# **ARCHITECTURE (ARCH)**

#### ARCH 1101 - Design I (6 Credits)

Introduction to design as a conceptual discipline directed at the analysis, interpretation, synthesis, and transformation of the physical environment. Exercises are aimed at developing an understanding of the issues, elements, and processes of environmental design.

Enrollment Information: Enrollment limited to: B.Arch. students. Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 1102 - Design II (6 Credits)

Continuation of ARCH 1101. Covers human, social, technical, and aesthetic factors related to space and form. Design problems range from those of the immediate environment of the individual to that of small social groups.

Prerequisites: ARCH 1101 and ARCH 1501.

Enrollment Information: Enrollment limited to: B.Arch. students. Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 1103 - Elective Design Studio (6 Credits)

Last Four Terms Offered: Fall 2021, Fall 2020, Fall 2019, Fall 2018

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 1104 - Elective Design Studio (6 Credits)

Non sequence design studio for students who are not architecture majors at Cornell and for department students taking design studio for nonsequence credit.

Enrollment Information: Enrollment limited to: non-B.Arch. students. Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2020, Spring

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 1110 - Introduction to Architecture: Design Studio (3 Credits)

Designed to introduce students to ideas, principles, and methods of solving architectural problems in a studio setting. Through a graduated sequence of exercises culminating in a major semester project, students explore the architectural concepts of space, form, function, and technology. Instruction is via highly personalized critiques of individual student work by assigned department faculty members, as well as periodic reviews of the group by invited faculty and guest critics. The grade is based on the overall performance in the studio with special emphasis on the quality of a major studio project.

Enrollment Information: Enrollment limited to: non-B.Arch. students, high school students in 11th and 12th grades, and any individuals with a minimum of a high school diploma interested in exploring the field of architecture.

Last Four Terms Offered: Summer 2025, Summer 2024, Summer 2023, Summer 2022

Schedule of Classes (https://classes.cornell.edu/)

## ARCH 1300 - An Introduction to Architecture: Lectures (3 Credits)

Survey course that covers the many facets of architecture: history, design principles, preservations, landscape architecture, building technology, and cultural factors. Course format comprises lectures, demonstrations, films, and field trips. Evaluation is based on guizzes and a final exam.

**Enrollment Information:** Enrollment limited to: non-B.Arch. students, high school students in 11th and 12th grades, and anyone with minimum of a high school diploma interested in exploring the field of architecture.

Last Four Terms Offered: Summer 2025, Summer 2024, Summer 2023,

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 1301 - Introduction to Architecture (3 Credits)

Intended to familiarize non-architecture students with the art and science of architecture. The fundamentals of plan, section, and elevation, the primary elements that comprise an architectural form; basic organizational principles; the ways in which we perceive architectural space; and the various concepts of function in relation to form will be included among the topics to be covered, using examples from numerous times and cultures as well as from contemporary Cornell campus. Enrollment Information: Enrollment limited to: non-B.Arch. students. Last Four Terms Offered: Fall 2024, Spring 2018, Spring 2017, Spring

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 1501 - Representation I: Freehand Architectural Drawing (3

Introduction to freehand drawing as an analytical tool within the design process.

Enrollment Information: Enrollment limited to: B.Arch. students or permission of instructor.

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 1510 - Introduction to Virtual and Augmented Reality (3 Credits)

Augmented Reality is emerging as an important and exciting form of communication for architects and designers and those with an interest in visualizing the environment. In this course we will discuss technical aspects of how AR technologies work and how it has the potential to change the way architects and designers interact with their work and with each other. We will introduce students to immersive realities as a tool for both creating and experiencing digital spaces. Students will learn the basics of 3D modeling CAD software and explore strategies for using realtime rendering and game development to create experiences that adapt and react directly to the viewer.

Last Four Terms Offered: Summer 2022, Summer 2021 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 1518 - Constructing Drawings: Negotiating Between Digital and Physical (3 Credits)

As the tools we utilize become increasingly digital and complex, it is necessary for designers to understand their limits and constraints as design and representational tools. Through this understanding, new methods of representation and visualization can be developed to expand how we think, see, and ultimately design. This course will examine the role of drawing as a generative tool for design to inform new methods of making. Through research, experimentation, drawing, and making, students will investigate new methods and processes for design which hybridize digital and analog techniques to inform alternative approaches for drawing. Further, students will engage with digital fabrication techniques, computation, and robotics to develop and test hybrid methods for architectural image-making.

Last Four Terms Offered: Summer 2022

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 1610 - Design Making: Introduction to Digital Fabrication (3 Credits)

The use of digitally driven design tools constitutes an important skill set for future architects, designers, engineers, and artists. Rooted in the emergence and proliferation of digital design culture, this course introduces students to the fundamentals of digital design. Students will become familiar with 3D modeling, parametric design, and representation through a series of hands-on workshops and tutorials. Students will visualize their design explorations digitally using Rhinoceros 3D and physically using fabrication techniques developed through their digital design tools.

Last Four Terms Offered: Summer 2022, Summer 2021 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 1611 - Environmental Systems I: Introduction to Sustainable Design (3 Credits)

This course examines the relationships between building, site, landscape and sustainability through the lens of ecology and systems thinking. Topics include: basic concepts of sustainability, energetic processes, climate, spatial data visualization, global warming, solar geometry, landscape processes, microclimates, site strategies and grading, building footprint & sustainable building metrics.

**Exploratory Studies: (CU-SBY)** 

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 1612 - Structural Concepts (3 Credits)

Fundamental concepts of structural behavior. Statics and strength of materials. Introduction to and analysis of simple structural systems. **Last Four Terms Offered:** Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 1718 - Introduction to Topics in Digital Applications (3 Credits)

This course addresses pertinent issues relative to the subject of computer/digital applications. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content.

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 1801 - History of Architecture I (3 Credits)

The history of the built environment as social and cultural expression from the earliest to more recent times. Themes, theories, and ideas in architecture and urban design are explored, beginning with the earliest written records.

Exploratory Studies: (EAAREA, EUAREA)

Last Four Terms Offered: Spring 2025, Spring 2024, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 1901 - FWS: Topics in Architecture (3 Credits)

This First-Year Writing Seminar is devoted to topics related to architecture.

