## Architecture Program Report

The Cooper Union

September 7, 2024

REVISED December 20, 2024

# MAGB

National Architectural Accrediting Board, Inc.



### **Architecture Program Report (APR)**

2020 Conditions for Accreditation 2020 Procedures for Accreditation

Institution	The Cooper Union
Name of Academic Unit	The Irwin S. Chanin School of Architecture
Degree(s) (check all that apply) Track(s) (Please include all tracks offered by the program under the respective degree, including total number of credits. Examples: 150 semester undergraduate credit hours Undergraduate degree with architecture major + 60 graduate semester credit hours Undergraduate degree with non-architecture major + 90 graduate	Bachelor of Architecture     Track:160 CREDITS     Master of Architecture     Track:     Track:
semester credit hours)	0 11 1 1 11 11
Application for Accreditation	Continuing Accreditation
Year of Previous Visit	2016
Current Term of Accreditation	Continuing Accreditation (Eight-Year Term)
(refer to most recent decision letter)	
Program Administrator	
Chief Administrator for the academic unit in which the program is located (e.g., Dean or department chair)	Hayley Eber
Chief Academic Officer of the	Dr. Demetrius L. Eudell
Institution	
President of the Institution	Laura Sparks Malcolm King
Individual submitting the APR	Monica Shapiro
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#### **Submission Requirements:**

- The APR must be submitted as one PDF document, with supporting materials
- The APR must not exceed 20 MB and 150 pages
- The APR template document shall not be reformatted

Note from the program: Any links directing the reader outside of the realm of this document are supplementary.



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#### **INTRODUCTION**

#### **Progress since the Previous Visit (limit 5 pages)**

In this Introduction to the APR, the program must document all actions taken since the previous visit to address Conditions Not Met and Causes of Concern cited in the most recent VTR. The APR must include the exact text quoted from the previous VTR, as well as the summary of activities.

The last VTR was in 2016, which listed the following:

#### **Conditions Not Met:**

I.2.3 Financial Resources

#### **Student Performance Criteria Not Met:**

- B.1 Pre-Design
- B.9 Building Service Systems
- C.3 Integrative Design

Below is a summary that describes the IPR directive, activities included in the IPR(s), and the Board responses.

#### **I.2.3 Financial Resources**

**2016 Team Assessment:** The Cooper Union is experiencing structural budget deficits that have impacted all three schools, including the School of Architecture (the School); therefore, it has not been demonstrated that the appropriate financial resources are available to support future student learning. As a result of the budget deficits, the College made a significant change in 2014 by transitioning from full scholarship (no tuition) to half-scholarship. The budget crisis led to the formation of short-term work groups in 2012: the Revenue Task Force (charged with identifying new sources of revenue) and the Expense Reduction Task Force (charged with identifying immediate operations budget reductions). The College and The School have both experienced leadership changes.

The current financial crisis is affecting the architecture program in multiple ways through hiring freezes, budget support reductions, delays in addressing facility accessibility issues, and the continued shortage of faculty offices. Nonetheless, while the School operated with fiscal restraint, the total operating budget increased approximately 29% between FY 2011 and FY 2016 (not adjusted for inflation). In meetings with the students, they said that the financial crisis has been a "distraction" in recent years, which has taken time away from school and the studios. In multiple meetings with students, a common theme surfaced—that students who pay tuition feel that they must "prove" themselves worthy of being in the architecture program to the faculty and to students who do not pay tuition. All students admitted to the School of Architecture continue to be admitted on merit; the admissions process is need-blind.

The architecture school does have control over the following resources: the Archive, The Cooper Union Institute for Sustainable Design, Art and Architecture Shop, and The Paul Laux Digital Architecture Studio.

Evident in meetings with President Mea, Dean Tehrani, and the faculty was the resolve to steward the institution and architecture program through this period. During faculty meetings, the faculty spoke passionately regarding their resolve to protect the legacy of the architecture program, including the core value that admission is meritdriven rather than financially driven. Dean Tehrani discussed efficiencies that have been enacted to focus on advancing the core mission of the School. President Mea detailed his plan to address the deficit as presented in *The Cooper Union for the Advancement of Science and Art. Budget and Financial Projections FY 16*, which provides a detailed budget and financial analysis, including projections for FY 16, FY 17, FY 18, FY 19, and FY 20. The goal of the plan is to provide financial stability for the College so that it can become cash-positive in FY 19. To accomplish this goal, the analysis provides a basis for short-term and medium-term financial and operational planning.



A key component of the plan is to increase revenue generated through tuition, as each entering first-year class pays tuition and the last of the full-scholarship students (current third-year students) matriculate through the architecture program. At the same time, the president is implementing steps to make the College cash positive. As prescribed in the consent decree, a Free Education Committee of the Board of Trustees has been formed to "examine whether The Cooper Union can return to a sustainable full tuition scholarship model that maintains its strong reputation for academic quality within its Art, Architecture, and Engineering programs at their historical levels of enrollment."

In addition to the development work of the Free Tuition Movement, Dean Tehrani is engaging in development activities specifically to support, enhance, and advance the architecture program. During his meeting with the team, President Mea commented that Dean Tehrani is accomplished at fundraising.

#### The Cooper Union, 2018 Response Summary:

In Spring 2016, The Cooper Union was in a state of profound transition and financial uncertainty. Following a lawsuit filed against the college and its Board of Trustees in 2014 over the historic decision to introduce tuition for undergraduate students after more than a century of free education, a Consent Decree was ratified by the Supreme Court of the State of New York only four months prior. This resolution involved the State Attorney General and marked a critical chapter in the institution's history.

The Consent Decree mandated governance changes and the appointment of a Financial Monitor and Free Education Committee (FEC). The FEC's final report, delivered in 2018, outlined financial benchmarks and a timeline for returning to full scholarships for all admitted students. The Financial Monitor concurred with the report, highlighting the institution's financial stress. The focus was on achieving financial health before returning to full-tuition scholarships.

In 2018, the Board of Trustees adopted the FEC plan with modifications based on community input and Financial Monitor feedback. Fundraising efforts were crucial to achieving financial stability and returning to free education. Institutional funding and grants supported projects such as a multidisciplinary workshop space.

The School of Architecture also engaged in fundraising efforts for scholarships and preservation of student work collections. Endowments were established to support various initiatives. Expense reductions affected faculty positions, leading to a rebalancing of faculty by increasing the full-time faculty while decreasing the number of proportional time faculty. The School of Architecture's budget decreased slightly in FY2019 but funding for exhibitions and publications increased through endowments and restricted funds. The dean's discretionary fund supported various academic enhancements.

The Cooper Union's Plan to Return to Full Tuition Scholarships is more than a financial plan; it was a commitment to rebuilding trust and addressing long-standing operational deficits. Progress has been made through fiscal discipline, increased income, alumni and private donor support, and institutional contributions. The plan will continue to guide the institution's efforts to move towards free education while adapting to new global challenges.

**NAAB Response:** The National Architecture Accrediting Board has accepted the 2-year IPR as having demonstrated satisfactory progress toward addressing the respective deficiency identified in the most recent VTR.

#### **B.1 Pre-Design**

**2016 Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 121 Design II; ARCH 131 Design III; ARCH 141 Design IV; and ARCH 151 Thesis. Certain aspects of the criterion, such as "an analysis of site conditions," were addressed in the majority of the pre-design elements within a comprehensive program that they set out to implement in their projects.



**The Cooper Union, 2018 Response:** The course descriptions that define expected outcomes for the Design Studio sequence provide for investigating the relationship between user needs, program and architectural form, in increasing complexities, in the Design II, Design III, and Design IV studios. Practice at taking a "brief" or sketch program description, interrogating it, and transforming it from a generic outline to a program for a more specifically defined use was addressed in both the Design II and Design IV studios in the fall 2018 semester.

In Design II, students were required to take the generic brief of a "Contemporary Circus Conservatory" and develop a program specific to a particular audience and set of activities that were suggested by a structural type that had been defined and developed in a previous exercise.

In Design IV, two separate studios investigated the program as a generator of architectural space and form through a set of shared exercises and a common site while investigating and designing for two different programs: one a museum and the other a theater. Early assignments and dedicated lectures addressed the topic of program from multiple perspectives. Students were required to take a template program and redefine it in terms of viewing specific works of art (museum) and different types of performance activities (theater). In both studio sections, the "design project" itself did not begin until week 8 of the semester, allowing almost half the semester for pre-design investigations.

**NAAB Response:** The National Architecture Accrediting Board has accepted the 2-year IPR as having demonstrated satisfactory progress toward addressing the respective deficiency identified in the most recent VTR.

#### **B.9 Building Service Systems**

**2016 Team Assessment:** Evidence of student achievement at the prescribed level was found in exams prepared for ARCH 134A-B Environmental Technologies. Mechanical and fire protection systems were clearly taught throughout the curriculum; however, work that supported the teaching and student understanding of plumbing, electrical, communication, and vertical transportation security systems was scarce or not found at all.

The Cooper Union, 2018 Response Summary: The School of Architecture's seven-semester structures sequence, which spans second-year through the fifth-year study, has long been a defining feature of the School's pedagogy. Structural principles are often the organizational basis and form determinants of students' design projects. Given the increasing urgency for environmental concerns at all scales to be directly addressed by architects, in spring 2018, the School of Architecture faculty approved a new two-hour, two-semester required course ARCH 124A-B Environments in the second-year curriculum, in parallel with ARCH 122A-B Structures I, a conceptual introduction to principles of structural behavior. This class will provide students with a conceptual grounding in environmental issues at the urban and building scales in the second-year curriculum when complexities of program, context, and site are introduced in the studio. The class will be directly aligned with the ARCH121B Design II spring semester studio through common faculty and shared project-based work.

Previously, ARCH 134A-B Environmental Technologies was a student's first classroom introduction to environmental concepts and building systems. ARCH 124A-B Environments shifts the conceptual groundwork of broad environmental concerns and an understanding of the building interior as a complex environment system earlier in the curriculum. This will allow ARCH 134A-B to focus on a broader array of internal building systems as they create, form, and serve the interior environment. ARCH 134B, a three-hour class, has been restructured to allow for case studies at all classes and to make use of practical demonstrations and project-based assignments.

**NAAB Response:** The National Architecture Accrediting Board has accepted the 2-year IPR as having demonstrated satisfactory progress toward addressing the respective deficiency identified in the most recent VTR.

#### **C.3 Integrative Design**

**2016 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for a few of the high pass projects in ARCH 131B Design III, and the ability to integrate space and structure was evidenced in most projects. In contrast, the integration of multiple systems, especially those



including environmental systems, building service systems, and the building envelope and assemblies, was not evidenced throughout the work.

