3 Units

Terms offered: Spring 2025, Spring 2023, Spring 2017

Daylighting is a cornerstone of architecture design, a fundamental aspect of space making. The course focuses on design approaches to natural light, resorting to the study of precedents in modern and contemporary architecture, daylighting vocabularies and grammars, rules of thumb, field measurements, quantitative studies and computer simulations. Other topics include health and comfort, energy conservation, metrics and standards. Weekly sessions comprise both lectures and labs. Final projects are developed in groups and use both qualitative and quantitative methods to assess design solutions.

Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Caldas

ARCH 246 Building Energy Simulations 3 Units

Terms offered: Fall 2023, Fall 2021

Energy saving in buildings is among the most cost-effective and environmentally sustainable measures to reduce greenhouse gasses emissions and energy consumption. 40% of the primary energy use and 75% of total U.S. electricity consumption is used in buildings. Computer-based energy analysis tools are important for architects, building designers, engineers, and sustainability consultants to use for evidence-based design, sustainability ratings, energy code compliance, building control and optimization, policy development, and assessment.

Objectives & Outcomes

Course Objectives: Develop a fundamental and practical knowledge about building performance and energy simulations. Specify, design, run, analyze, compare and assess building energy simulations.

Student Learning Outcomes: Energy modeling by performing guided energy simulations and apply them to a project. Flexibility to select a building that you like, for example, it could be a school, a house, a commercial building.

Rules & Requirements

Prerequisites: Arch 140 or Arch 240 or consent of the instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Schiavon

ARCH 249 Special Topics in the Physical Environment in Buildings 1 - 4 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

Rules & Requirements

Prerequisites: 140

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 250 Introduction to Structures 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

This class focuses on the fundamental principles that affect the structural behavior of buildings. Through digital and hands-on exercises, students will learn analytical techniques for measuring and evaluating the flow of forces through structural systems. Students will also learn to consider the structural behavior of buildings as a fundamental factor in the design of architectural proposals. The goal of the class is to gain a fundamental understanding of the forces, moments, and stresses in typical building elements such as columns, beams, frames and walls and to make better informed decisions when designing resource- and environmentally-friendly buildings with lightweight and material-efficient structural systems.

Rules & Requirements

Credit Restrictions: Students will receive no credit for ARCH 250 after completing ARCH 250. A deficient grade in ARCH 250 may be removed by taking ARCH 250.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 252 Form and Structure 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

The class investigates the interplay between geometry and structural behavior of different structural systems categorized with respect to their load-bearing mechanism. Special focus is placed on form-active and surface-active structures like cable nets, membranes, gridshells, and continuous shells. The class will begin by providing a holistic overview of ancient and cutting-edge form-finding approaches and analysis methods. Using playful physical experiments, students will gain a hands-on understanding of how different structural states can affect the shape of a structure and how this interrelation could be used creatively to drive the design process.

Rules & Requirements

Prerequisites: Consent of instructor required

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 253 Seismic Design and Construction 3 Units

Terms offered: Fall 2012, Summer 2012 10 Week Session, Fall 2011
Contemporary design and construction techniques for improving the performance of new and existing buildings in earthquakes. Topics will include 1) basic principles of seismic design and building performance, 2) retrofit of existing buildings and evaluation techniques, 3) design and planning for disaster recovery and rebuilding. The course will use Bay Area and campus buildings as case studies.

Rules & Requirements

Prerequisites: 150

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Comerio

ARCH 255 Structure, Construction, and Space 3 Units

Terms offered: Prior to 2007
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 through 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 is geared to help students integrate construction and structural issues into their architectural design so that they can maintain control of the entire design process.

Rules & Requirements

Prerequisites: 150

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Black

ARCH 256 Structural Design in the Studio 1 - 3 Units

Terms offered: Spring 2016, Fall 2015, Fall 2013
Teaching structures to architecture students on their own turf: in a design studio. The course is organized around weekly desk reviews and assignments for students enrolled in a 201 design studio or thesis. The reviews and assignments focus on the structural issues of the students' projects. A central goal of the course is to help students understand structural issues as they relate to design and to help them become comfortable with structural concepts so that they can begin to integrate the structure and architecture. The course can be taken for 1 unit, 2 units, or 3 units depending on the amount of time a student wishes to commit to it. A final report showing the evolution of each student's project with clear reference to how structural understanding influenced design decisions is required of all students regardless of units taken. Enrollment strictly limited to 10 students.