**Distribution Requirements: (WRT-AG)** 

Last Four Terms Offered: Fall 2024, Spring 2024, Fall 2023, Spring 2023 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 2100 - Elective Design Studio (6 Credits)

Non sequence design studio for students who are not architecture majors at Cornell and for department students taking design studio for non-sequence credit.

Last Four Terms Offered: Fall 2022, Summer 2022, Fall 2021, Summer 2021

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 2101 - Design III (6 Credits)

Students develop an understanding of context and precedent in the construction of architectural form, and are introduced to contextual and programmatic densities in addition to circulatory, spatial, and organizational strategies in the design process.

Prerequisites: ARCH 1102.

Enrollment Information: Enrollment limited to: B.Arch. students. Last Four Terms Offered: Summer 2025, Fall 2024, Fall 2023, Fall 2022 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 2102 - Design IV (6 Credits)

Design and development of complex architectural projects situated in urban contexts and developed with regard to program, site, building, and representation, with an emphasis on social justice and community engagement.

Prerequisites: ARCH 2101, and ARCH 2502 or permission of instructor. Enrollment Information: Enrollment limited to: B.Arch. students. Last Four Terms Offered: Summer 2025, Spring 2025, Spring 2024, Spring 2023

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 2302 - Architectural Analysis: Architecture, the City, and Landscape (3 Credits)

Agendas and approaches to the making and reading of urban conditions and landscape designs. The analysis of canonical works and texts, with emphasis on architecture within and without the city as vehicles of study, and with frequent reference to urban and landscape theories and designs, as well as to representations of the city and garden from other media and disciplines.

Last Four Terms Offered: Spring 2025, Fall 2024, Fall 2023, Fall 2022 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 2502 - Representation II: Media of Representation (3 Credits)

The understanding of representational and fabrication techniques as generative tools in the design process.

Prerequisites: ARCH 1501 or permission of instructor.

Last Four Terms Offered: Fall 2024, Spring 2023, Spring 2022, Spring 2021

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 2613 - Structural Systems (3 Credits)

Behavior and design of overall structural systems for buildings. Particular focus on systems used for resisting lateral loads (rigid frames, braced frames and shear walls) and for spanning long distances (trusses and space frames; cables and membranes; and arches, domes, and shells). **Prerequisites:** ARCH 1612.

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 2614 - Building Technology I: Materials and Methods (3 Credits)

Building construction is examined from the following standpoints: life safety (including fire safety and zoning constraints on site planning); building service systems (plumbing, electrical, vertical transportation, security, fire protection); materials, sustainability, and life-cycle analysis; accessibility; technical documentation and outline specifications.

### ARCH 2616 - Environmental Systems II: Building Dynamics (3 Credits)

This course examines the design and analysis of the building envelope, with a focus on the material and energetic transformations taking place at the boundary between architecture and environment. Topics include: comfort, building thermodynamics, envelope assemblies, thermal modeling, active and passive control systems, daylighting and architectural acoustics.

Prerequisites: ARCH 1611.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 2802 - History of Architecture II (3 Credits)

The history of the built environment as social and cultural expression from more recent times to the present. Architecture and urban design themes, theories, and ideas are addressed in greater detail leading to the present time.

Prerequisites: ARCH 1801.

**Exploratory Studies: (EAAREA, EUAREA)** 

Last Four Terms Offered: Fall 2024, Spring 2023, Spring 2022, Spring 2021

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 3100 - Elective Design Studio (6 Credits)

Non sequence design studio for students who are not architecture majors at Cornell and for department students taking design studio for non-sequence credit.

Last Four Terms Offered: Fall 2022, Summer 2022, Fall 2021, Summer 2021

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 3101 - Design V (6 Credits)

Design and development of complex architectural projects situated in urban contexts and developed with regard to program, site, building, and representation.

Prerequisites: ARCH 1611, ARCH 1612, ARCH 2613, ARCH 2614, ARCH 2616, and ARCH 2102.

**Enrollment Information:** Enrollment limited to: B.Arch. students. **Last Four Terms Offered:** Summer 2025, Spring 2025, Fall 2024, Summer 2024

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 3102 - Design VI (6 Credits)

Design and development of complex architectural projects situated in urban contexts and developed with regard to program, site, building, and representation.

Prerequisites: ARCH 3101.

Enrollment Information: Enrollment limited to: B.Arch. students.

Last Four Terms Offered: Summer 2025, Spring 2025, Fall 2024, Summer 2024

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 3105 - NOMA Student Design Competition (1 Credit)

In this class, a group of students form a design team that competes in the NOMA Student Design Competition in response to a specific brief.

**Prerequisites:** ARCH 1101 or permission of instructor.

**Last Four Terms Offered:** Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 3109 - Elective Design Studio (6 Credits)

Nonsequence design studio used for off-campus foreign programs for third-year B.Arch. students. Credit will be applied toward ARCH 4101 upon successful completion of ARCH 3102.

**Last Four Terms Offered:** Summer 2022, Summer 2021, Summer 2020, Spring 2020

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 3117 - Contemporary Italian Culture - Italian Cinema (1 Credit)

This course examines the cinematic representation of Italy with particular emphasis to the use of settings and space. We will explore how the visions of urban and rural spaces reflect the evolving cultural, social and political fabric of a nation in a period of rapid and often traumatic historical change. The course will feature screening of films set in several Italian locations, from Rome to Milan, from Naples to Venice, from Sicily to the Apennines, and represent different moments of Italian contemporary history. We will take advantage of the unique opportunity to study this cinema while residing in Rome and traveling in Italy, through the experience of the real settings that have figured so prominently in Italian cinema. Each session consists of an in-class lecture and a film screening. The course will also include one or two guest lecturers each semester.

**Exploratory Studies: (EUAREA)** 

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

ARCH 3197 - Special Investigations in Architectural Design (1-3 Credits) Independent study.

Prerequisites: ARCH 1101, ARCH 1102, ARCH 2101, and ARCH 2102. Exploratory Studies: (CU-UG)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 3302 - Architectural Analysis I: Buildings, Drawings, and Texts (3 Credits)

Agendas and approaches to the making and reading of space and form in 20th- and 21st-century architecture. The analysis of canonical works and texts, with frequent reference to relevant works prior to the 20th century, and with an emphasis on buildings and drawings as the vehicles of study, with occasional citations from painting, film, literature, and other critical works.

Prerequisites: ARCH 2302.