The Cooper Union, 2018 Response: The first truly integrated Design studio is assigned in the second semester of year 3. This follows the analysis studio in which students do a comprehensive analysis of the form, concept, and systems of a building, as well as its relationship to the city or landscape in which it is located. The courses ARCH 132 Structures II, ARCH 134 Environmental Technologies, and ARCH 135 Building Technologies, all a part of the third-year curriculum, provide for design projects to be developed in both the studio and the classes that teach specific technical content. The syllabus for ARCH 131 Design III for spring 2017 is attached in Section 4. Appendix. The studio began with a design for a light scoop, thereby having a performative building element/system orient and drive the design process from its beginning. This gave emphasis to systems as determinants of space and form, as well as necessary building performance. The program for the Integrated Studio in spring 2017 was housing. The School of Architecture partnered with the University of Puerto Rico (UPR) to use the integrated studio to respond to the extreme hardship and social crisis due to hurricanes Irma and Maria that struck the island in the fall of 2017. The goal was to make immediate and long-term contributions to the University and its students, the city of San Juan, and the discipline through a shared studio experience. The two schools used a common brief for the project. Professor Jose Javier Toro helped to design the studio brief with his colleagues at UPR and Cooper. A "hybrid" program of housing, units, commercial activities, and educational institutes that might expand and contract over time as community needs changed was defined during the design process. Housing provided students with an opportunity to resolve the environmental and other systems of a building with less formal and technical complexity than a museum.

Given the success of the housing studio, it will be repeated as a program in Spring 2019. This year, the School will partner with Help USA who will assist with developing the studio brief and will provide the Design Studio with community contacts and site information for one of its properties ready for development. Help USA is a national organization that provides housing and the supportive services necessary for the homeless and people in need to become and remain self-reliant. Help USA sees housing as the beginning of a community-building network and envisions a world where safe and stable housing is a starting point for everyone. It manages permanent supportive housing, operates shelters, and runs prevention programs. Additionally, the School of Architecture will be part of a network of local schools of architecture conducting housing studios, which will share programs, research, knowledge, and roundtable conversations about contemporary housing practices. The architect lñaqui Carnicero, who has significant experience in housing design, will join the studio team. Students will have another opportunity to complete an integrated design in Design IV. Fourth year had previously been devoted to projects in urbanism. At least one studio is now the design of a complex institutional project, from programming to façade and building systems.

The Cooper Union, 2021 Response Summary: The spring semester of third year is structured as the Integrated Design Studio, whereby students are introduced to a complex building typology to develop both analytical and design skills around a comprehensive and integrated consideration of site, program, structure, building technologies, building systems, and environmental conditions. The required courses ARCH 132A-B Structures II, ARCH 134A-B Environmental Technologies, and ARCH 135A-B Building Technology, all a part of the third-year curriculum, provide for design projects to be developed in both the studio and the classes that teach specific technical content.

In response to the Visiting Team's Assessment, the Spring 2020 integrative studio emphasized the importance of building materiality in its pedagogical approach. The studio asserted that the materials used in constructing a building carry a fundamental architectural logic that shapes the project's construction and spatial organization.

The ARCH131B Design III studio focused on urban housing typologies and posed key questions about materiality in the design process. The aim was to consider materiality regarding a building's appearance or exterior and conceptualize the programmatic functions and spatial relationships through construction techniques. Another main objective of this studio is to provide a comprehensive introduction to urban housing typologies by analyzing



historical precedents, critiquing and reimagining architectural programs for modern urban housing, and ultimately designing a medium-density housing project within an urban context. The design process considers both historical and contemporary influences on urban housing, considering social, economic, and material factors. Siting strategies are crucial, with a thorough analysis of potential sites, including physical, zoning, environmental, and contextual aspects.

Through the close coordination of the ARCH 131B Design Studio, with ARCH 132B Structures II, ARCH 135B Building Technology, and ARCH 134B Environmental Technologies, we demonstrate that design is an activity that does not occur singularly but takes place in a completely integrated process in which architects, structural engineers, mechanical and electrical engineers, and many others participate in a collaborative endeavor.

**NAAB Response:** The National Architecture Accrediting Board has accepted the 5-year IPR as having demonstrated satisfactory progress toward addressing the respective deficiency identified in the most recent two-year IPR.

#### **Program Changes**

Further, if the Accreditation Conditions have changed since the previous visit, the APR must include a brief description of changes made to the program as a result of changes in the Conditions.

This section is limited to 5 pages, total.

Since the previous visit in 2016, we have implemented substantial improvements to the program across multiple fronts. These modifications stem from several sources: the analysis of the Visiting Team at the 2016 reaccreditation visit, changes in the NAAB conditions, shifts in the profession and challenges across the globe, and efforts dedicated to strengthening and advancing the program across many facets. Below is a summary of these improvements, all detailed further in the following sections of the APR.

#### A. Curricular Transformation and Pedagogical Experimentation:

Since the NAAB accreditation visit in 2016, the deans and the Curriculum Committee have worked together with faculty to implement changes to the B. Arch. curriculum.

The History, Theory, and Criticism sequence has been expanded beyond Western canons to incorporate scholarship and creative works from a diverse range of historians, theorists, designers, and artists. This expansion aims to introduce a more inclusive, diverse, and global perspective on the discipline's history.

The urgent and critical issue of architecture's role in either exacerbating or mitigating climate change has prompted the introduction of new required courses addressing the environment in the second-year curriculum. By integrating these courses, students gain a foundational understanding of environmental issues at both urban and building scales. In the realm of representation, the required curriculum was restructured in the first and second years to extend the investigation of how architecture is analyzed and represented, including photography, animation, computation, and other digital and analog tools.

Within the design sequence, **ARCH 121B Design II** Formal Analysis has been relocated from the first semester of the third year to the spring semester of the second year to accommodate the inclusion of a Design Synthesis Studio in the third-year design sequence. Additionally, option studios focused on urbanism have been introduced in the fourth year.

The range of elective courses has been broadened to encompass a variety of histories, theories, technologies, cultures, environments, and advanced studies in computational methods. Furthermore, our interdisciplinary course offerings have been extended through collaborations with the Schools of Art, Engineering, and the Faculty of Humanities and Social Sciences on a broad range of topics. In addition, an Independent Study at the elective level was introduced in 2021.



#### B. Administrative Changes and Faculty Planning:

At the time of the previous NAAB re-accreditation visit, Nader Tehrani had been dean for less than a full academic year. In 2022, after a productive and successful seven-year tenure, Dean Nader Tehrani stepped down and associate dean Hayley Eber was appointed acting dean as provided in the School of Architecture Governance. Prior to that, under Tehrani's leadership first with Elizabeth O'Donnell and then with Hayley Eber as associate dean, the School embarked on a series of transformative initiatives.

One of the significant changes implemented during Dean Tehrani's tenure was the expansion of the full-time faculty from three to seven members, introducing specialized personnel with expertise in academic, research, and administrative domains. Although the School currently has six full-time faculty members due to the passing of Professor Anthony Vidler in Fall 2023, this strategic decision was made to enhance the School's capacities and facilitate its development in diverse aspects, thereby addressing pertinent disciplinary and cultural challenges of our time.

The first full-time faculty search in 2016 led to the promotion of Michael Young from proportional-time to full-time in 2017. Young's work and scholarship focus on exploring the conceptual and aesthetic possibilities of architecture and urbanism through built commissions and experimental research. The other full-time hire in 2017 introduced Lorena del Rio, whose built work and academic research are grounded in an interdisciplinary approach to design that integrates architecture, art, and material research to foster emotional well-being.

With the second full-time search in 2018-2019, Lydia Kallipoliti and Nora Akawi joined the full-time faculty in 2019. Kallipoliti's background in both architecture and engineering offers a unique theoretical and historical perspective at the intersections of architecture, technology, and environmental politics. In tandem, Nora Akawi's contributions in urbanism, geography, and the political dimensions of representation shed light on the cross-cultural implications of reexamining histories of the city, mapping, and territory as a cultural construct.

With a deep investment in design sensibilities, all these full-time hires seek to expand our conversation in the School of Architecture, while effectively speaking to some of the deep-seated investments already in place within our institution.

With these full-time faculty hires, the proportional-time faculty was simultaneously reduced from eleven to four, with contracts designed to have an anticipated duration of five years to encourage the introduction of new viewpoints, emerging subjects, an enriched curriculum, and involvement in critical matters such as climate change, social justice, and diverse narratives.

To enrich the program's foundational years, new adjunct faculty members were introduced to reinforce the core studios of the first three years. This strategy aimed to weave a larger narrative and provide students with a broader educational experience. The fourth year saw the introduction of visiting studio critics, bringing in fresh voices to inspire new areas of research and speculation among students and faculty alike. The School added a critical staff position to enhance support for key initiatives: an Administrative Assistant for Public Programs. This role is designed to increase the School's outreach efforts and enhance its capabilities in innovative technologies and projects while supporting a wealth of public programming.

#### C. New Spaces of Learning:

Several enhancements to physical resources have been made since the NAAB team visit in 2016 to benefit the Bachelor of Architecture Program. In 2019, the School of Architecture equipped its studios with new operable worktables, ergonomic seating, and collaborative worktables to facilitate daily movement and productivity. In 2021, the AACE Lab, a state-of-the-art digital fabrication facility, was launched on the fourth floor of the Foundation Building. In 2022, The Cooper Union opened the Benjamin Menschel Civic Projects Lab, a versatile street-level space serving as a classroom, workspace, and public exhibition area for interdisciplinary projects



focused on civic issues. Also opened in 2022, The Hub serves as a campus-wide welcome center for enrollment information, financial aid, scholarships, student accounts, and more. With a rich history spanning over 160 years, The Cooper Union Library has been a cornerstone of the institution's academic community. The completion of phase one of the library renovation has introduced social spaces for students, as well as workshop areas and spaces for book launches. The Center for Writing and Learning, a key resource for all Cooper Union students, was also relocated from 41 Cooper Square to the Library in 2023.

#### D. Structures for Student Support and Agency:

Since our last accreditation, several support structures have been implemented to ensure student success within our rigorous academic environment, yielding positive outcomes. Firstly, all students now receive an academic advisor upon entering the program, who continues to guide them through their fifth year of study. This personalized support system helps students navigate their academic journey effectively. Since spring 2017, all fifth-year students have selected individual advisors for their Thesis projects. This change allows students to receive tailored mentorship as they work on their thesis projects, enhancing their overall academic experience.

The appointment by the office of enrollment of an Assistant Director of Admissions dedicated to the school of architecture has played a crucial role in diversifying our student body by facilitating the admission of increasingly diverse classes. This initiative has enriched our learning community and promoted inclusivity.

