ARCHITECTURE

Contact Us

Departmental Office:
500 The Diana Center
212-854-8430
architecture@barnard.edu

Director of Undergraduate Studies:
Professor Karen Fairbanks
(212) 854-8430
kfairban@barnard.edu

Departmental Administrator:
Rachel Garcia-Grossman
(212) 854-8430
rgarcia@barnard.edu

The Department of Architecture

Mission

The Architecture major establishes an intellectual context for students to interpret the relation of form, space, program, materials and media to human life and thought. Through the Architecture curriculum, students participate in the ongoing shaping of knowledge about the built environment and learn to see architecture as one among many forms of cultural production. At the same time, the major stresses the necessity of learning disciplinary-specific tools, methods, terms and critiques. Thus, work in the studio, lecture or seminar asks that students treat architecture as a form of research and speculation which complement the liberal arts mission of expansive thinking.

Undergraduate Study in Architecture

Studying Architecture at Barnard College, Columbia College, and General Studies leads to a liberal arts degree — a Bachelor of Arts with a major in Architecture, and Barnard College is the administrative location for all undergraduate architecture studies at Columbia University and its partner institutions. A liberal arts education in architecture holds a unique position in academia and in relation to the discipline. If the goal of a professional education in architecture is to enable students to participate directly in the world as an architect — a liberal arts education asks that students consider the broader and myriad conditions in which architecture is conceived and practiced and, in turn, to understand how architecture inevitably alters those conditions. Students are asked to confront and interpret the complex social, cultural, political, and environmental processes that weave through architectural design and urbanism. The purpose of an undergraduate liberal arts degree in architecture is to educate students to think about the world through architecture.

The Architecture curriculum introduces design at a variety of scales, acknowledging that integrated design thinking is effective for problem solving at any scale and in any discipline. Students will experiment with full-scale installations and devices and make small-scale models of urban conditions from which they extract, interpret and invent new possibilities of inhabitation and use. The curriculum intentionally balances the traditions of handcrafted representation with evolving digital technologies of architectural design and communication.

The Architecture major complements, and makes great use of its University setting. With access to superb libraries, research centers, graduate programs, and abundant intellectual resources, our students have the opportunity to follow their creative instincts to great depth and breadth — and they do. The major depends on New York City as more than a convenient site for many design and research projects and frames the City as one of the key social and architectural, and thus didactic, markers of Modernity. Architecture students study with peers from countries around the world in one of the most diverse cities in the world. A large majority of the Architecture students expand their education by interning in Architecture or a related field during their undergraduate studies. Alumni of the Department are leaders in architecture and design fields around the world. The faculty teaching in the undergraduate program are dedicated teachers who are also at the forefront of practice and research and are similarly drawn to New York City as a nexus of global design thinking.

Students interested in obtaining a professional degree in Architecture continue on to graduate programs after their undergraduate degree, and students from the Barnard Columbia program have enjoyed enormous success in their admissions to the most competitive graduate programs in the country. Students who study Architecture as undergraduates have also pursued graduate degrees in a variety of disciplines including Urban Planning, Law, and Media and Communications.

Student Learning Outcomes

Students in the Architecture Majors who fully engage with the curriculum should be able to complete the following outcomes:

- Apply integrated design thinking to specific problems in and beyond the discipline;
- Visually communicate architectural concepts and research using discipline-specific techniques in multiple media;
- Verbally present independent, group or assigned research, in multiple media formats;
- Organize and concisely write in a variety of formats including reports, case studies, synthetic overviews, etc.;
- Understand and critically interpret major buildings and themes of Architectural history and theory;
- Be intellectually prepared for graduate studies in architecture and related disciplines.

Advising Appointments

Current students as well as prospective students with questions about our courses and programs of study are encouraged to meet with our full-time faculty members. Faculty advising appointments are open to anyone who is interested in learning more about our department. During the summer break, all current and prospective students are instead invited to submit their questions by email to architecture@barnard.edu.