**Last Four Terms Offered:** Fall 2023, Fall 2022, Fall 2021, Fall 2020 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 3308 - Special Topics in the Theory of Architecture I (3 Credits)

This course addresses pertinent issues relative to the subject of Theory of Architecture. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester.

**Prerequisites:** ARCH 2301 and ARCH 3301 or permission of instructor. **Exploratory Studies:** (EUAREA)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 3397 - Special Investigations in the Theory of Architecture I (1-3 Credits)

Independent study.

Prerequisites: ARCH 2301. Prerequisite or Corequisite: ARCH 3301. Exploratory Studies: (CU-UG)

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#### ARCH 3418 - Architecture, Culture, and Society Seminar (3 Credits)

This course addresses pertinent issues relative to the subject of architecture, culture, and society. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content.

**Prerequisites:** ARCH 1801 and 2802, or permission of instructor. Schedule of Classes (https://classes.cornell.edu/)

# ARCH 3497 - Special Investigations in Architecture, Culture, and Society (1-3 Credits)

Independent study.

Prerequisites: ARCH 1801 and ARCH 2802.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 3605 - Bridge Design (3 Credits)

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 3615 - Building Technology II: Structural Elements (3 Credits)

Concepts and procedures for the design, manufacture, and construction of structural components (e.g., walls, columns, beams, slabs) in steel, concrete, masonry, and timber.

Prerequisites: ARCH 2614.

Last Four Terms Offered: Spring 2024, Spring 2023, Spring 2022, Spring

2021

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 3702 - Visual Imaging in the Electronic Age (4 Credits)

Crosslisted with ART 2907, CS 1620, ENGRI 1620

Interdisciplinary survey course designed to introduce students in the creative arts, science, and engineering to the concepts of 2D and 3D digital pictorial representation and display. It is a concept course that concentrates on why rather than how. Topics include perspective representations, display technology, how television works, bandwidth concepts, digital photography, computer graphics modeling and rendering, color perception, 3D data acquisition, volumetric imaging, and historical precedents, primarily from the art world.

**Distribution Requirements:** (MQR-AAP)

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2021, Fall 2020

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 3819 - Special Topics in the History of Architecture and Urbanism (3 Credits)

This course addresses pertinent issues relative to the subject of History of Architecture and Urbanism. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester

Prerequisites: ARCH 1801 and ARCH 2802 or permission of instructor.

**Exploratory Studies:** (EUAREA)

**Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 3820 - The Topography and Urban History of Rome in Antiquity and the Middle Ages (3 Credits)

Rome is a prisoner of its past. The entire city confronts the student with almost 30 centuries of urban and architectural history. This course intends to reconstruct the urban history of Rome from its origins through the Middle Ages (10th century bc-12th century ad). The purpose of this course will be to discover the layers of Rome, combining archaeology with literature, architecture, and urban history with art history. The goal is a thorough and direct knowledge of the Roman and Medieval urban landscape and the way this landscape has sometimes survived until today. Special attention will be given to Roman and Medieval building typology, both private and public, and the development of the urban infrastructure (street system, water supply, fortifications, etc.). Strong emphasis will be placed upon continuity, use/reuse, and transformation of buildings and spaces, etc. Every week one or two different regions will be explored that are typical for a particular moment of the urban history. Visits to sites outside Rome also will be used to address the issue of urban history in Italy in antiquity and the Middle Ages.

**Distribution Requirements:** (ALC-AAP) **Exploratory Studies:** (CU-ITL); (EUAREA)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 3823 - Urban Design, Architecture, and Art in Renaissance and Baroque Rome (3 Credits)

This course focuses on the Renaissance and Baroque phases (15th-18th centuries) of Rome's history. The first class sessions will survey the city's urban history and form from its origins to the present, and we will often turn our attention to earlier and later developments, without an understanding of which the Renaissance and Baroque periods would be only partially intelligible. While the history of urban and architectural design will be our main focus, we will also look at key episodes of painting and sculpture, especially by artists who are also among the principal architects of these periods (Michelangelo, Bernini).

Prerequisites: ARCH 1801 and ARCH 2802, or permission of instructor.

**Distribution Requirements:** (ALC-AAP)

**Exploratory Studies:** (CU-ITL)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 3897 - Special Investigations in History of Architecture and Urbanism (1-3 Credits)

Independent study.

Prerequisites: ARCH 1801 and ARCH 2802.

**Exploratory Studies: (EUAREA)** 

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 4100 - Elective Design Studio (6 Credits)

Non sequence design studio for students who are not architecture majors at Cornell and for department students taking design studio for non-sequence credit.

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Summer 2022 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 4101 - Design VII (6 Credits)

Advanced programs in architectural design, with options in, but not limited to, urban design, architectural technology, computational design, ecology, culture, and representation.

**Prerequisites:** ARCH 1801, ARCH 2302, ARCH 2802, ARCH 3102, ARCH 3301, and ARCH 3615.

**Enrollment Information:** Enrollment limited to: B.Arch. students. **Last Four Terms Offered:** Summer 2025, Spring 2025, Fall 2024, Summer 2024

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 4102 - Design VIII (6 Credits)

Advanced programs in architectural design, with options including, but not limited to, urban design, architectural technology, computational design, ecology, culture, and representation.

Prerequisites: ARCH 4101.

Enrollment Information: Enrollment limited to: B.Arch. students.

Last Four Terms Offered: Summer 2025, Spring 2025, Fall 2024, Summer 2024

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 4300 - Architectural Publications (3 Credits)

Crosslisted with ARCH 4500

Colloquy and practicum on issues related to the production of an architectural journal, as well as other theoretical and practical production issues related to the exchange of architectural ideas. Exercises cover both theoretical as well as hands-on aspects of architectural publication. Last Four Terms Offered: Fall 2021, Spring 2020, Spring 2018, Fall 2017 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 4408 - Special Topics in Architecture, Culture, and Society (3 Credits)

This course addresses pertinent issues relative to the subject of Architecture, Culture and Society. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 4500 - Architectural Publications (3 Credits)

Crosslisted with ARCH 4300

Colloquy and practicum on issues related to the production of an architectural journal, as well as other theoretical and practical production issues related to the exchange of architectural ideas. Exercises cover both theoretical as well as hands-on aspects of architectural publication. Last Four Terms Offered: Fall 2021, Spring 2020, Spring 2018, Fall 2017 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 4508 - Special Investigations in Visual Representation (1-3 Credits)

Independent study.