To better support our international students, our program was re-certified as eligible for the STEM OPT extension, offering extended opportunities for post-graduation work experience in the United States. Moreover, The Cooper Union has expanded resources for student well-being across all schools, working closely with Student Affairs to proactively address student needs and ensure that students have the necessary support and services to aid their personal journeys.

#### E. New Opportunities for Collaboration and Engagement:

Our collaborative efforts extend far beyond the borders of The Cooper Union, encompassing a wide array of organizations and institutions within and beyond New York City. The School of Architecture has forged partnerships with various NYC institutions for curricular and extra-curricular projects involving both students and faculty. *Please see* <u>SV. 5 Leadership, Collaboration, and Community</u> as well as <u>PC.6 Leadership and Collaboration</u> for details.

#### F. Intensified Public Programming:

We support a wealth of varied public programming with a breadth of practitioners and disciplinarians. *Please see Appendix A. Selected Events and Exhibitions for the public programming supplementing our students' learning.* These endeavors make the School of Architecture a vital hub for dialogue and exploration within the architecture community at the local, national, and global levels.

#### G. Diversity, Equity, Inclusion and Belonging:

In response to the student-led initiatives following the Black Lives Matter movement in the summer of 2020, a task force comprising students, faculty, and alumni from the School of Architecture was established. This task force was formed to propose actions to dismantle structures of racism and injustice within the institution by advocating for changes in curricula, educational approaches, and philosophies. Through the <a href="Anti-Racist Manifesto">Anti-Racist Manifesto</a>, the School has articulated various objectives and milestones to foster an inclusive teaching and learning environment through collective efforts and self-accountability. The recommendations put forth by the Anti-Racism Task Force undergo review by relevant committees and are continually integrated into school practices. Please see <a href="SV.3 Equity">SV.3 Equity</a>, <a href="Diversity">Diversity</a>, and Inclusion, <a href="PC.7 Learning and Teaching Culture">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="PC.8 Social Equity and Inclusion">PC.7 Learning and Teaching Culture</a>, and <a href="P

#### H. Incorporating Self-Assessment Process and Curricular Development:

The architecture program's ongoing assessment practices have been augmented in response to the NAAB *Conditions for Accreditation, 2020 Edition*. The revision to learning outcomes was inspired by the updated



accreditation criteria and a desire to align program goals with the revised Shared Values, Program Criteria, and Student Criteria developed by the NAAB.

It is important to highlight that the development of this APR was a collaborative self-assessment process. In previous accreditation cycles, only a few key faculty members were involved in writing the program report. However, for this APR, all our full-time and proportional faculty, along with a significant number of contributing adjuncts and staff members, provided direct input and participated in the writing process. This inclusive approach was democratic and collaborative, requiring numerous meetings, conversations, and reflections involving a majority of our faculty and staff members.

More detail on our various assessment practices can be found in 5.3 Curricular Development.

#### 1—Context and Mission

To help the NAAB and the visiting team understand the specific circumstances of the School, the program must describe the following:

The institutional context and geographic setting (public or private, urban or rural, size, etc.), and how the program's mission and culture influence its architecture pedagogy and impact its development. Programs that exist within a larger educational institution must also describe the mission of the College or university and how that shapes or influences the program. *Program must specify their delivery format (virtual/on-campus)*.

The Cooper Union for the Advancement of Science and Art, established in 1859, is among the nation's oldest and most distinguished institutions of higher education. Dedicated exclusively to preparing students for the professions of architecture, art, and engineering, the college has an enrollment of approximately 1,000 students, all accepted on merit alone.

Through the Charter and Deed of Trust, Peter Cooper, inventor, industrialist, philanthropist, and public servant, endowed a newly established institution, The Cooper Union for the Advancement of Science and Art, a building and land "for the purpose of establishing a public institution...for the advancement of science, art, philosophy and letters, for procuring and maintaining scientific and historical collections, collections of chemical and philosophical apparatus, mechanical and artistic models, books, drawings, pictures, and statues, and for cultivating other means of instruction." Thus, Peter Cooper endowed a public building, not a particular program. The original Foundation Building housed a large public lecture hall, classrooms, galleries, and a free reading room.

The Cooper Union was the first private institution of higher education in the nation to admit students based exclusively on merit; the first to explicitly prohibit discrimination based on race, gender, religion, ethnicity or national origin; the first to provide a free education to every admitted student (before free public education at the precollege level was public policy) and the first to offer a free reading room open to all residents of the city, the forerunner of the public library.

Beyond its educational programs, the public lecture hall included in Peter Cooper's Foundation Building would become one of the most significant public spaces in 19th and 20th century New York. Originally designed to accommodate a standing audience of three thousand, the Great Hall of The Cooper Union would become a center of civic engagement for the greater public, providing a space for free lectures and a forum for public debate of the most significant issues of the time. View <u>History of The Great Hall</u>.

The Irwin S. Chanin School of Architecture enjoys an illustrious history, with notable faculty and alumni whose careers have impacted both professional and academic spheres. Most notably, the program was launched and led by John Hejduk, who started teaching at Cooper Union in 1964 and was appointed dean in 1975, serving until his passing in 2000. With a student body of 145 primarily enrolled in a five-year undergraduate degree program, the



program has always emphasized a robust curriculum, including Design; History, Theory, and Criticism; Representation; and Technology classes in dialog with a foundation of Humanities courses shared between the Schools of Engineering, Art, and Architecture. The intimate scale within the institution allows for a close interdisciplinary connection between all schools while permitting a tight-knit conversation between faculty, staff, and students. The School of Architecture has also fostered the idea of Hejduk's 'social contract,' ensuring that education protects academic freedom – a vibrant place of exchange, exploration, and experimentation.

Located on Cooper Square in the East Village of New York City, the School draws vitality from its urban context. The urban voids of the city have served as sites of many studio speculations over the past decades, engaging the city as a testbed of ideas. At the same time, the School has consistently collaborated with local institutions to create a more lasting and vocal cultural presence; with the Education of an Architect exhibition at MoMA in 1971 setting the stage, the program continues to work with a host of different institutions to allow students cultural exchange with prominent curators, historians, and practitioners. More recently, this has expanded internationally with student contributions to numerous biennales and other international exhibitions.

Located primarily on the third floor of the historic Foundation Building, the School of Architecture is situated between two critical programmatic centers of our program: the Architecture Archive on the second floor and the fabrication shops on the fourth floor. The Archive contains the School's pedagogical history and serves as a teaching tool for students and faculty, curating new exhibitions every semester, hosting internships for students, and participating in lectures, roundtables, and seminars. The fabrication shops include the AACE Lab, which opened in 2020, and the Art and Architecture Sculpture Shop. The AACE Lab offers a wide variety of new digital fabrication tools to all students. The Art and Architecture Sculpture Shop provides machinery for woodworking, casting, and welding, supporting student work at a wide range of scales. Together, these spaces enable a key aspect of every student's education in their first year, providing the means to work with all tools as a foundational requirement, making building a central part of a commitment to architectural exploration. As pedagogical instruments, these two resources form a critical part of the education of our students.

The program's role in and relationship to its academic context and university community, including how the program benefits—and benefits from—its institutional setting and how the program as a unit and/or its individual faculty members participate in university-wide initiatives and the university's academic plan. Also describe how the program, as a unit, develops multidisciplinary relationships and leverages unique opportunities in the institution and the community.

The School of Architecture is the smallest among the three degree-granting schools at The Cooper Union and has a distinct role within the institution. Its small size encourages an intensity and community in which students and faculty can engage closely, fostering collaboration and support.

Situated alongside the Schools of Art and Engineering and the Faculty of Humanities and Social Sciences, the School of Architecture benefits from exposure to a focused spectrum of disciplines within The Cooper Union. This proximity creates opportunities for interdisciplinary exploration, collaborative research, and comprehensive learning experiences.

Activities that demonstrate the program's benefit to the institution: Most non-design studio classes in the School of Architecture are open to students in Art and Engineering as electives, and students from the other schools take advantage of this opportunity. The School also sponsors and co-sponsors major public events, including symposia on issues of both global and local importance to The Cooper Union and the greater architectural community. The School has developed active, ongoing relationships with New York City cultural and professional institutions, including the American Institute of Architects NY Chapter, The Architectural League of New York, the Metropolitan Museum of Art, The Museum of Modern Art, and the Storefront for Art and Architecture. These partnerships reaffirm The Cooper Union's position in New York as a center of knowledge and critical investigation of urgent



environmental, technological, cultural, and civic questions. Such collaborations illustrate the potential for architecture, art, and engineering to engage these questions to transform, ameliorate, and reframe the conditions of contemporary life.

The School of Architecture's exhibition program addresses issues of importance to the other professional schools of The Cooper Union. Recent gallery exhibitions include Vkhutemas: Laboratory of Modernism, 1920-1930; Confronting Carbon Form; and Sue Ferguson Gussow: Retrospective. *Please see Appendix A. Selected Events and Exhibitions* for an extensive overview of public programming at the School of Architecture, organized by Program Criteria.

Benefits derived to the program from the institutional setting: The disciplinary intersections between architecture, art, and engineering as allied fields have been integral to the development of all three schools within The Cooper Union. Students in the School of Architecture participate in the larger community of design professions and develop their craft within a small and closely-knit community where students in art and engineering also find their professional paths. Students in the School of Architecture take studio and theory classes in the School of Art for elective credit as well as classes in the School of Engineering on materials testing, structures, and computation. Students develop proposals for the Menschel Fellowship Exhibition jointly with students in the other two schools and form interdisciplinary project teams for internal grants. This combination of intimate scale and common history creates a meaningful cross-pollination between The Cooper Union's three programs and a true sharing of intellectual resources across disciplines.

The Faculty of Humanities and Social Sciences (HSS) curriculum plays a vital role at The Cooper Union. Students across all three schools are required to complete foundational and elective courses practicing close reading, written analysis, verbal expression, and critical engagement with various disciplines. The HSS program aims to bridge the gap between professional training and broader liberal arts and life skills, cultivating informed citizens with humanistic and social tools. The HSS curriculum includes a strong focus on the interdisciplinary nature of architectural practice. Many architecture students choose to pursue an HSS minor, which enhances their understanding of a given subject through specialized courses, providing formal recognition for their efforts.

**Interdisciplinary Learning:** Over the past five years, significant strides have been made in advancing Cooper Union's Board-approved <u>strategic priorities</u>. These efforts have sought to create greater opportunities for experimentation at the intersections of our disciplines. Progress includes the establishment and success of shared facilities such as the AACE Lab and Civic Projects Lab; the implementation of an institutional approach to block scheduling to facilitate cross-registration and more diverse composition of schools in the HSS courses; and the promotion of internal grants for interdisciplinary project teams.