Full-Time Faculty

Professors of Professional Practice:
Karen Fairbanks (Chair)
Kadambani Baxi

Assistant Professors:
Anoopadha Iyer Siddiqi
Ignacio G. Galán
Ralph Ghoche
Nick Smith
Adjunct Faculty

**Adjunct Professors:**
- Joeb Moore
- Madeline Schwartzman
- Suzanne Stephens

**Adjunct Assistant Professors:**
- Virginia Black
- Diana Cristobal
- Lindsay Harkema
- Jason Kim
- Evangelos Kotsioris
- Galen Pardee
- Todd Rouhe
- Michael Schissel
- Fred Tang
- Irina Verona

Our Programs of Study

THE MAJOR IN ARCHITECTURE (p. 2)
THE MAJOR IN THE HISTORY AND THEORY OF ARCHITECTURE
THE MINOR IN ARCHITECTURE

The Major in Architecture

The major in architecture is open to Barnard College students, Columbia College students, and General Studies students. The required classes are broken down into four categories: studio, lectures seminars and workshops, senior courses, and the specialization:

**Studio Courses**

Four studio courses, to be taken one per semester (studio courses have limited enrollment and priority is given to Architecture majors):

- **ARCH UN2101** ARCHITECTURAL DESIGN: SYSTEMS AND MATERIALS
- **ARCH UN2103** ARCHITECTURAL DESIGN: ENVIRONMENTS AND MEDIATIONS
- **ARCH UN3201** Architectural Design, I
- **ARCH UN3202**

**Lecture, Seminar, and Workshop Courses**

Five courses following the distribution requirement below:

- **ARCH UN3117** Architectural Elective: History
- **ARCH UN3121** Architectural Elective: Society, Environment, and the Global
- **ARCH UN3122** Architectural Elective: Design, Media, and Technology

**Senior Courses**

- **ARCH UN3901** Senior Seminar

Elective Architecture seminar (another Senior Seminar in the Department, Advanced Architectural Research and Design, or Independent Research)

**Specialization Courses**

All majors are asked to complement their work with a thematic unit (three courses) called the “specialization.” Each student develops a specific specialization that broadens their architectural studies in one of the following areas or combination of areas: History, Society, Environment, Global, Design, Media, and Technology. Courses may be taken from across various departments. All majors, in consultation with their advisers, will develop a short (100 word) description of their specialization and advisers will approve their course selections. Students can request and develop other areas of specialization with adviser approval.

**Graduation Requirements**

The major also requires that students submit a portfolio and a writing sample before graduation. The design portfolio includes representative work from all design studios and the writing sample is a paper or essay from a senior level architecture or architecture-related course. Final submissions are archived in the department, the portfolios are displayed at the end of the year show, and both are used to award graduation honors.

* These are courses offered by the architecture department or other applicable departments offered within the University. Students should consult the program office for a list of applicable courses each semester.

The Major in the History and Theory of Architecture

The History and Theory of Architecture major stresses research and writing in Architectural History. This program of study is only open to Barnard College students; Columbia College and General Studies students that are interested in majoring in architectural history should contact the Department of Art History and Archaeology at Columbia University. The History and Theory of Architecture major requires a total of 14 courses, distributed as follows:

**Studio Courses**

1-2 studio courses, to be taken one per semester:

- **ARCH UN1020** Introduction To Architectural Design and Visual Culture
- **ARCH UN2101** ARCHITECTURAL DESIGN: SYSTEMS AND MATERIALS
- **ARCH UN2103** ARCHITECTURAL DESIGN: ENVIRONMENTS AND MEDIATIONS

**Lecture, Seminar, and Workshop Courses**

7-8 lecture, seminar, or workshop courses:

- **ARCH UN3117** Architectural Elective: History
- **ARCH UN3121** Architectural Elective: Society, Environment, and the Global
- **ARCH UN3122** Architectural Elective: Design, Media, and Technology

**Senior Courses**

3 to 4 Architectural Electives - any lecture, seminar, or workshop offered by the Architecture Department or an approved course from a related department

*Note: Studios, Lectures, Seminars, and Workshops must total to 9 courses

**Specialization**

3 courses for the specialization:

Each student develops a specialization that broadens the reach of their architectural studies and supports their thesis. All majors, in consultation with their advisers, will develop a short (100 word) description of their specialization and advisers will approve their course selections.

**Senior Courses**
2 courses for the senior course requirement:
ARCH UN3901 Senior Seminar
ARCH UN3998 Independent Study
All senior History and Theory of Architecture majors are required to enroll in one semester of Senior Seminar and to write a thesis which can be done through enrolling in Independent Study (ARCH UN3997 or ARCH UN3998). Please consult with your major adviser for planning your thesis.