Prerequisites: ARCH 1501, ARCH 2502. Exploratory Studies: (CU-UG)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 4509 - Special Topics in Visual Representation I (3 Credits)

This course addresses pertinent issues relative to the subject of Visual Representation. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester.

Prerequisites: ARCH 1501 and ARCH 2502, or permission of instructor. Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 4601 - Ecological Literacy and Design (3 Credits)

Crosslisted with DEA 4220

This course is a design-oriented lecture/seminar course for students who are concerned about the role they play as design professionals in affecting the biophysical world. The course's prime objective is to develop a new worldview founded on a broader sensitivity for things living and an accompanying set of meaningful environmental ethics. The course's secondary objectives are to develop a deeper knowledge of environmental issues, construct conceptual frameworks for analysis of these issues and to demonstrate how ecological knowledge can be applied to design.

**Exploratory Studies: (CU-SBY)** 

Last Four Terms Offered: Fall 2024, Spring 2023, Spring 2022, Spring 2021

#### **Learning Outcomes:**

- Develop grounding in the field of ecology as it pertains to the human/ nature relationship and the manifest expressions of these ideas through the design of the built environment.
- Demonstrate a greater proficiency in critical thinking through rhetorical analysis and criticism of the readings.
- Display commitment to ethical principles, especially those pertaining to the environment.

Schedule of Classes (https://classes.cornell.edu/)

## ARCH 4605 - Special Topics in Building Technology (3 Credits)

This course addresses pertinent issues relative to the subject of Building Technology. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester.

**Prerequisites:** ARCH 2615 or permission of instructor.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 4619 - Special Topics in Environmental Systems and Conservation (3 Credits)

This course addresses pertinent issues relative to the subject of Environmental Systems and Conservation. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester.

Prerequisites: ARCH 1611, ARCH 2613, and ARCH 2616 or permission of instructor.

**Exploratory Studies: (CU-SBY)** 

Last Four Terms Offered: Spring 2021, Spring 2020, Spring 2019, Spring 2018

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 4697 - Special Investigations in Construction (1-3 Credits)

Independent study.

Prerequisites: ARCH 2614 and ARCH 2615.

**Exploratory Studies:** (CU-UG)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 4698 - Special Investigations in Environmental Systems and Conservation (1-3 Credits)

Independent study.

**Prerequisites:** ARCH 1611 and ARCH 2616. **Exploratory Studies:** (CU-SBY, CU-UG)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 4699 - Special Investigations in Structures (1-3 Credits)

Independent study.

Prerequisites: ARCH 1612 and ARCH 2613.

**Exploratory Studies: (CU-UG)** 

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 4901 - Undergraduate Thesis in the History of Architecture and Urbanism (4 Credits)

Enrollment Information: Enrollment limited to: BS honors candidates in

History.

**Exploratory Studies: (CU-UG)** 

**Last Four Terms Offered:** Spring 2023, Fall 2022, Spring 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 5100 - Elective Design Studio (6 Credits)

Non sequence design studio for students who are not architecture majors at Cornell and for department students taking design studio for non-sequence credit.

Last Four Terms Offered: Fall 2024, Fall 2023, Summer 2023, Fall 2022 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5101 - Design IX (6 Credits)

Advanced programs in architectural design, with options in, but not limited to, urban design, architectural technology, computational design, ecology, culture, and representation.

Prerequisites: ARCH 4102.

Enrollment Information: Enrollment limited to: B.Arch. students.

**Exploratory Studies: (EUAREA)** 

Last Four Terms Offered: Summer 2025, Spring 2025, Fall 2024, Summer 2024

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 5104 - Design Xa (6 Credits)

A structured studio for those needing to take an alternative to design thesis. This course operates within one of advanced option design studios.

Prerequisites: nonadvancing grade in ARCH 5902.

Enrollment Information: Enrollment limited to: B.Arch. students. Last Four Terms Offered: Summer 2025, Spring 2025, Fall 2024, Summer

2024

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5111 - Core Design Studio I: Fundamentals (6 Credits)

Introduction to fundamental concepts of architectural design and representation, including preliminary notions of site, program, and context. Emphasis on interpretive, analytical, and generative uses of drawing, physical modeling, and digital media in the design process. Focus on issues of context, program and architectonics in the design of a building; introduction to site planning.

Enrollment Information: Enrollment limited to: M.Arch students. Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 5112 - Core Design Studio II: Relational and Ecological Design (6 Credits)

Focus on relational and ecological design thinking through interpretive, analytical, programmatic and generative uses of digital media. Emphasis on context, architectonics and systems in the design of a mid-scale building as informed by the analysis of precedents.

Prerequisites: ARCH 5111.

Enrollment Information: Enrollment limited to: M.Arch students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 5113 - Core Design Studio III: Engaged Practices (6 Credits)

These studios use an expanded form of design practice to address meta-issues in contemporary society. They recognize that architectural production is becoming increasingly heterogeneous and networked, and that real-world projects are seldom defined by site boundaries, or the work of a single profession. Design research and speculation are used to situate projects within larger social, political and environmental systems, creatively and inclusively engage the perspectives of other actors shaping the built environment, and opportunistically orchestrate real world processes and interactions.

Prerequisites: ARCH 5112.

Enrollment Information: Enrollment limited to: M.Arch students. Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 5114 - Core Design Studios IV: Integrative Design Practices (6 Credits)

Focus on the development of architectural ideas in constructed, material form. The studio explores emergent topics and constructive methods in contemporary architectural practice. Design study includes the creation of a comprehensive set of representations that describes an architectural project in detail. Students work in collaborative groups and in consultation with advisors drawn from professional practice to develop a project that engages a complex range of topical areas, including: structural and environmental systems, building envelope systems, materiality and construction, life-safety planning, and sustainability.

Prerequisites: ARCH 5113.

Enrollment Information: Enrollment limited to: M.Arch students.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5115 - Vertical Design Option Studio (6 Credits)

The New York City vertical studios engage contemporary issues through examining urban and infrastructural issues in relation to ecological, technical, and cultural practices.

Prerequisites: ARCH 5114.

Enrollment Information: Enrollment limited to: M.Arch students. Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5116 - Vertical Design Option Studio II (6 Credits)

The vertical studios are topical in nature and engage contemporary issues in architectural practice and research.

Prerequisites: ARCH 5115.