In 2018, The Cooper Union was awarded a \$2 million grant from the <u>IDC Foundation</u> to create a new interdisciplinary lab. The IDC Foundation Art, Architecture, Construction, and Engineering (AACE) Lab serves as a catalyst for integration across disciplines. Building on existing cross-disciplinary initiatives at Cooper Union, each school's strengths are integrated around projects of "making" that create outcomes larger than the sum of the parts of individual disciplines.

One of the major changes since our last accreditation is the appointment of Dr. Demetrius L. Eudell in July 2023 as The Cooper Union's inaugural Vice President of Academic Affairs (VPAA). Dr. Eudell's appointment to this newly established academic leadership position followed a national search process guided by the recommendations of an external <u>Visiting Committee</u> and involving a cross-section of Cooper Union faculty, students, and staff. The charge of the VPAA role, identified in the Committee's report as an essential area of focus, is to coordinate cross-disciplinary learning opportunities, pedagogical collaboration, and global, civically engaged perspectives across HSS, architecture, art, and engineering. The hiring of Dr. Eudell represents significant progress toward this goal, and he is already engaged in key elements of future interdisciplinary success, including the preparation of interdisciplinary grant proposals.



The ways in which the program encourages students and faculty to learn both inside and outside the classroom through individual and collective opportunities (e.g., field trips, participation in professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities).

The School of Architecture is dedicated to offering its students the highest quality professional education within an intellectual environment that fosters and expands their creative capacities and sensibilities. Through a commitment to advancing this pedagogical project, the program provides a wide range of learning experiences, both within and beyond the formal curriculum.

#### **Learning Opportunities Within the Classroom:**

- Team Teaching: The School has a long tradition of 'team teaching.' Several faculty together co-teach the full cohort of students in a single class year each semester in every year expect for the Design IV Option Studios. This system has several demonstrated advantages: it gives students access to a broad spectrum of experience and background among the faculty team; it serves to foster a dynamic mentoring system in which senior faculty share a mastery of material and teaching experience with younger faculty colleagues who bring contemporary positions toward theory, modes of representation, fabrication and practice; and finally, by creating a mix of approaches and points of view, team-taught studios become a laboratory in which new exercises and methodologies can be introduced and evaluated as a shared, critical endeavor among the diverse groups of faculty.
- In-Class Guest Lectures: Faculty often invite guest lecturers to share specialized knowledge, skills, and experience that complement the faculty's expertise. Inviting guest speakers brings diverse perspectives, real-world insights, and opportunities for networking and inspiration. It is a valuable practice that helps students better understand and engage with the subject matter.
- Convergence Class: To illuminate the inter-relatedness of ARCH 135 Building Technology, ARCH 143 Construction Management, and ARCH 154 Professional Practice, this recently developed embedded course of study looks to highlight the related content of the three courses devoted to those subjects through the study of a single project. All third-, fourth-, and fifth-year students participate in the class, which is taught collaboratively by the three faculty members who lead each individual course. In the fall semester, the professors introduce the project through a joint lecture series, and in the spring semester, the students form groups to analyze topics and issues specific to the project. Convergence currently operates on a 3-year interval, but due to student concern's regarding the increased workload without additional credit, we are reviewing the merits and feasibility of the embedded project.
- Workshops: The School offers workshop sessions to students, faculty, and staff that complement existing
  coursework and expand critical technical fluency in select topics in digital art, design, and fabrication. These
  include workshops in 3D modeling, advanced 3D modeling, Grasshopper, scripting, metal origami, CNC
  fabrication, digital embroidery, utilizing the Kuka Robotic Machining Cell, LiDAR scanning, virtual reality, and
  GIS. For the fifth-year Thesis class, we offer tutorials in Adobe Premiere and After Effects, GIS: Mapbox
  Tutorial, UNITY, iPhone Capture, MilliLab, and Advanced Blender.
- Building Technology: The Building Technology Course allows students to work in small groups to build
  physical fragments (detailed "mock-ups") of works of architecture at a large scale. This hands-on
  understanding of materials and methods is developed via the analysis and construction of building details.
  Both the design and the construction of detail projects demand that the students access and comprehend
  the format and methodology of working drawings and interpret the building details in full-scale
  constructions.
- Field Trips: Field trips and site visits are integral components of an architect's education, encompassing a
  variety of classes and design studios. In ARCH 143A-B Construction Management, students visit
  construction sites locally along the Northeast corridor, offering valuable hands-on experience in
  construction practices. In ARCH 154A-B Professional Practice, students embark on visits to different
  architectural offices and studios, providing insights into diverse modes of practice. In ARCH 135A-B Building
  Technology, planned field trips include a construction site tour and a tour of "good and bad details near
  Cooper Square." Within design studios, site visits are conducted to document, research, and gain firsthand



- experience of specific locations. Recent examples include the **ARCH131A Design III** boat tour of Newtown Creek, the **ARCH141B Design IV** visit to the Erie Canal and Albany, the **ARCH131B Design III** visit of the East New York Housing Projects, and the **ARCH111B Architectonics** visit to The New Museum to explore Theaster Gates' use of materiality in the "Young Lords and Their Traces" exhibition.
- Travel Studios: Over the years, students have had the opportunity to enhance their architectural studies and broaden their understanding of the world through travel and intensive exploration of various sites and cities. This experience enables them to engage with diverse cultures, work within intricate contexts, and contribute to the advancement of the fields related to the built environment as global citizens. Previous travel studios have encompassed field trips to locations such as Mexico City, Puerto Rico, Kansas, Hong Kong, and Shenzhen. Students have also participated in a Summer Workshop in Madrid hosted by Cooper Union faculty in collaboration with ETSAM. The School is committed to support all students enrolled in courses with travel opportunities to ensure equal access. However, budget constraints often restrict what can be offered. Unfortunately, since the pandemic, we have been unable to resume our class-wide travel studios.

Extending the School's Engagement with New York City and Beyond: Our 2018 partnership with the University of Puerto Rico in the aftermath of Hurricane Maria, as well as our recent collaboration with HELP USA on housing projects in the Bronx and Brooklyn, exemplify initiatives that connect Cooper Union with the pressing social issues of our time and foster a meaningful dialogue with our local communities. In a similar vein, our continuous involvement with the Museum of Modern Art has resulted in the creation of striking models for two recent exhibitions: "Toward a Concrete Utopia: Architecture in Yugoslavia, 1948-1980" and "The Project of Independence: Architectures of Decolonization in South Asia 1947-1985." Additionally, our students have constructed a substantial centerpiece model of the Stupa typology for The Metropolitan Museum of Art's "Tree & Serpent: Early Buddhist Art in India, 200 BCE–400 CE Exhibition."

Furthermore, the School of Architecture has actively participated in several exciting and successful off-site student work installations over recent years. These include "IBEJI" at the dieFirma Gallery in New York, led by Julian Palacio and his Structures I students; "The Imagination of Space," a project on Governors Island led by Ceren Bingol and their "Phenomenology of Space" elective students; and "The Festival des Architectures Vives 2019" in Montpellier, led by Julian Palacio his Structures I students.

We are also proud to have taken part in various significant global exhibitions. Professors Ben Aranda and Sam Keene led teams of architecture and engineering students in an exploration of artificial intelligence in relation to facial recognition and privacy at the 2019 Shenzhen Biennale. In 2021, a selection of faculty and students, including Nora Akawi, Hayley Eber, Lydia Kallipoliti, Lauren Kogod, and Ife Vanable, participated in the Venice Architecture Biennale, where they reflected on the theme "How We Live Together." Acting Dean Hayley Eber and Associate Professor Adjunct Mae-Ling Lokko's students reimagined the typology of the dining room table as part of the "Edible" exhibition for the 2022 Tallinn Architecture Biennale.

Each of these exhibition and installation experiences was complemented by a pedagogical project, typically a Design Studio or Elective Seminar. These projects enabled faculty and students to engage with museum curators and scholars, providing valuable context and direction throughout the creative process. *Please see Appendix A. Selected Events and Exhibitions for additional details.* 

Other forms of institutional collaborations have been pursued through pedagogical initiatives that integrate a public-facing element. Some instances of these collaborations include a recurring elective course with The Storefront of Art and Architecture focusing on Public Art as Alimentary Infrastructure, the first of which culminated in a 2023 symposium titled "What Black is This, you Say?" in the Great Hall. Additionally, the directors of a83 Gallery host a printmaking elective at their SoHo gallery space. Benjamin Aranda's spring 2024 elective, ARCH185.20 Crossings "Home – Smithsonian Design Triennial," and the upcoming 2024-2025 lecture series



collaboration with The Cooper Hewitt, Smithsonian Design Museum for their upcoming Triennale, explore the theme of "Making Home with History."

#### Advancing the Discipline Through Intensifying Intellectual Programming:

Our extensive lecture series and public programming provide a valuable opportunity to amplify the vibrant intellectual culture of the School and extend the discursive space of the studio and classrooms into various public formats. These forms of architectural discourse, along with platforms for exhibitions and discussions, play a pivotal role in fostering meaningful debates and the exchange of ideas. They are essential for the ongoing learning of both faculty and students.

In addition to the School of Architecture Lecture Series, which is coordinated each year by a faculty member around a set of themes and issues, we have an ongoing lecture partnership with The Architectural League of New York and affiliations with the American Institute of Architects. The Diane Lewis Student Lecture Series, supported by Elise Jaffe and Jeffrey Brown, is organized by a student committee, and often includes presentations by Cooper alumni and others exploring alternative modes of practice.

The Cooper Union engages local and regional audiences through exhibitions, partnerships, and outreach, demonstrating its commitment to offering "public programs for the civic, cultural, and practicable enrichment of New York City." The School of Architecture Archive produces a vibrant exhibition program thematically tied to the School's educational objectives, bridging pedagogy and public service by enriching Cooper Union's curriculum, and engaging diverse audiences. This program is central to the School's evolving pedagogy, its benefit to New York City's intellectual and cultural life, and its contribution to the region's broader architecture and design community. A detailed description of the Archive's role within the School of Architecture is found in 5.6.4 Physical Resources.

**Travel Opportunities and Resource Support for Students:** Travel constitutes a fundamental element of architectural education. It broadens students' understanding of the world, allowing them to interact with diverse cultures, navigate intricate environments, and make meaningful contributions to advancing the built environment as global citizens. To support this objective, we provide numerous fellowship opportunities enabling students to conduct on-site research, facilitating a comprehensive grasp of various contexts.