Rules & Requirements

Prerequisites: 150 or equivalent

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Black

ARCH 258 Robotic Fabrication and Construction 3 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023
The emergence of robotics in creative sectors such as architecture and design has sparked an entirely new movement of collective making that is inextricably open and future-oriented. Challenged by increasingly complex technological and environmental problems, architects, designers, and engineers are seeking novel practices of collaboration that go far beyond traditional disciplinary boundaries.

Rules & Requirements

Prerequisites: Consent of the instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 1 hour of laboratory per week

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Schleicher

ARCH 259 Special Topics in Building Structures 1 - 4 Units

Terms offered: Spring 2025, Spring 2023, Spring 2022

Selected topics in building structures such as experimental structures and architectural preservation. For current offerings, see departmental website.

Rules & Requirements

Prerequisites: Consent of instructor

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 259X Special Topics: Building Structures 1 - 4 Units

Terms offered: Spring 2009, Fall 2008, Spring 2008

Special topics such as experimental structures and architectural preservation.

Rules & Requirements

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 260 Introduction to Construction, Graduate Level 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

This course addresses the methods and materials of construction. While students will not be experts at the end of the semester, the course should give students the confidence to feel comfortable on a construction site or when designing a small building for a studio. The course will focus on four major territories: structural materials, building envelope, built elements such as stairs and cabinets, and costs, labor conditions, conventional practices, and the regulatory environments that control design.

Rules & Requirements

Prerequisites: Graduate standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Buntrock

ARCH 262 Architecture in Detail 3 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017

This seminar will reevaluate the material nature of buildings by studying and understanding construction details and the new technologies that are revolutionizing design construction and labor relations in architecture.

Rules & Requirements

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Davids

ARCH 264 Off-Site Fabrication: Opportunities and Evils 3 Units

Terms offered: Fall 2021, Spring 2020, Fall 2017

This seminar looks at the implications of off-site fabrication in architecture: consistent, protected environments; worker efficiency and safety; coordination of trades; cheaper, semi-skilled labor; construction periods shortened; and completion dates more predictable. Off-site fabrication can allow for increased refinement and trial assemblies. However, it may also create monotonous sameness when the processes and results are not considered with care.

Rules & Requirements

Prerequisites: 160, 260 or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Buntrock

ARCH 265 Japanese Craft and Construction 3 Units

Terms offered: Spring 2011, Spring 2009, Spring 2005

The class addresses the role craft and construction play in Japanese architecture and applies these lessons to the evaluation of an exemplary recent building having unusual technical features. Buildings are expressions of theoretic and technical intent and a response to cultural and economic forces; Japanese architecture is regarded as particularly innovative. In studying a system where there is an emphasis on collaboration, students also see the values of North American systems of architectural production.

Rules & Requirements

Prerequisites: 150, 160, or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Buntrock

ARCH 269 Special Topics in Construction and Materials 1 - 4 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

Selected topics in construction and materials. For current offerings, see departmental website.

Rules & Requirements

Prerequisites: Consent of instructor

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 270 History of Modern Architecture 3 Units

Terms offered: Fall 2025, Fall 2024, Fall 2023

This course examines developments in design, theory, graphic representation, construction technology, and interior programming through case studies of individual buildings. Each lecture will delve deeply into one or sometimes two buildings to examine program, spatial organization, critical building details, and the relationship of the case study building with regard to other parallel works and the architect's overall body of work.

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/Graduate

Grading: Letter grade.

Instructor: Castillo

ARCH 271 Methods in Historical Research and Criticism in Architecture 4 Units

Terms offered: Spring 2021, Spring 2019, Fall 2014

Rules & Requirements

Prerequisites: Doctoral candidate or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of lecture per week

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 273 Case Studies in Modern Architecture 3 Units

Terms offered: Fall 2010

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.

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/Graduate

Grading: Letter grade.

ARCH 275 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 or architectural culture.

Rules & Requirements

Prerequisites: The course is 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/Graduate

Grading: Letter grade.

Instructor: Crysler

ARCH 276 Spaces of Recreation and Leisure, 1850-2000 3 Units

Terms offered: Spring 2014, Spring 2012, Spring 2010

A reading and research seminar surveying the building types, social relations, and cultural ideas of recreation in the American city, including the tensions between home, public, and commercial leisure settings.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Groth

ARCH 277 California Architecture 3 Units

Terms offered: Spring 2025, Fall 2023, Fall 2021

Many California architects came from other places: Maybeck from New York via the Ecole des Beaux Arts; Schindler and Neutra from Vienna; Frank Gehry from Chicago. But, once they arrived, their encounters with the Golden State produced new and original forms of architecture. This seminar will examine the qualities of the state's environment, culture, economy, and population that have produced unique buildings and landscapes during the 20th century. It will look at both Northern and Southern California architecture, starting with canonical designers then moving beyond them to consider lesser-known regional architects whose work embodies local characteristics.