Enrollment Information: Enrollment limited to: M.Arch. students.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5201 - Professional Practice (3 Credits)

Examination of organizational and management theories and practices for delivering professional design services. Includes a historic overview of the profession and a review of the architect's responsibilities from the pre-contract phase through cost estimating and specifications to construction. Application of computer technology in preparing specifications.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5203 - Multicultural Work Environments (1 Credit)

Independent study. Promotes an understanding of the cultural assumptions we bring to the work environment and the effects of cultural differences on the ways in which architecture is practiced. A 5-10 page paper relates the experience of the internship to one or more texts approved by the instructor. Course may be taken more than once, but a maximum of 1 credit may be used to fulfill departmental free elective distribution requirement.

**Enrollment Information:** Enrollment limited to: B.Arch. and M.Arch. students whose architectural internships are in a country other than that of their citizenship or prior work experience.

**Exploratory Studies:** (CU-ITL)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5204 - Professional Trajectories (3 Credits)

How will you self-curate your work trajectory? This class bridges and integrates academia and practice, exploring diverse issues, inclusive of the resiliency of current and long-term career options, whether you are exploring an internship or graduating. Based on lectures, discussions, and coached reflections, you will produce a customized, intentional, designed, integrated, self-specific 'work application' aligned with your interests and values. This is not just a practical class. At its heart, it is an authentic, transparent conversation about 'professional experience' with each other, Cornell alumni and guest panelists. We will discuss a wide range of pathways, leadership, media perception, work culture, compensation, negotiation, teaching, grant writing and competitions. You will write cover letters, resumes, organize portfolios, and film your individual speaking and presenting styles, for a jury and client. The required individual advisory session delves into your professional options by looking holistically at your work and your personal definition of 'value'. Enrollment Information: Enrollment limited to: Architecture students at AAP NYC.

Last Four Terms Offered: Spring 2025, Spring 2024, Fall 2022, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

ARCH 5297 - Special Investigations in Professional Practice (1 Credit) Independent study.

Prerequisites: ARCH 3102.

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5301 - Theories and Analyses of Architecture I (3 Credits)

Introduces students to influential critical and creative themes in modern architecture. Topics cover influential 20th-century discourses and practices prior to the 1990s, the questions and contexts that they engage, and their implications for contemporary thinking and design. Discussions and assignments aim at developing critical and graphical readings of both works and writings as integral to the design process.

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5302 - Theories and Analyses of Architecture II (3 Credits)

Continuation of ARCH 5301 focusing on themes in architectural discourse, design, and inquiry from the 1990s to the present, and their creative/critical implications.

Prerequisites: ARCH 5301.

Last Four Terms Offered: Spring 2024, Spring 2023, Spring 2022, Spring 2021

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5402 - Architecture, Culture, and Society (3 Credits)

Social and cultural values are both reflected in buildings, landscapes, and cities, and constructed by them. At the same time, this articulation of people and built environments is framed by general socio-economic and political systems of ordering that often transcend locale. This course explores how these complexities might impact design practice, drawing on concepts and methods from disciplines such as anthropology, geography and cultural studies, as well as architectural history and theory, and referring to examples from around the world.

**Exploratory Studies: (SAAREA)** 

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 5418 - Architecture, Culture, and Society Seminar (3 Credits)

This course addresses pertinent issues relative to the subject of architecture, culture, and society. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content.

**Prerequisites:** ARCH 5801 and 5802, or permission of instructor. Schedule of Classes (https://classes.cornell.edu/)

### ARCH 5511 - Constructed Drawing I (3 Credits)

Focuses on bridging hand-drawing and sketching with digital representation as vehicles for design thinking and perception.

Observational, analytical, and transformational exercises develop creative proficiency in freehand drawing and orthographic projection as well as computational thinking. Develops understanding of, and proficiency in, projective drawing, in both analog and digital forms. Students are introuced to a variety of digital representation applications, including modeling, rendering, animation, and scripting.

**Enrollment Information:** Enrollment limited to: M.Arch students or permission of instructor.

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 5512 - Constructed Drawing II: Digital Representation and Fabrication (3 Credits)

Develops understanding of, and proficiency in, projective drawing, in both analog and digital forms. Students continue to develop a variety of digital representation applications, including modeling, rendering, and animation, and scripting.

Prerequisites: ARCH 5511 or approved equivalent.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2023

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5605 - Bridge Design (3 Credits)

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 5611 - Environmental Systems I: Introduction to Sustainable Design (3 Credits)

This course examines the relationships between building, site, landscape and sustainability through the lens of ecology and systems thinking. Topics include: basic concepts of sustainability, energetic processes, climate, spatial data visualization, global warming, solar geometry, landscape processes, microclimates, site strategies and grading, building footprint & sustainable building metrics.

**Exploratory Studies: (CU-SBY)** 

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

### **ARCH 5612 - Structural Concepts (3 Credits)**

Fundamental concepts of structural behavior. Statics and strength of materials. Introduction to and analysis of simple structural systems. **Last Four Terms Offered:** Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5613 - Structural Systems (3 Credits)

Behavior and design of overall structural systems for buildings. Particular focus on systems used for resisting lateral loads (rigid frames, braced frames and shear walls) and for spanning long distances (trusses and space frames; cables and membranes; and arches, domes, and shells). **Prerequisites:** ARCH 5612.

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

ARCH 5614 - Building Technology I: Materials and Methods (3 Credits)
Building construction is examined from the following standpoints: life

Building construction is examined from the following standpoints: life safety (including fire safety and zoning constraints on site planning); building service systems (plumbing, electrical, vertical transportation, security, fire protection); materials, sustainability, and life-cycle analysis; accessibility; technical documentation and outline specifications.

Last Four Terms Offered: Spring 2025, Fall 2024, Fall 2023, Fall 2022 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 5615 - Building Technology II: Structural Elements (3 Credits)

Concepts and procedures for the design, manufacture, and construction of structural components (e.g., walls, columns, beams, slabs) in steel, concrete, masonry, and timber.

Prerequisites: ARCH 5612.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5616 - Environmental Systems II: Building Dynamics (3 Credits)

This course examines the design and analysis of the building envelope, with a focus on the material and energetic transformations taking place at the boundary between architecture and environment. Topics include: comfort, building thermodynamics, envelope assemblies, thermal modeling, active and passive control systems, daylighting and architectural acoustics.