- The Arthur Thomson Thesis Fellowship was established in 2022 to support the development of thesis projects that seek positive social and environmental change by shaping the built and natural environment in the US and worldwide. The Fellowship supports informed, original, and critical student thesis propositions that extend beyond graduation to significantly impact the field and partake in extended discursive arenas that shape architectural discourse. *Please see our website for additional information*.
- The Diane Lewis AR'76 Memorial Architecture Travel Fellowship, *In Search of Civic Space* is awarded to Cooper Union architecture students for summer travel between their fourth and fifth years of study. Students focus on a major recurring architectural theme of great importance to the late Professor Lewis—defining and designing 'civic space.' The inaugural fellowship was awarded for the summer of 2018. *Please see our website for additional information*.
- The William Cooper Mack Thesis Fellowship program was established in 2008 by John and Harriet Mack at
  The Irwin S. Chanin School of Architecture in memory of their son William Cooper Mack AR'06. William
  Cooper Mack Thesis Fellowships are awarded each year to support primary research and inquiry in the
  development of significant and original thesis projects. Please see our website for additional information.
- The IDC Foundation Innovation Fellowship established in 2021 for engineering and architecture students entering their last two semesters before graduation provides a full tuition scholarship plus a \$1,000 stipend. The Fellowship is merit-based for students who demonstrate exceptional academic performance and career potential to develop innovative, interdisciplinary solutions to pressing societal needs. *Please see our website for additional information*.
- The Palmer Hayden Travel Fellowship supports travel abroad for African American students in art and architecture.

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- In a partnership that started in 2022, Fontainebleau has offered scholarships to our students to participate in their Summer Program in Paris, and Campus Ultzama sponsors a student to participate in their workshop in Navarre, Spain.
- The inaugural Arthur Thomson Post-Graduation Fellowship, launched in Summer 2023, aims to support young architects who are dedicated to applying their knowledge and skills to advocate for social justice and equity in meaningful ways. The \$20,000 award is intended to support a proposal from a fifth-year architecture student for impactful endeavors post-graduation.

Student and Faculty Professional Development: The School of Architecture supports student contact and involvement with the profession through its co-sponsorship with the Center for Career Development of the CU@Lunch Lectures, which bring alumni active in practice throughout the region back to Cooper to share their experiences of moving from school to diverse roles in the profession. The School pays the dues of any student who wishes to become a member of the American Institute for Architecture Students, which also gives students free student membership to the AIA New York Chapter. Through our partnership with The Architectural League of New York, School of Architecture students are offered free admission to the League's annual Student Program, which provides the opportunity to visit a broad range of professional offices in New York City and to discuss contemporary modes of practice in the city and beyond.

The School encourages and supports faculty involvement in professional societies and organizations. We have faculty representation on the AIA Board of Educational Affairs, The Journal of Architectural Education Editorial Board, the Boards of The Architectural League, The Storefront for Art and Architecture, and the New York State Board for Architecture Office of the Professions. *Please see Section 5.4.3 for more information regarding resources for faculty development support.* 

**Student Teaching Opportunities:** Students in The School of Architecture have a wide range of opportunities to engage in teaching roles, both in collaboration with faculty and independently, taking on the responsibility of designing curricula and fostering a learning community among students. Our student-taught Saturday Program offers free studio art and architecture courses to New York City public high school students. Many alumni of the Saturday Program enroll at The Cooper Union and subsequently become student instructors for the program.

Students have the opportunity to teach in our summer program "Introduction to Architecture," open to high school and college students. We also maintain an ongoing partnership with The Chapin School, where two of our students teach an architectural design course to their high school students during the spring semester. As part of our commitment to fostering a collaborative learning environment, we have established a teaching assistant program within the required curriculum. In this program, upper-level students provide supplementary class support and tutoring for lower-level students in courses such as History I and II, Descriptive Geometry, and Representation.

#### **Summary Statement of 1 – Context and Mission**

#### This paragraph will be included in the VTR; limit to maximum 250 words.

The mission of The Irwin S. Chanin School of Architecture is to provide its students with the finest professional education available within an intellectual environment that fosters and expands their creative capacities and sensibilities and establishes the foundation for a creative professional life. The School is committed to the belief that one of society's prime responsibilities is toward learning and education in the deepest sense: that exercising individual creativity within a willing community is a profoundly social act. Fundamental to the School's mission is the maintenance of an atmosphere in which freedom of thought and exploration can flourish, where students can explore and utilize their strengths and individual talents, interests, and modes of working to their highest potential.



The curriculum offers a cultural and intellectual foundation in the liberal arts as they relate to the design of the environment at all scales. The discipline of architecture is interpreted in the widest possible sense. Students develop their knowledge and design skills within a framework of studios and courses that stimulate research and debate into the role of architecture as a cultural practice with broad social and environmental implications. As the nature, role, and scope of the architect rapidly assumes new directions and dimensions, the School emphasizes the principles of design and their underlying human values. The program seeks to engender a strong sense of the ethical responsibilities of service and leadership, teamwork, and individual creativity essential to the development of principled professionals dedicated to addressing the spatial needs of the community.

#### Long-term / Strategic Goals

The long-term goals outlined here were crafted by Dean Tehrani and (then Associate, now Acting) Dean Eber as part of the annual planning assignment requested by the President. These goals are a culmination of discussions held during Faculty meetings, dialogues with students, feedback from external critics and jury members, and insights gleaned from the profession.

## 1. Broaden Traditional Forms of Knowledge Production and Dissemination: Curricular Transformation + Pedagogical Experimentation

- Implement curricular changes to advance the School's pedagogical project and strengthen its longstanding commitment to integrating history, theory, design, and architectural representation methods.
- Experiment with pedagogical approaches to enhance knowledge production and dissemination.

#### 2. Enhance Interdisciplinary Approaches: Bridging Courses, Schools, and Disciplines

- Facilitate collaboration between different courses, schools, and disciplines.
- Foster an environment that encourages the cross-pollination of knowledge and skill sets.

#### 3. Extend Engagement with New York City and Beyond: Amplifying Discursive Spaces

- Expand the influence of studio and seminars into public formats, initiatives, and collaborations.
- Prepare students to lead in a diverse and complex world.

#### 4. Actively Work Towards a Just, Resilient, and Sustainable Future

- Encourage creative practices that contribute to justice, resilience, and sustainability.
- Emphasize engagement across all scales and for all inhabitants of natural and built environments.

#### 5. Diversify the Field of Thinkers and Makers

- Promote diversity in the field by encouraging a broad range of perspectives.
- Support initiatives that foster inclusivity in both thinking and making.

#### 6. Foster Institutional Culture: Collaborative Practice, Advocacy, and Support

- Cultivate a culture that values and encourages collaborative practices.
- Develop structures within a rigorous academic program for student support and agency.

#### 2—Shared Values of the Discipline and Profession

The program must report on how it responds to the following values, all of which affect the education and development of architects. The response to each value must also identify how the program will continue to address these values as part of its long-range planning. These values are foundational, not exhaustive.

**Design**: Architects design better, safer, more equitable, resilient, and sustainable built environments. Design thinking and integrated design solutions are hallmarks of architecture education, the discipline, and the profession.

#### **SV.1**—Our Approach:

The School of Architecture's shared values for the discipline and the profession are grounded in the ethos of our governance: that students and faculty together constitute all committees, including the curriculum committee that steers the School's intellectual direction and has begun to evaluate critical courses at the end of the semester.



Increasing student and adjunct faculty participation in all committees in 2019 was the first step in ensuring that all voices of the School were heard equally in an inclusive and equitable environment.

The role of critical thinking and the perception of architecture within an enlarged social, environmental, and material context constitutes the core of the school's mission. It also highlights the pivotal role of design thinking principles and their underlying human and tectonic values in shaping the evolution of our program. This is explicitly highlighted in the second paragraph of our Mission Statement and Strategic Goal 1.

## Goal 1: Broaden Traditional Forms of Knowledge Production and Dissemination: Curricular Transformation + Pedagogical Experimentation.

The strategies for achieving this goal start with the curriculum. As stated in the Mission Statement, "Students develop their knowledge and design skills within a framework of studios and courses that stimulate research and debate into the role of architecture as a cultural practice with broad social and environmental implications." We continuously implement curricular changes to advance the School's pedagogical project, strengthening its longstanding commitment to integrating history, theory, design, representation, and technology while experimenting with pedagogical approaches.

Within our curriculum there is a vibrant dialogue among Design Studio; History, Theory, and Criticism; Structures; Environments; Environmental Technologies; Building Technology; and Humanities and Social Sciences. Where possible, we encourage cross-pollination of faculty within Design Studios; this encourages a design process that is broadly informed by a greater range of social, political, and cultural issues beyond technical requirements. Courses within the three core years are coordinated, drawing their syllabi to establish a dialogue between different aspects of the curriculum. For instance, **ARCH 121B Design II** includes case studies that inform **ARCH 131B Design III**. In tandem, the Structures and Building Technology professors are brought into this studio to elaborate on material and structural explorations as catalysts for design speculation.

During the past eight years, we have critically examined, revisited, and reframed the curriculum of the Bachelor of Architecture Program in response to larger cultural questions amongst North American colleges to challenge Eurocentric perspectives and biases, and to address contemporary ecological, social, and political crises. Since 2022 we have restructured the content of the History, Theory, and Criticism sequence to include global histories that have hitherto been excluded, bringing them into dialogue with classical pedagogical canons. In critiquing and de-centering Western narratives, we engage with questions of settler colonialism, forced displacement, and racial equity with a more critical accord. In response to the existential crisis of the Anthropocene and climate change, a series of courses, seminars, and studios have been added to the curriculum, exploring the environment through a technical, political, and social context. While our prior curriculum historically focused on the tectonic intelligence and autonomy of architecture, our present focus is to create an inclusive intellectual environment by exploring the intersection of technological, cultural, and social issues to foster a nuanced discourse within the discipline and beyond.

With the scope of educating young architects in preparation for a profession that is ever expanding, we are also cognizant of the need to view the necessary dynamism of practice itself, often out of sync with urgent cultural issues. For this reason, we also see the mandate of our pedagogical responsibilities to explore and forecast questions in a productive and speculative light, not only to conform to the profession as we know it but to further transform it for forthcoming generations.

#### **SV.1—Curricular Aspects:**

The Bachelor of Architecture Program's Design Studio sequence is structured around problems that increase in breadth and complexity as the social and cultural contexts of students' design work gradually broaden and deepen. The curricular activities that directly support design are the Design Studios I-IV (years 1-4) and Thesis (year 5), which constitute the primary focus of the School's pedagogical agenda. Expanded descriptions of these courses can be found primarily in PC.2 Design, as well as throughout 3.1 Program Criteria and 3.2 Student Criteria.



While design is the underlying theme of the entire curriculum, three broad and interrelated concentrations can be distinguished among the required courses: design as representation, design as analysis and process, and design as ethical and social engagement.