Rules & Requirements

Prerequisites: A previous architectural history class

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Crawford

ARCH 278 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 cases 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, 1860's, etc.) It provides a sampling of possibilities and models for the final student project, an in-depth, original research paper. Several themes thread their way through the course, including the role of the "unbuilt" in architectural history and architectural practice; the uses of the future in the construction of national and personal identities, cultural narratives, and modern mythologies; the importance of the future as cliché, and the role of play in cultural production.

Rules & Requirements

Prerequisites: 170A-170B and consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

Instructor: Shanken

ARCH 279 Special Topics in the History of Architecture 1 - 4 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

Selected topics in the history of architecture. For current offerings, see department website.

Rules & Requirements

Prerequisites: Consent of instructor

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 281 Methods of Inquiry in Architectural Research 4 Units

Terms offered: Fall 2023, Fall 2021, Fall 2019

This is the introductory course in methods of inquiry in architecture research to be required of all entering Ph.D. students in all areas of the program. The purpose is to train students in predissertation and prethesis research strategies, expose them to variety of inquiry methods including the value of scholarly research, the nature of evidence, critical reading as content analysis and writing, presenting and illustrating scholarship in the various disciplines of architecture.

Rules & Requirements

Prerequisites: M.S. or Ph.D. standing or consent of instructor

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 290 Dissertation Writing Seminar in Architectural History, Theory, and Society 4 Units

Terms offered: Prior to 2007

Post-candidacy research and writing seminar focused on dissertation completion.

Rules & Requirements

Prerequisites: Advancement to candidacy or instructor permission

Repeat rules: Course may be repeated for credit with advisor consent.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

ARCH 298 Special Group Study 1 - 4 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

Special group studies on topics to be introduced by instructor or students.

Rules & Requirements

Credit Restrictions: May be repeated for credit up to unit limitation.

Repeat rules: Course may be repeated for credit up to a total of 4 units.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer: 8 weeks - 8-32 hours of independent study per week

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: The grading option will be decided by the instructor when the class is offered.

ARCH 299 Individual Study and Research for Master's and Doctoral Students 1 - 12 Units

Terms offered: Fall 2025, Spring 2025, Fall 2024

Individual studies including reading and individual research under the supervision of a faculty adviser and designed to reinforce the student's background in areas related to the proposed degree.

Rules & Requirements

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

Hours & Format

Fall and/or spring: 15 weeks - 1-12 hours of independent study per week

Summer: 8 weeks - 1.5-22.5 hours of independent study per week

Additional Details

Subject/Course Level: Architecture/Graduate

Grading: Letter grade.

ARCH 375 Seminar in the Teaching of Architecture 2 Units

Terms offered: Spring 2025, Spring 2024, Spring 2023

This class is intended for first-time graduate student instructors, especially those working in studio and lab settings. The class covers a range of issues that normally come up when teaching, offers suggestions regarding how to work well with other graduate student instructors and faculty, and how to manage a graduate student instructor's role as both student and teacher. The greatest benefit of this class comes from the opportunity to explore important topics together. Using a relatively light, but provocative set of readings, the seminar will explore the issues raised each week. There will be one assignment intended to help students explore their own expectations as educators.

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Professional course for teachers or prospective teachers

Grading: Offered for satisfactory/unsatisfactory grade only.

Formerly known as: Architecture 300

ARCH 399 Supervised Teaching 1 or 3 Units

Terms offered: Spring 2025, Fall 2024

Professional course for prospective teachers.

Rules & Requirements

Prerequisites: Appointment as graduate student instructor

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

Hours & Format

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

Additional Details

Subject/Course Level: Architecture/Professional course for teachers or prospective teachers

Grading: Offered for satisfactory/unsatisfactory grade only.

ARCH 602 Individual Study for Doctoral Students 1 - 8 Units

Terms offered: Fall 2015, Fall 2014, Fall 2013

Individual study in consultation with the major field adviser, intended to provide an opportunity for qualified students to prepare themselves for the various examinations required of candidates for the Ph.D. This course may not be used for units or residence requirements for the doctoral degree.

Rules & Requirements

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

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer: 8 weeks - 2-8 hours of independent study per week

Additional Details

Subject/Course Level: Architecture/Graduate examination preparation

Grading: Offered for satisfactory/unsatisfactory grade only.