Prerequisites: ARCH 5611.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5801 - History of Architecture I (3 Credits)

The history of the built environment as social and cultural expression from the earliest times to the beginning of the modern period is studied through selected examples from across the world. Themes, theories, and ideas in architecture and urban design are explored through texts, artifacts, buildings, cities, and landscapes.

**Exploratory Studies: (EUAREA)** 

Last Four Terms Offered: Spring 2025, Spring 2024, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 5802 - History of Architecture II (3 Credits)

The history of the built environment as social and cultural expression from the modern period to the present day is studied through selected examples from across the world. Architecture and urban design themes, theories, and ideas are explored through texts, artifacts, buildings, cities, and landscapes.

Prerequisites: ARCH 5801 or approved equivalent.

**Exploratory Studies: (EUAREA)** 

Last Four Terms Offered: Fall 2024, Spring 2023, Spring 2022, Spring 2021

2021

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 5819 - Special Topics in the History of Architecture and Urbanism (3 Credits)

This course addresses pertinent issues relative to the subject of History of Architecture and Urbanism. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester.

**Prerequisites:** ARCH 5801 and ARCH 5802 or permission of instructor. **Exploratory Studies:** (SAAREA)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 5902 - Design X Thesis (8 Credits)

An independent design project on a topic selected and developed by the student. Marking the transition between academic and professional practices, the thesis project is an opportunity for each student to define an individual position with regard to the discipline of architecture.

Prerequisites: for students having matriculated prior to Summer 2023: ARCH 5101 and ARCH 5911 or Required Directed Elective (RDE); for students matriculating Summer 2023 and beyond: ARCH 5101 and ARCH 5911.

**Enrollment Information:** Enrollment limited to: B.Arch. students. **Exploratory Studies:** (CU-UG)

#### ARCH 5903 - Design IX Expanded Design Thesis (6 Credits)

The expanded design thesis is designed for undergraduate students who wish to pursue a yearlong investigation. The expanded thesis must include substantial research and the completed work should be of wider scope and greater depth than is normal for a one-semester thesis. The thesis topic should extend the student's work already begun in a course or a sequence of courses taken before the fifth year.

Prerequisites: ARCH 4102 and approval of expanded thesis application. Enrollment Information: Open to: students who carry a minimum cumulative GPA of 3.7 and minimum studio GPA of 3.8. Exploratory Studies: (CU-UG)

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5904 - Design X Expanded Design Thesis (8 Credits)

The expanded design thesis is designed for undergraduate students who wish to pursue a yearlong investigation. The expanded thesis must include substantial research and the completed work should be of wider scope and greater depth than is normal for a one-semester thesis. The thesis topic should extend the student's work already begun in a course or a sequence of courses taken before the fifth year.

**Prerequisites:** ARCH 5903 and approval of expanded thesis application. **Exploratory Studies:** (CU-UG)

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 5911 - Prethesis Methods Workshop (2 Credits)

This course offers a synthesis of design and research methods for the development of an independent thesis proposal. Course work includes exposure to different theories and practices of design inquiry, explorations of critical positions for individual development, and preparation of a document encapsulating research leading to a thesis proposition. For students matriculating in Summer 2023 and beyond, successful completion of the course, which includes approval of the thesis document, is a prerequisite for advancement into ARCH 5902 - Design X Thesis.

Prerequisites: ARCH 4102 or permission of instructor. **Last Four Terms Offered:** Fall 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 6109 - Special Problems in Design (1-3 Credits)

Independent study.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 6110 - Computational Thinking as Design Process (3 Credits) Introduction to contemporary computational design techniques, models, and theories.

**Enrollment Information:** Enrollment limited to: MS AAD students. **Last Four Terms Offered:** Summer 2025, Summer 2024, Summer 2023, Summer 2023

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 6131 - Critical Introduction to Urban Data (3 Credits)

The first course in the methods sequence introduces concepts and applications for urban data: where it comes from, its sources and applications. It stresses a critical-making approach in which projects build essential skills while also fostering critical discussion about the possibilities and limits of the tools, the uses and misuses of data, and alternate modes of data gathering, including field work, qualitative sources, and analog methods.

Enrollment Information: Enrollment limited to: M.S. AUD students. Last Four Terms Offered: Fall 2024, Fall 2023
Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 6132 - Intermediate Applications (3 Credits)

The second skills-based course introduces a range of opportunities for relationships with data and visualization. Through intensive skill-building modules, students are introduced to the possibilities of range of applications including but not limited to: big data, AI / machine learning, procedural generation, time-based interactive applications (video games) / simulation engines, expanded data sources and tools for data scraping, forms of art practice that engage urban data.

Prerequisites: ARCH 6131 or permission of instructor.

Enrollment Information: Enrollment limited: to M.S. AUD students.

Last Four Terms Offered: Spring 2025, Spring 2024

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 6133 - Advanced Synthesis (3 Credits)

In service of Studio III, the third skills-based course on urban data combines multiple modes of drawing/analysis/production to explore the possibilities for design work and drawing-based research methodologies including but not limited to: experimental mapping formats, animation, interaction, print based work, other publishing formats.

Prerequisites: ARCH 6132 or permission of instructor. Last Four Terms Offered: Summer 2025, Summer 2024 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 6301 - Architectural Territories of Investigation (3 Credits)

Introduction to themes of inquiry in contemporary architecture, including critical motives in research, topical problems, and materials and tactics of investigation involving architecture in relation to discourse, ecology, representation, and urbanism.

**Enrollment Information:** Enrollment limited to: MS AAD students. **Last Four Terms Offered:** Summer 2025, Summer 2024, Summer 2023, Summer 2022

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 6307 - Special Investigations in the Theory of Architecture II (1-4 Credits)

Independent study.

**Exploratory Studies:** (EUAREA)

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 6308 - Special Topics in the Theory of Architecture II (3 Credits)

This course addresses pertinent issues relative to the subject of Theory of Architecture. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester.

Prerequisites: ARCH 5301 and ARCH 5302.

**Exploratory Studies: (EUAREA)** 

#### ARCH 6318 - Mellon Design Justice Workshop (4 Credits)

Design Justice Workshops emphasize the social reciprocity of learning through which faculty and students advance understandings of race and social justice with research and design. Workshops are structured to address meta-issues in global urbanism that challenge narrow conceptions of design practice. They reflect on the imperative to develop plans and paradigms for equal access to the built environment, social space, and eco-structures for communities historically left out of conventional aims and practices of architectural design. Topics vary by semester.