Representation is understood as a tool for critical evaluation in all five years of the Program. From the outset, students are taught that the construction of a drawing or model is a selective and iterative process that edits and critiques those aspects of a problem that are given form in each representational mode. While the design studio is the crucible for exercising this approach to representation, a sequence of required courses in the first two years instructs all students in techniques of representation, ranging from freehand drawing to computer applications and descriptive geometry to fabrication and construction techniques. Thus, by the end of the second year, each student is equipped with a broad range of techniques and a conceptual framework for understanding the tools with which design is explored. *Please see Appendix C. Additional Documentation for the Representation course descriptions.* 

Analysis as a didactic, structural, and abstract discipline is fundamental to the School of Architecture curriculum. Exercises that introduce methodologies for discerning and manipulating the lessons embodied in important historical buildings are introduced at several points in the curriculum. Design as an iterative and evaluative process is systematically reinforced in the pedagogy of the studios: a carefully orchestrated rhythm of desk critiques, pinups, formal internal reviews, and midterm and final reviews with visiting critics from the greater architectural and professional communities reinforce a process whereby the initial analysis of a problem or question leads to a first effort to synthesize spatial relationships that, in turn, leads in turn to further analysis, and so on. The sequences of technical courses in Structures, Building Technology, and Environmental Technologies all gradually build a more complex understanding of the elements that must be explored and balanced in a successful design effort. Please see <u>PC.2 Design</u>, <u>SC. 1 Health</u>, <u>Safety</u>, and <u>Welfare in the Built Environment</u>, and <u>SC.4 Technical Knowledge</u> for supporting curricular aspects and expanded course descriptions.

Finally, the broad contexts in which design is received and evaluated at a sociocultural, historical, and aesthetic level is the focus of required courses in the History of Architecture sequence, including the History and Theory of Urbanism, and a rich offering of electives that explore how design is understood as part of a larger intellectual discourse, both historically and in terms of contemporary challenges. The emphasis here includes a focus on non-Western knowledge, on alternative readings of sociocultural contexts for understanding architecture, and on the ethical implications of making architecture today. *Please see <u>PC.4 History and Theory</u> for supporting curricular aspects and expanded course descriptions.* 

In this way, coursework outside of studio informs and enriches the design process within the studio and subsequently provides students with an expanding context for understanding their own process.

#### **SV.1—Co-Curricular Aspects:**

While design thinking permeates virtually every aspect of the School, key supplemental experiences that reinforce design include the Lecture Series, Exhibitions Program, End of Year Show, collaborative institutional partnerships, and final design reviews. Detailed descriptions of these activities can be found primarily in <a href="PC.2 Design">PC.2 Design</a>, as well as throughout <a href="3.1 Program Criteria">3.1 Program Criteria</a> and <a href="3.2 Student Criteria">3.2 Student Criteria</a>. Please see <a href="Appendix A. Selected Events and Exhibitions">Appendix A. Selected Events and Exhibitions</a> for an overview of public programming and lecture series that supplement our students' learning.

#### **SV.1**—Strategies for Continuous Improvement:

Assessment of the design curriculum is conducted both formally and informally. Formally, the design faculty teaching team coordinates reviews with internal and external jurors to evaluate student work. The Curriculum Committee identifies and addresses issues and concerns, which are then discussed and shared with faculty to be integrated into studio courses in the subsequent cycle.

Twice a semester, the deans meet individually with each class year of the Architecture School student body, as well as with the Student Council. These meetings address various student concerns, including issues regarding the design studios and other classes. Notes are taken and priorities for action items established.



Course Questionnaires and surveys are distributed at the end of each semester for the design studios, allowing students to provide feedback.

Faculty and students collaborate to curate and install the annual End of Year Show, which serves as both a celebration of student work and an assessment tool for the profession and the public.

**Environmental Stewardship and Professional Responsibility**: Architects are responsible for the impact of their work on the natural world and on public health, safety, and welfare. As professionals and designers of the built environment, we embrace these responsibilities and act ethically to accomplish them.

#### SV.2—Our Approach:

The School of Architecture is committed to teaching environmental stewardship and engaging with the evolving role of the architect in light of the climate crisis. Historically, the School focused on core design and tectonic values that form an architect's professional practice, freedom of thought, and imaginative capabilities. This mission has expanded in the last eight years to embrace questions relative to the climate crisis, not only as a technical problem but as a cultural and existential condition. The reshaping of the School's pedagogy is reflected in a) curricular changes to the core program, b) curated lecture series by faculty to explore the material and social-economic conditions that shape design discourse in relationship to the climate crisis, and c) embracing questions of design, climate, and society within larger dialogues of the School, particularly as these dialogues are expressed in thesis projects and the work of elective courses.

With these changes, the School's pedagogy has expanded to explore the role of architecture and urbanism within the context of interconnected global crises: the climate emergency, public health crisis, and social inequity. Broader dialogues throughout the School investigate how architecture constructs, distributes, and leverages power, how spaces are shaped by larger political agendas that unequivocally involve the climate crisis, and how architects are responsible for the impact of their work on the natural world and on public health, safety, and welfare.

Goal 4 of our Strategic Goals addresses how environmental stewardship and professional responsibility are critical priorities in our program's evolution. Below is a summary and further explanation of that goal.

Goal 4: Actively Work Towards a Just, Resilient, and Sustainable Future: Engaging All Scales and Inhabitants is critical to the program's evolution. As stated earlier, strategic Goal 4 promotes creative practices that foster justice, resilience, and sustainability. It underscores our dedication to climate action by advocating for engagement across all scales and for all inhabitants of both natural and built environments. This commitment permeates our curriculum and extracurricular initiatives, as outlined below.

#### **SV.2—Curricular Aspects:**

Our sustained commitment to climate action and environmental stewardship as an affirming value of the School is reflected primarily in changes to the core curriculum.

In 2018, Dean Tehrani worked with Associate Dean O'Donnell and the Curriculum Committee to reconsider and adjust the Bachelor of Architecture core curriculum. With the faculty's vote, two required courses were added to the second-year curriculum, the **ARCH 124A** and **ARCH 124B Environments** sequence, with an explicit focus on environmental stewardship and the ways in which many facets of climate change may reshape the architect's professional responsibility.

The Environments sequence introduces critical issues of the "natural" environment and the recognition of contemporary interior space as a complex environment that is both mechanical and passive. These courses are directly linked to Design II, providing students with a conceptual grounding in environmental issues at the urban and building scales, when complexities of program, context, and site are introduced in the studio. The alliance of



these two courses with Design II, via a series of shared assignments, allows students to integrate topics addressed in Environments with their design work through environmental analysis and climate-responsive solutions.

With the initiative of Dean Tehrani and Associate Dean Eber, the ARCH 134A-B Environmental Technologies sequence in the third year of the curriculum was recalibrated in 2021 with a renewed focus on the integration of specific design solutions within the Design III studio proposals. Previously, the course content was dedicated to technical design solutions. With the adjustments of ARCH 134A-B, the courses now cover environmental and life safety systems, including mechanical (heating, cooling, ventilating), water supply and disposal, electrical, lighting, acoustics, communication, security, and fire protection. The sequence emphasizes the application of these systems and the ways in which they affect program and building form.

Many students also choose to address the discipline's professional responsibility and how stewardship of the environment is inherent to that responsibility in their thesis projects in **ARCH 151A-B Thesis.** 

SV.2 Environmental Stewardship and Professional Responsibility is closely connected to the curricular and cocurricular aspects detailed in <u>PC.3 Ecological Knowledge and Responsibility</u> as well as <u>SC.1 Health, Safety, and</u> Welfare in the Built Environment.

#### SV.2—Co-Curricular Aspects:

The Lecture Series organized by the School of Architecture in 2020-2021 and 2022-2023 were dedicated to exploring environmental awareness, new practices in the age of climate change, and environmental inequality.

In particular, the 2020-2021 Lecture Series curated by Associate Professor Lydia Kallipoliti, *Landing: Architecture in the Age of Extinction, Entanglements, and Other Bodies,* claimed that climate change, social inequality, and economic deregulation are indivisible and intertwining problems, and envisioned the materialization of these three factors as a landing process down to earth. Via a series of online lectures, debates, and interactive conversations, the aim was to question and assume responsibility for architecture's political, ecological, and social agency. The 2022-2023 Lecture Series, curated by Assistant Professor Elisa Iturbe, *Architectures of Transition,* interrogated architecture's alliance with the project of carbon modernity from the early moments of industrialization to today's advanced stages of fossil capitalism.

In addition, Professor Iturbe organized an exhibition and a symposium in tandem with **ARCH 124B Environments** on "Confronting Carbon Form" in the spring of 2023, two events that largely evolved the student community and impacted the pedagogy of the School. The exhibition and symposium examined a new spatial order born in the fossil fuel age: new building typologies and urban archetypes that emerged to meet the demands of a new economy while unprecedented mobility fundamentally changed human perception of space. Professor Kallipoliti organized an exhibition and the launch of her book *Histories of Ecological Design: An Unfinished Cyclopedia* in spring 2024. This event was linked with research electives that she taught from 2022-2024 and ongoing discussions with thesis students.

Most prominently, The Cooper Union's Solar Decathlon team was awarded the 2023 US Department of Energy Solar Decathlon Design Challenge Competition Commercial Grand Prize. Led by Professors Melody Baglione (School of Engineering), Pamela Cabrera, Julian Palacio, Nader Tehrani, Cosmas Tzavelis (School of Engineering), and David Wootton (School of Engineering), the interdisciplinary group of students designed a public college-prep high school located on Governor's Island, New York. Students employed zero-energy retrofit principles, taken after the National Renewable Energy Laboratory (NREL) guidelines. Winning the Solar Decathlon was a substantial achievement, as teams had to first qualify at the semi-finalist competition in February 2023 in one of six subdivisions: New Housing, Retrofit Housing, Attached Housing, Multifamily Building, Office Building, or Education Building. The Cooper Union team ranked as one of 10 finalists under the Education Building Division to advance to the national event; the team had to first win the subdivision before being awarded the Commercial Grand Prize. Please see our website for the official announcement.

Architecture students also participate in the Cooper Union Gardening Project, which utilizes growing plots on the 8<sup>th</sup> floor terrace of 41 Cooper Square. The project started in October 2018, by students of all three academic



schools. The students reclaimed space to cultivate and educate the community by growing food on a neglected green roof on the building. The Garden Project's stated goals were to increase access to locally grown food, educate community members about our relationship to food, energy, waste, and sustainable practices, and finally to encourage food, social, and environmental justice through practice, advocacy, and awareness.

#### SV.2—Strategies for Continuous Improvement:

The Cooper Union Grant Program offers financial support for initiatives that enrich our students' educational journeys, advance our faculty's teaching, research, and professional activities, foster innovative concepts for our future, and create platforms for our community to unite in tackling pressing societal challenges. During the selection process, various rotating themes are considered, with particular emphasis placed on proposals assessing climate change's impacts and investigating possible solutions.