The Minor in Architecture
The minor in architecture is only open to Barnard College students and SEAS students at Columbia University. The minor in architecture requires a total of five courses, distributed as follows:

<table>
<thead>
<tr>
<th>Studio Courses</th>
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<tbody>
<tr>
<td>1-3 of the following courses:</td>
<td></td>
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<tr>
<td>ARCH UN1020 Introduction To Architectural Design and Visual Culture</td>
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| Three history/theory courses   |   |
| ARCH UN2101 ARCHITECTURAL DESIGN: SYSTEMS AND MATERIALS |   |
| ARCH UN2103 ARCHITECTURAL DESIGN: ENVIRONMENTS AND MEDIATIONS |   |

| Lecture, Seminar, and Workshop Courses |   |
| ARCH UN3117 is required along with 1-3 Architectural Electives - any lecture, seminar, or workshop offered by the Architecture Department or an approved course from a related department. |   |
| ARCH UN3117 |   |

Academic Year 2022-2023 Courses
Most architecture courses have a restriction on online enrollment (meaning that you will automatically appear on the wait list when you try to register online) and require an application in order to be admitted. Links to our 2021-2022 applications are available on our website. For a complete list of courses across the university that have been approved to fulfill various architecture major and minor requirements, please refer to our program planning list. You are welcome contact us with any questions you may have: architecture@barnard.edu.

Fall 2022 Courses
ARCH UN1020 Introduction To Architectural Design and Visual Culture. 3 points.
Corequisites: Intended for the non-major, sophomore year and above.
Enrollment limited to 18 students.
Introductory design studio to introduce students to architectural design through readings and studio design projects. Intended to develop analytic skills to critique existing media and spaces. Process of analysis used as a generative tool for the students' own design work. Attendance is mandatory at the first class meeting in order to form class registration lists.

ARCH UN2101 ARCHITECTURAL DESIGN: SYSTEMS AND MATERIALS. 4 points.
This architectural design studio explores material assemblies, techniques of fabrication, and systems of organization. These explorations will be understood as catalysts for architectural analysis and design experimentation.
Both designed objects and the very act of making are always embedded within a culture, as they reflect changing material preferences, diverse approaches to durability and obsolescence, varied understandings of comfort, different concerns with economy and ecology. They depend on multiple resources and mobilize varied technological innovations. Consequently, we will consider that making always involves making a society, for it constitutes a response to its values and a position regarding its technical and material resources. Within this understanding, this studio will consider different cultures of making through a number of exercises rehearse design operations at different scales—from objects to infrastructures.

ARCH UN2103 ARCHITECTURAL DESIGN: ENVIRONMENTS AND MEDIATIONS. 4 points.
This architectural design studio course explores modes of visualization, technologies of mediation and environmental transformations. These explorations will be used as catalysts for architectural analysis and design experimentation.
Introducing design methodologies that allow us to see and to shape environmental interactions in new ways, the studio will focus on how architecture may operate as a mediator – an intermediary that negotiates, alters or redirects multiple forces in our world: physical, cultural, social, technological, political etc. The semester will progress through three projects that examine unique atmospheric, spatial and urban conditions with the aid of multimedia visual techniques; and that employ design to develop creative interventions at the scales of an interface, space and city.
ARCH UN3120 CITY, LANDSCAPE, # ECOLOGY. 3.00 points.
City, Landscape, Ecology is a thematically driven course that centers on issues and polemics related to landscape, land settlement and ecology over the past two centuries. The course interrogates our changing attitudes to nature from the 18th century to the present, focusing on the artistic and architectural responses to these perceptions. It aims to demonstrate the important role that artists and architects have played, and are to play, in making visible the sources of environmental degradation and in the development of new means of mitigating anthropogenic ecological change. City, Landscape, Ecology is divided into three parts. Part I explores important episodes in the history of landscape: picturesque garden theory, notions of “wilderness” as epitomized in national and state parks in the United States, Modern and Postmodern garden practices, and the prevalence of landscape in the work of artists from the 1960s to the present. The purpose here is to better understand the role that territorial organization plays in the construction of social practices, human subjectivities, and technologies of power. We then turn to ecology and related issues of climate, urbanization and sustainability in Part II. Here we will look at the rise of ecological thinking in the 1960s; approaches to the environment that were based on the systems-thinking approach of the era. In the session “Capitalism, Race and Population Growth” we examine the history of the “crisis” of scarcity from Thomas Robert Malthus, to Paul R. Ehrlich (The Population Bomb, 1968) to today and look at questions of environmental racism, violence and equity. The course concludes with Part III (Hybrid Natures). At this important juncture in the course, we will ask what is to be done today. We’ll examine the work of contemporary theorists, architects, landscape architects, policy makers and environmentalists who have channeled some of the lessons of the past in proposing lasting solutions to our land management and ecological crises of the present and future.