**Exploratory Studies: (CU-CEL)** 

Last Four Terms Offered: Fall 2022

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 6319 - Urban Justice Lab (4 Credits)

Crosslisted with SHUM 6819, ART 6419, ENGL 6919, PMA 6819, MUSIC 6819

Urban Justice Labs are innovative seminars designed to bring students into direct contact with complex questions about race and social justice within the context of American urban culture, architecture, humanities, and media. Drawing from Cornell's collections, such as the Hip Hop Collection, the Rose Goldsen Archive of New Media Art, the Human Sexuality Collection, holdings on American Indian History and Culture, the John Henrik Clarke Africana Library, and the Johnson Museum of Art, students will leverage archival materials to launch new observations and explore unanticipated approaches to urban justice. Urban Justice Labs are offered under the auspices of Cornell University's Andrew W. Mellon Foundation Collaborative Studies in Architecture, Urbanism, and the Humanities grant. Topic: Sound, Music, Public Space.

**Enrollment Information:** Enrollment limited to: fellowship recipients, who receive a \$1500 stipend.

Last Four Terms Offered: Spring 2024, Spring 2023, Spring 2022, Spring 2021

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 6331 - Theories and Analysis I: Introduction (3 Credits)

The seminar explores and develops some of the program's central concepts including ecology, infrastructure, urbanism, urban system, histories and theories of planetary change. Emphasis is on developing a critical awareness these topics: narratives; global perspectives; questions of ecology and urbanism as they intersect with power, colonialism, extraction, intersectional environmentalism, and modes of thought related to urban technology.

Enrollment Information: Enrollment limited to: M.S. AUD students.

Last Four Terms Offered: Fall 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 6332 - Theories and Analysis II (3 Credits)

The second theory course explores the ways that design intersects with the political economic questions of planetary transformation. It considers cultural production in the context of ecology, urbanism, and infrastructure broadly construed, including, for example, theories and practices of social and environmental ecology.

Prerequisites: ARCH 6331 or permission of instructor. Last Four Terms Offered: Spring 2025, Spring 2024 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 6333 - Theories and Analysis III: Theories of Practice (3 Credits)

The third seminar in theory sequence develops theories of practice to better understand how urban ecological projects are realized and how change happens. Regular meetings with people and organizations making things happen will support the exploration and discussion of emerging models of practice, the role of power in social change, tendering and real estate processes, the AEC/civil engineering industry, activist/advocacy practices, and future practice models in pursuit of common values

Prerequisites: ARCH 6332 or permission of instructor. Last Four Terms Offered: Summer 2025, Summer 2024 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 6408 - Special Topics in Architecture, Culture, and Society (3-4 Credits)

This course addresses pertinent issues relative to the subject of Architecture, Culture and Society. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. For precise content, please see the Architecture Department webpage.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 6409 - Graduate Investigations in Architecture, Culture, and Society (1-4 Credits)

Independent study.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 6418 - Mellon Design Justice Workshop (4 Credits)

Design Justice Workshops emphasize the social reciprocity of learning through which faculty and students advance understandings of race and social justice with research and design. Workshops are structured to address meta-issues in global urbanism that challenge narrow conceptions of design practice. They reflect on the imperative to develop plans and paradigms for equal access to the built environment, social space, and eco-structures for communities historically left out of conventional aims and practices of architectural design. Topics vary by semester.

**Exploratory Studies: (CU-CEL)** 

#### Last Four Terms Offered: Fall 2022

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 6508 - Special Investigations in Visual Representation II (1-3 Credits)

Independent study.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 6509 - Special Topics in Visual Representation II (3 Credits)

This course addresses pertinent issues relative to the subject of Visual Representation. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester.

**Prerequisites:** ARCH 5511 and ARCH 5512 or permission of instructor. **Last Four Terms Offered:** Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 6605 - Special Topics in Building Technology (3 Credits)

This course addresses pertinent issues relative to the subject of Building Technology. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. For precise content, please see the Architecture Department webpage.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 6609 - Special Investigations in Structures (1-3 Credits) Independent study.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 6800 - State of the Discipline (4 Credits)

This seminar will provide a survey of architectural historiography paying particular attention to the paradigm shifts of recent decades. Through the critical readings of important texts we will discuss the current state of the field while simultaneously reconsidering our position in it. The course will address how we apply theory to practice, develop research strategies that maximize methodological alliances, imbue the study of the past with contemporary relevance, and contribute as much to other disciplines as we borrow from them.

Last Four Terms Offered: Fall 2024, Spring 2023, Fall 2020, Fall 2018 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 6801 - Foundations of the Discipline (4 Credits)

Explorations of seminal positions that established the disciplinary praxis of the history of architecture and urbanism, based on case studies.

Exploratory Studies: (EUAREA)

Last Four Terms Offered: Fall 2023, Fall 2021, Fall 2019, Fall 2017 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 6805 - Practicum (3 Credits)

This course exercises history of architecture and urbanism's capacities for affecting contemporary events through critical associations with the past. The workshop culminates in an exhibition, publication, symposium, curricular initiative, or other public occasion. Enrollment of qualified graduate students from associated fields is encouraged.

Last Four Terms Offered: Spring 2025, Fall 2022, Spring 2021, Spring 2019

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 6819 - Seminar in Special Topics in the History of Architecture and Urbanism (3 Credits)

This course addresses pertinent issues relative to the subject of History of Architecture and Urbanism. The instructor(s) of the course are drawn from the permanent and visiting faculty who may either broadly or narrowly define the course's scope and content. Topics vary each semester.

**Exploratory Studies: (EUAREA)** 

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 7101 - Problems in Architecture Design (1-9 Credits) Independent study.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 7111 - Design A (6 Credits)

Exploration of themes, methods, and technologies in contemporary design.

**Enrollment Information:** Enrollment limited to: MS AAD students. **Last Four Terms Offered:** Summer 2025, Spring 2025, Summer 2024, Spring 2024

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 7112 - Design B: Topic Studio (6 Credits)

Advanced programs in architectural design, with options in, but not limited to, urban design, architectural technology, computational design, ecology, culture, and representation.

Enrollment Information: Enrollment limited to: M.S. AAD students. Last Four Terms Offered: Spring 2025, Fall 2024, Summer 2024, Spring 2024

Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 7113 - Design C: Topic Studio (6 Credits)

Advanced programs in architectural design, with options in, but not limited to, urban design, architectural technology, computational design, ecology, culture, and representation.