As the special advisor to the Vice President of Academic Affairs, Mokena Makeka collaborates with The Irwin S. Chanin School of Architecture to advance pedagogical and interdisciplinary innovation centered on pressing issues, including climate change and sustainability. His efforts are focused on reinvigorating the now-dormant Institute of Sustainable Design into a new form, with a focus on environmental issues as they intersect all the Schools at The Cooper Union and the broader public.

At the conclusion of every school year, students from the School of Architecture, along with the Art and Architecture Shop, organize a materials swap or collection to minimize material waste. Additionally, our Computer Lab has adopted more sustainable material practices, such as opting for bond paper over mylar. A comprehensive campus-wide strategy is being discussed at the cabinet level to evaluate our material use and practices across all the Schools.

**Equity, Diversity, and Inclusion**: Architects commit to equity and inclusion in the environments we design, the policies we adopt, the words we speak, the actions we take, and the respectful learning, teaching, and working environments we create. Architects seek fairness, diversity, and social justice in the profession and in society and support a range of pathways for students seeking access to an architecture education.

#### SV.3—Our Approach:

At The Cooper Union, the commitment to Diversity, Equity, and Inclusion (DEI) has been central to the College's mission since its founding. The Cooper Union was the first private institution of higher education in the nation to admit students based exclusively on merit; the first to explicitly prohibit discrimination based on race, gender, religion, ethnicity, or national origin; the first to provide a free education to every admitted student (before free public education at the pre-college level was public policy); and the first to offer a free reading room open to all residents of the city, the forerunner of the public library. As the College effectively works to restore full scholarships for all undergraduate students, it continues to reinforce equal access to education as a core value at Cooper.

The Irwin S. Chanin School of Architecture is committed to an inclusive and diverse community through an open learning environment that is opposed to all forms of racism, discrimination, inequality, exclusion, and marginalization. We embrace transformative potentials of pedagogical experiments and explorations that challenge preconceptions and prejudice, encourage creative practices that engage across all scales and for all inhabitants of the natural and built environments, and prioritize the innovation and reflection that comes from recognizing diverse perspectives. We insist on our agency as architects in fighting for public safety, environmental health, and an equitable society for all.

The School of Architecture's approach to DEI permeates through 1) our pedagogy and learning environments, 2) diversifying our sources and references, 3) our approaches to architectural practice, ethics in the workplace, and the profession's impacts on the social and environmental contexts in which it is situated, and 4) the diversity of backgrounds and experiences of our community, in particular including those historically marginalized based on



race, religion, gender, sexual orientation, and disability. The School's approaches to DEI values are implemented in admissions processes, in diversifying our faculty and provision of faculty support, in the development and assessment of our curriculum and pedagogical approach, in the overall culture at the School, student life, and student support. These long-term efforts have been supported by committees tasked with college- and school-wide goals focused on advancing social justice principles across all aspects of the program.

We aim to continue diversifying our student body, particularly by increasing the admission of Black, Indigenous, and People of Color (BIPOC) students from New York, the U.S., and the world. This is achieved through outreach efforts, introduction to architecture courses, and portfolio support. For example, the School of Architecture participates in the Saturday Program, a student-led free education program in Art and Architecture for high-school students from across New York City's under-resourced neighborhoods, running from September to April.

The Saturday Program was founded in 1968 by Cooper undergraduate students, and students continue to provide instruction and peer mentorship. The course schedule provides the intensive work time necessary to explore media, techniques, and concepts for both beginners and students who are building their college admissions portfolios. The program includes museum and artist studio visits, guest artist lectures, and a year-end exhibition.

The School continues to strive for a faculty body that reflects the diversity of New York City, from local and global backgrounds. In addition to faculty recruitment, The Cooper Union offers faculty support and interdisciplinary course development grants that advance <u>The Cooper Union's strategic goals</u>, including to "increase diversity of thought, background, and experiences," "develop leading-edge models for higher education that consider the ethical, cultural, and environmental contexts and consequences of technical and creative disciplines," and "integrate public service orientation into academics and actively contribute to the betterment of New York."

Faculty, staff, and students contribute to nurturing an overall supportive and inclusive learning environment at the School to uphold DEI values. Public programs organized by the dean, faculty, and students are carefully curated to ensure a diversity of voices and backgrounds, historical and geographic contexts, and approaches to architectural practice, research, history, and design. Interdisciplinary public programs, such as the Center for Writing and Learning, the Intersectional Justice Program, and the Race and Climate Reading Group, and programs organized by student organizations contribute to an environment engaging questions of social justice and inclusion.

Strategic Goal 5 addresses how diversity, equity, and inclusion are critical priorities in our program's evolution. Below is a summary and further explanation of that goal.

#### Goal 5: Diversify the Field of Thinkers and Makers by encouraging a broad range of perspectives and practices.

The goal above aims to cultivate an environment that actively champions diversity, equity, and inclusion across scholarship, content, and educational processes. It advocates for a broad spectrum of perspectives and supports initiatives that nurture inclusivity in thought and action.

#### SV.3—Curricular Aspects:

The History, Theory, and Criticism (HTC) sequence at The Irwin S. Chanin School of Architecture has been restructured to diversify and expand historical and conceptual understandings of the discipline and move architecture beyond Western canons to include scholarship and creative production by a greater selection of BIPOC historians, theorists, designers, and artists as well as practitioners from the Global South. These updates to the curriculum, guided by DEI values, have benefited from the hiring of new full-time faculty, adjunct faculty, and visiting faculty. Please see <u>PC.4 History and Theory</u> for an extended description of the History-Theory-Criticism sequence.

Elective courses have been expanded to include deeper engagements with a diversity of often understudied histories, theories, cultures, and environments. They include diverse approaches to practices of architecture, responding to social, political, environmental, and technological developments in our time.

Examples of elective courses offered in recent semesters include "Construction and Slavery: The Architecture of The Black Atlantic" and "Principles and Praxis of Design and Spatial Justice" in spring 2023, "The Spatial Politics of



The Social Turn" and "Public Art as Alimentary Infrastructure" in fall 2023, and "Light Without the Promise of Form" along with "Climate Migration and the Future of New York" in spring 2024. *Expanded descriptions of these courses are found throughout* 3.1 Program Criteria and 3.2 Student Criteria.

#### SV.3—Co-Curricular Aspects:

DEI values are addressed across extracurricular and supplemental activities within the School of Architecture and beyond through public programs, reading groups, institutional partnerships, student organizations, grant opportunities, and DEI evaluation questionnaires.

Examples of public programs addressing DEI values directly include the 2021-2022 *Pluriversal, Bewildered and Otherwise* lecture series focusing on architecture practices whose work is rooted in social movements for justice, and the 2022-2023 *Architectures of Transition* lecture series focusing on environmental justice and architecture. *What Black Is This, You Say?* was a public symposium organized with the Storefront for Art and Architecture featuring the work of artist Amanda Williams, investigating public art and the plurality, complexity, and nuance of the Black experience. The Anti-Racism in Thesis Workshop was a day-long public program co-organized with thesis students, addressing decolonial and anti-racist practices as seen in the Thesis curriculum, conversation formats, and advising models.

The <u>Cooper Union Grant Program</u> is an annual opportunity that supports a rotating set of themes that address institutional priorities, one being student and faculty social justice initiatives across the disciplines. Architecture, art, and engineering student groups address DEI values through programming, exhibitions, and social events. These include groups such as the Black Student Union, The Cooper Climate Coalition, and The Cooper Union Architecture Lobby Chapter. Expanded descriptions of these efforts and activities are found in <u>PC.8 Social Equity and Inclusion</u> as well as throughout <u>3.1 Program Criteria</u> and <u>3.2 Student Criteria</u>.

#### SV.3—Strategies for Continuous Improvement:

DEI values shape aspects of curriculum assessment and development processes. As mentioned in Curricular Aspects above, a sub-curriculum committee was tasked with restructuring the History, Theory, and Criticism Sequence at the School based on DEI values, and these changes were implemented in 2022. Curricular changes also apply to design studios at all levels and shape the carefully selected Option Studios (Design IV) and elective courses.

Following the work of the 2020 Anti-Racism Task Force at the School and its "Call To Action to Build a Cooper Union Free of Racial and Social Injustice," students also receive a questionnaire to reflect, from their perspectives, on how courses address the values of DEI in course contents, structure, and pedagogy. At Cooper, we strive for open channels of communication between faculty, staff, students, and the deans where concerns and interests can be addressed promptly and effectively. This is achieved through student participation as voting members in all School of Architecture committees, the recently implemented academic advising and mentorship program, the independent study program, and all-class student mid-semester and end-of-semester meetings with the dean and the associate dean.

In March 2018, the Board of Trustees made the landmark decision to embark on the 10-year Plan to Return to Full Tuition Scholarships for all undergraduate students. The work we are doing to make this 10-Year Plan a reality is unlike that of any other college or university in the country. While the Plan seeks to restore the legacy of The Cooper Union as an accessible and free center of learning, as Peter Cooper intended, it is also tackling head-on the national crisis of staggering student debt and demonstrating that a different way forward is possible.

**Knowledge and Innovation:** Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.



#### SV.4—Our Approach:

The development and implementation of new ideas, techniques, materials, and technologies to address various challenges and opportunities in architectural design and culture at large is pivotal to the School's pedagogy and indispensable to the development of the curriculum. Approaches to innovation are multifaceted and distributed in both design studio pedagogy and seminar courses. Most importantly, innovation is understood as deep knowledge of the history of the discipline and the profession of architecture, more than just an embrace of future tools and technologies.

The first years of study have the students take a vigorous series of courses in the humanities and social sciences, providing a solid basis upon which architecture can be understood in relation to larger cultural histories. This knowledge is expanded through a range of required seminars in the history and theory of architecture with topics ranging from cutting-edge digital fabrication and computation to emerging ecological studies to social and political impacts of architecture on the built environment.

The Shared Value of Knowledge and Innovation is codified in several of our School's strategic goals. Goals 1, 2, 3, and 6 specifically address how the School will advance knowledge and innovation through efforts over the next five years.

## Goal 1: Broaden Traditional Formats of Knowledge Production and Dissemination: Curricular Transformation + Pedagogical Experimentation

In our pursuit of advancing new knowledge and fostering innovation, we continually evaluate and implement curricular changes to further the School's educational objectives. We actively explore various pedagogical approaches to push the boundaries of research and foster knowledge creation.

#### Goal 2: Enhance Interdisciplinary Approaches: Bridging Courses, Schools, and Disciplines

In our efforts to advance knowledge and innovation, we cultivate an environment that nurtures the cross-pollination of knowledge and skill sets. This is achieved through fostering collaboration among various courses, schools, and disciplines where we generously share, collaborate, debate, and research.