ARCH UN3201 Architectural Design, I. 4.5 points.
Prerequisites: ARCH V3101 and ARCH V3103. Open to architecture majors or with permission of instructor.
Introduction to architectural design taught in a studio environment, through a series of design projects requiring drawings and models. Field trips, lectures, and discussions are organized in relation to studio exercises. Portfolio of design work from Architectural Representation: Abstraction and Perception will be reviewed the first week of classes.

ARCH UN3211 Architectural Design, III. 4.5 points.
Prerequisites: ARCH V3202 and permission of the department chair.
Enrollment limited as space permits.
Further exploration of the design process through studio work. Programs of considerable functional, contextual, and conceptual complexity are undertaken. Portfolio required for review first day of fall semester or earlier, as requested by the department. Class list based on portfolio review will be formed by first class meeting.

ARCH UN3312 Special Topics in Architecture. 3 points.
Topics vary yearly. Course may be repeated for credit. Attendance is mandatory at the first class meeting in order to form class registration lists.

ARCH UN3901 Senior Seminar. 4 points.
Prerequisites: Enrollment limited to 16 students per section. Open to architecture majors only unless space permits.
Readings, individual class presentations, and written reports. Attendance is mandatory at the first class meeting in order to form class registration lists.

ARCH UN3997 Independent Study. 2-4 points.
Prerequisites: Permission of the program director in term prior to that of independent study. Independent study form available at departmental office.

ARCH GU4300 The Just City: Global Debates in Urban Planning and Policy. 4.00 points.
Urbanization is inherently unequal, inscribing social, economic, environmental, and political unevenness into the spatial fabric of the city. But the distribution of such inequality is not inevitable. Urbanization is a product of the collective decisions we make (or choose not to make) in response to the shared challenges we face in our cities. And, thus, the patterns of urbanization can be changed. This is the task of urban planning and the starting point for this advanced seminar, which asks how we can reshape our cities to be more just—to alleviate inequality rather than compound it. In embarking on this effort, we face numerous “wicked” problems without clear-cut solutions. The approaches one takes in addressing urban inequality are therefore fundamentally normative—they are shaped by one’s place in the world and one’s view of it. The central challenge in addressing inequality is thus establishing a basis for collective action amongst diverse actors with differing—and sometimes conflicting—values and views. In other words, planning the just city a matter of both empathy and debate. In this course, we will endeavor to develop informed positions that can help us engage with others as a basis for taking collective action. The course is organized into four 3-week modules, each of which addresses a dimension of the just city: equity, democracy, diversity, and sustainability. In the first week of each module, we will discuss how the issue has been understood in history and theory (with an emphasis on tradeoffs between different priorities and values); in the second week, we will apply this discussion to a global case study prepared and presented by a team of students; and in the third week, we will hold an in-class debate to determine what should be done. Specific case studies vary each year.

Spring 2022 Courses
The course schedule listed below may be subject to change. Please revisit this page and the online Directory of Classes in November 2021 to confirm our spring 2022 course information. You are also welcome to contact us with any questions you may have: architecture@barnard.edu.
ARCH UN2101 ARCHITECTURAL DESIGN: SYSTEMS AND MATERIALS. 4 points.
This architectural design studio explores material assemblies, techniques of fabrication, and systems of organization. These explorations will be understood as catalysts for architectural analysis and design experimentation.

Both designed objects and the very act of making are always embedded within a culture, as they reflect changing material preferences, diverse approaches to durability and obsolescence, varied understandings of comfort, different concerns with economy and ecology. They depend on multiple resources and mobilize varied technological innovations. Consequently, we will consider that making always involves making a society, for it constitutes a response to its values and a position regarding its technical and material resources. Within this understanding, this studio will consider different cultures of making through a number of exercises rephase design operations at different scales—from objects to infrastructures.