Prerequisites: ARCH 7112.

Enrollment Information: Enrollment limited to: MS AAD students. Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 7131 - Studio I: Foundation (6 Credits)

The introductory practicum is a workshop-based studio that introduces students to skills, techniques, methods, for coming to know the city. Design here is a means to develop/explore/become familiar with the tools, skills, approaches and capacities that will form the basis for subsequent studio work. Urban systems are introduced through design modules and attendant skills: Mapping Urban Knowledges (creative engagement with urban systems); Engaging Urban Knowledges (introduction to engaging communities); Projecting Urban Knowledges (future planning/scenario building).

Enrollment Information: Enrollment limited to: M.S. AUD students.

Last Four Terms Offered: Fall 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 7132 - Studio II: Application (6 Credits)

The second studio develops skills from the Foundation semester by working with guest instructor(s) on topics related to the concerns of the program. Projects are speculative in nature, offering opportunity to work more experimentally to develop students' own project but within a context at least partially defined by guest critic.

Prerequisites: ARCH 7131.

Last Four Terms Offered: Spring 2025, Spring 2024 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 7133 - Studio III: Synthesis Engagement (6 Credits)

The final studio partners with organization/urban actor to work on a pressing issue. It uses encounters with the concerns on the ground to understand limits of current modes and value systems. The studio works with partner organizations to test ideas that would be useful but also not always possible to explore in a more conventional consultant/client model. i.e., the organization is not presented as 'client' but as respondent/ collaborator of sorts. Outcomes should be tangible and useful while also supporting students' independent interests.

Prerequisites: ARCH 7132.

Last Four Terms Offered: Summer 2025, Summer 2024 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 7151 - Design Topic Research Studio: Matter Design Computation (6 Credits)

The research studio is topical in nature and engages fundamental concepts in matter design computation.

Enrollment Information: Enrollment limited to: M.S. MDC students. Last Four Terms Offered: Fall 2023, Fall 2022, Fall 2021, Fall 2020 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 7152 - Design Topic Research Studio II: Matter Design Computation (6 Credits)

Continuation of subjects developed in the first term. Focus is on research methods in matter design computation.

Prerequisites: ARCH 7151.

**Enrollment Information:** Enrollment limited to: M.S. MDC students. **Last Four Terms Offered:** Spring 2024, Spring 2023, Spring 2022, Spring 2022, Spring 2023, Spring 2022, Spring 2023, Spring 2022, Spring 2023, Spring 2023, Spring 2022, Spring 2023, Spring 2022, Spring 2023, Spring 2023, Spring 2022, Spring 2023, S

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 7809 - Graduate Independent Study in the History of Architecture and Urbanism (1-12 Credits)

Independent study.

Enrollment Information: Enrollment limited to: graduate students.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (https://classes.cornell.edu/)

### ARCH 8104 - Design VIIa (6 Credits)

A structured studio for those needing to take an alternative to design thesis. This course operates within one of the advanced option design studios.

Prerequisites: nonadvancing grade in ARCH 8912.

**Enrollment Information:** Enrollment limited to: MArch students. **Last Four Terms Offered:** Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 8151 - Design Topic Research Studio III: Matter Design Computation (9 Credits)

Pre-thesis research on an independent design project on a topic selected and developed by the student in preparation for ARCH 8905.

Prerequisites: ARCH 7151, ARCH 7152.

Enrollment Information: Enrollment limited to: M.S. MDC students. Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2021 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 8903 - Projects in Advanced Architectural Design (1 Credit)

Final project documentation drawing on work from ARCH 7111, ARCH 7112, and ARCH 7113 design studios as well as from the four courses representing the student's territory of investigation (TI) - discourse, ecology, representation, or urbanism - that demonstrate expertise in the student's TI.

Prerequisites: ARCH 7111 and ARCH 7112. Corequisite: ARCH 7113. Enrollment Information: Enrollment limited to: M.S. AAD (3-semester option) students.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 8905 - Independent Design Thesis: Matter Design Computation (9 Credits)

An independent design project on a topic selected and developed by the student and researched in ARCH 8151. Marking the transition between academic and professional practices, the objective of the thesis project is for each student to define an individual position with regard to the discipline and practice of architecture in the context of matter design computation.

Prerequisites: ARCH 7151, ARCH 7152, ARCH 8151.

Enrollment Information: Enrollment limited to: M.S. MDC students. Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 8906 - Thesis in Advanced Architectural Design I (9 Credits) Independent study.

independent study

Prerequisites: ARCH 7111 and ARCH 7112.

**Enrollment Information:** Enrollment limited to: M.S. AAD (4-semester option) students.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

# ARCH 8907 - Thesis in Advanced Architectural Design II (9 Credits) Independent study.

ndependent study.

Prerequisites: ARCH 7111, ARCH 7112, and ARCH 8906.

**Enrollment Information:** Enrollment limited to: MS-AAD (4-semester option) students.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

#### ARCH 8911 - Proseminar in Design Research (2 Credits)

This course offers a synthesis of design and research methods for the development of an independent thesis proposal. Course work includes exposure to different theories and practices of design inquiry, explorations of critical positions for individual development, and preparation of a document encapsulating research leading to a thesis proposition. Successful completion of the course, which includes approval of the thesis document, is a prerequisite for advancement into ARCH 8912 - Independent Design Thesis.

Prerequisites: ARCH 5301 and ARCH 5302.

Enrollment Information: Enrollment limited to: M.Arch students. Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023 Schedule of Classes (https://classes.cornell.edu/)

### ARCH 8912 - Independent Design Thesis (9 Credits)

An independent design project on a topic selected and developed by the student and researched in ARCH 8911. Marking the transition between academic and professional practices, the thesis project is an opportunity for each student to define an individual position with regard to the discipline of architecture.

**Prerequisites:** ARCH 5115, ARCH 8911, and all required core M.Arch courses.

Enrollment Information: Enrollment limited to: M.Arch students.

Last Four Terms Offered: Spring 2025, Fall 2024, Spring 2024, Fall 2023

Schedule of Classes (https://classes.cornell.edu/)

# ARCH 9901 - Ph.D. Dissertation in the History of Architecture and Urbanism (1-12 Credits)

Independent study for the doctoral degree.