ARCH UN2103 ARCHITECTURAL DESIGN: ENVIRONMENTS AND MEDIATIONS. 4 points.
This architectural design studio course explores modes of visualization, technologies of mediation and environmental transformations. These explorations will be used as catalysts for architectural analysis and design experimentation.

Introducing design methodologies that allow us to see and to shape environmental interactions in new ways, the studio will focus on how architecture may operate as a mediator—an intermediary that negotiates, alters or redirects multiple forces in our world: physical, cultural, social, technological, political etc. The semester will progress through three projects that examine unique atmospheric, spatial and urban conditions with the aid of multimedia visual techniques; and that employ design to develop creative interventions at the scales of an interface, space and city.

ARCH UN1020 Introduction To Architectural Design and Visual Culture. 3 points.

Corequisites: Intended for the non-major, sophomore year and above.
Enrollment limited to 18 students.
Introductory design studio to introduce students to architectural design through readings and studio design projects. Intended to develop analytic skills to critique existing media and spaces. Process of analysis used as a generative tool for the students’ own design work. Attendance is mandatory at the first class meeting in order to form class registration lists.

ARCH UN3400 ENVIRONMENTAL VISUALIZATIONS OF NYC. 4 points.
Prerequisites: (ARCH UN1020) or (ARCH UN3101) or (ARCH UN3103) or Students must have taken at least one architectural design studio or an equivalent multimedia production course.
The goal of this seminar + workshop course is to develop new visual representations of impact of environmental issues on New York City. We will focus on two catastrophic events and sites: Greenpoint Oil Spill (1978), Newtown Creek; and Hurricane Sandy (2012), Lower Manhattan; and examine related toxic histories, environmental damage, impacted communities, clean-up and protection efforts and planning and design possibilities. Resourcing historical maps, on-site documentation and future design proposals, the class will explore environmental crises and their impact on the built environment and on the social, cultural and political life of the city. Students will conduct research at The Map Division of the New York Public Library, meet with environmental and design experts, and visit sites in Brooklyn and Manhattan. Based on this research, students will use digital mapping techniques, 360 video, VR (virtual reality) and AR (augmented reality) technologies to create compelling experiential, spatial, analytical, critical, and reflective reconstructions of catastrophic events and remediation. Course readings further examine environmental issues and climate change from four unique perspectives: mapping and urban/ecological histories; design research reports; global and planetary views; and graphic, audio-visual imaginaries.

ARCH UN3901 Senior Seminar. 4 points.
Prerequisites: Enrollment limited to 16 students per section. Open to architecture majors only unless space permits.
Readings, individual class presentations, and written reports. Attendance is mandatory at the first class meeting in order to form class registration lists.

ARCH GU4300 The Just City: Global Debates in Urban Planning and Policy. 4.00 points.
Urbanization is inherently unequal, inscribing social, economic, environmental, and political unevenness into the spatial fabric of the city. But the distribution of such inequality is not inevitable. Urbanization is a product of the collective decisions we make (or choose not to make) in response to the shared challenges we face in our cities. And, thus, the patterns of urbanization can be changed. This is the task of urban planning and the starting point for this advanced seminar, which asks how we can reshape our cities to be more just—to alleviate inequality rather than compound it. In embarking on this effort, we face numerous “wicked” problems without clear-cut solutions. The approaches one takes in addressing urban inequality are therefore fundamentally normative—they are shaped by one’s place in the world and one’s view of it. The central challenge in addressing inequality is thus establishing a basis for collective action amongst diverse actors with differing—and sometimes conflicting—values and views. In other words, planning the just city a matter of both empathy and debate. In this course, we will endeavor to develop informed positions that can help us engage with others as a basis for taking collective action. The course is organized into four 3-week modules, each of which addresses a dimension of the just city: equity, democracy, diversity, and sustainability. In the first week of each module, we will discuss how the issue has been understood in history and theory (with an emphasis on tradeoffs between different priorities and values); in the second week, we will apply this discussion to a global case study prepared and presented by a team of students; and in the third week, we will hold an in-class debate to determine what should be done. Specific case studies vary each year.