#### Goal 3: Extend Engagement with New York City and Beyond: Amplifying Discursive Spaces

We expand the research and knowledge produced in studios and seminars into public formats through various lectures, symposia, and exhibitions. We partner with other New York City and global institutions to advance research and foster collaborations.

#### Goal 6: Foster Institutional Culture: Collaborative Practice, Advocacy, and Support

We establish robust structures within our rigorous academic program to provide support and to empower students, enhancing retention rates by enriching the student experience and fostering innovative learning and research environments.

#### SV.4—Curricular Aspects:

The core design studios strategically evolve in their complexity from the first year to the third year to address knowledge and innovation in design concepts, material science, construction techniques, program, and technological integrations, all of which address environmental and urban contexts.

Beginning with the first-year studio **ARCH 111A-B Architectonics**, exploring representation with both traditional and contemporary digital tools, is posited as fundamental for designing architectural form, space, and material. In the second-year studio **ARCH 121A-B Design II**, the analysis of sites, contexts, programs, and architectural precedents are explored to broaden and deepen students' knowledge. The third-year studio **ARCH 131A-B Design III** integrates an expanded technical knowledge of construction, structures, and environmental systems both in the studio and the associated required seminars. These core studios all pursue the ways in which changes in design and fabrication technology are transforming the discipline of architecture, allowing the students to develop skills



they will need when they enter the field of professional practice. The fourth-year studio **ARCH 141A-B Design IV** expands the knowledge of design to engage larger questions of urban and environmental factors, while also emphasizing the historical development and social concerns of the shared built environment. Finally, the fifth-year studio **ARCH 151A-B Thesis** consists of a self-driven design thesis project. Over the course of both semesters, the students establish an argument through research in relation to contemporary architecture culture and practice. This research is the basis for the design work developed into the students' thesis. All studios are evaluated through public presentations and critiques where the students receive feedback from their professors and invited guest experts. *Please see <u>PC.2 Design</u> for an expanded description of our design studios*.

#### **SV.4—Co-Curricular Aspects:**

In conjunction with faculty research and opportunities provided by cultural and art organizations in and outside of New York, the School of Architecture offers interdisciplinary courses that engage art, architecture, and engineering students in interdisciplinary research and creative projects to be developed and exhibited for international venues. These courses offer students the opportunity to collaborate with peers from the other schools, connect with stakeholders outside of academia, and to share their work with the public. These interdisciplinary courses constitute valuable learning and training experiences for students.

Examples of such collaborative courses include ARCH 185 Crossings "Generative Algorithms for Art & Architecture", an Al course using generative machine learning, where interaction between architects and engineers is fundamental to opening new opportunities for creative work. Giving students the tools to collaborate across disciplines and with state-of-the-art technology is a successful path toward innovation. It gives these interdisciplinary groups an informed way to critique the larger social issues and biases present in these Al applications.

In the spring semester of 2024, **ARCH 135 Building Technology** students participated in a successful collaboration with Shigeru Ban Architects. Together with student volunteers across several years, they constructed and installed a full-scale version of the renowned <u>Paper Log House</u> on The Glass House estate in New Canaan, Connecticut.

In 2022, students in the School of Architecture participated in a collaborative student and faculty design and built research project for the 2022 Tallinn Architecture Biennale (TAB), co-curated by Professor Kallipoliti. An installation centered around the dining table, focusing on the relationship between architecture and planetary food systems, stemmed from a Spring 2022 Workshop class led by Acting Dean Hayley Eber and Adjunct Professor Mae-Ling Lokko. It built upon a Fall 2021 Elective by Professor Lokko that delved into design within culinary contexts.

Since the previous NAAB visit, we have added some cutting-edge spaces and advanced resources that support our programs. *Please see* <u>5.6.2</u> *Physical Resources for a description of the labs, shops, and equipment available to our students.* 

#### SV.4—Strategies for Continuous Improvement:

The CU Grant Program is dedicated to offering financial support for initiatives that foster knowledge and innovative concepts for our future while tackling pressing societal challenges. Special consideration is given to proposals that engage with a minimum of two of our four academic disciplines (architecture, art, engineering, and humanities and social sciences) and proposals aimed at creating or improving courses and workshops to be accessible to all students, irrespective of their discipline.

The School of Architecture leverages a diverse talent pool from the vibrant New York City architecture community. These professionals embody principles of knowledge and innovation through their excellence in research and practice, bringing their expertise to teach in all design studios, most notably our **ARCH 141A-B Design IV** option studios.

Knowledge is continually cultivated through our robust, themed annual lecture series, which explores topics through lectures, symposia, and associated exhibitions. Each year, the lecture series generates and disseminates design-focused knowledge in response to urgent and ever-changing conditions. The insights gained from these in-



depth explorations serve as feedback loops for fostering innovation and challenging disciplinary boundaries through ongoing questioning.

Implementing block scheduling opened new possibilities for interdisciplinary collaboration among students and faculty. This cross-pollination of skills, backgrounds, and scholarship leads to unique contributions to the field, enriching the entire discipline.

**Leadership, Collaboration, and Community Engagement:** Architects practice design as a collaborative, inclusive, creative, and empathetic enterprise with other disciplines, the communities we serve, and the clients for whom we work.

#### SV.5—Our Approach:

The core of our educational mission is to instill a skill set that empowers and inspires our students to leverage the potential of architecture and the built environment in enhancing the world we live in. This commitment is based on political, social, and environmental considerations, including climate emergencies, accessibility, and migration, often intersecting with these issues at the personal level of everyday life.

Our students are deeply passionate about addressing these global challenges, demonstrating their commitment through active participation in community engagement and social impact initiatives that operate across all scales and for all inhabitants of the natural and built environments. They understand that an architecture education equips them with the tools and skills necessary to comprehend, transform, create, and fundamentally reimagine the world around them, insisting on their agency as architects in fighting for public safety, environmental health, and an equitable society for all.

For this purpose, the Benjamin Menschel **Civic Projects Laboratory** was created on campus in November 2021 to provide a dedicated space for collaborative action where design initiatives may intersect with political, environmental, and social challenges. This innovative space is tailored for interdisciplinary exploration and projects aimed at addressing civic challenges. Engaging in dialogue with the broader public, the Civic Projects Lab addresses design and civic responsibility, fostering interdisciplinary collaboration and generating creative solutions that resonate with the public sphere. For a detailed description of the Civic Projects Laboratory, please see <u>5.6 Physical Resources</u>.

Strategic Goals 3 and 6 address how leadership, collaboration, and community engagement are critical to our program's evolution. Below is a summary and further explanation of these goals.

#### Goal 3: Extend Engagement with New York City and Beyond: Amplifying Discursive Spaces

Through collaborations and partnerships with other schools, institutions, and entities, we actively engage with external communities to broaden the reach and impact of our discipline. We prioritize high-impact learning strategies, including civic engagement and initiatives focused on social justice, to enhance our influence and agency.

#### Goal 6: Foster Institutional Culture: Collaborative Practice, Advocacy, and Support

As we prepare students to lead in a diverse and complex world, we are committed to cultivating a culture that values and encourages collaborative practices. We maintain robust structures within our rigorous academic program to provide support and empower students.

#### SV.5—Curricular Aspects:

At the core of our programs and co-curricular initiatives is a commitment to the development of professional leadership skills. In **ARCH 154 Professional Practice**, students are immersed in the fundamentals of the profession by studying the multifaceted factors that influence management and regulatory landscapes.



We uphold the principles of leadership, collaboration, and community involvement across various studios and courses that emphasize teamwork. In **ARCH 121B Design II**, students collaborate in groups of three throughout the semester, and in **ARCH 135A-B Building Technology**, student teams construct full-scale building mockups, addressing challenges related to design, logistics, methods of construction, and budget throughout the project. In spring 2024, **ARCH 135B Building Technology** students and student volunteers from across several years participated in a successful collaboration with Shigeru Ban Architects. Together, they constructed and installed a full-scale version of the renowned <u>Paper Log House</u> on The Glass House estate in New Canaan, Connecticut.

Our curriculum places a strong emphasis on engaging with others outside the Cooper community. Students involved in studio projects connect with communities through field trips or by inviting community members to participate in in-class discussions.

As part of our institution-wide initiative, we've implemented block scheduling to facilitate interdisciplinary courses in partnership with other schools, such as Generative Algorithms for Art and Architecture and the Solar Decathlon. These interdisciplinary teams bring together students from diverse backgrounds, including Architecture, Art, and Engineering. *Please see PC.6 Leadership and Collaboration for an expanded description of these curricular aspects.* 

#### SV.5—Co-Curricular Aspects:

**Collaborative Projects:** Our collaborative efforts extend beyond the confines of The Cooper Union, encompassing various organizations and institutions both within and beyond New York City. Our engagement with the University of Puerto Rico in the aftermath of Hurricane Maria, and our partnership with HELP USA in **ARCH 131B Design III Housing**, exemplify initiatives that align The Cooper Union with the urgent social issues of our time and cultivate a meaningful dialogue with local communities.

Similarly, our ongoing collaborative courses with various New York City institutions have resulted in models showcased in recent exhibitions at prestigious institutions like The Museum of Modern Art (MoMA), the Metropolitan Museum of Art, and in venues like the Cooper Hewitt, Smithsonian Design Museum for the 2024 Triennial. Furthermore, our recent partnership with the Storefront for Art and Architecture has led to the development of a new pedagogical experiment entitled "Public Art as Alimentary Infrastructure," a multidisciplinary seminar exploring colonialism and decolonization within the context of New York City.

**Student Leadership Opportunities:** To empower students as aspiring agents of change, it is vital to foster their development as effective leaders and collaborators. Within the School of Architecture, students wield significant agency by actively participating in the governance of the School, holding equal voting rights alongside faculty members on every committee, as well as on the Board of Trustees. Additionally, the deans regularly engage with students, addressing concerns and collecting feedback at the mid-point and conclusion of each semester. This direct interaction treats students as mature individuals and valued thought partners. We approach this engagement with careful attention, acknowledging and validating student experiences while actively working to enhance their agency and amplify their perspectives.

Motivated students can work for the School as student technicians in the Paul Laux Digital Architecture Studio, intern with the School of Architecture Archive, and serve as tour guides for the School of Architecture Office. Students can also work as monitors for the School of Architecture Study Collection and as Resident Assistants in The Cooper Union Residence Hall.

Through diverse teaching positions and opportunities, students play pivotal roles as mentors and role models for their peers. They serve as instructors in various courses, such as the Saturday Program and the Summer "Introduction to Architecture" Program, designed for high school and college students.

Furthermore, students play an active role in curating and coordinating the Diane Lewis Student Lecture Series. They have the autonomy to choose themes and facilitate conversations with architects, scholars, and designers, contributing to a dynamic and enriching academic environment. They manage their own budget, coordinate all scheduling and travel for invited guests, and serve as moderators for lectures.



**AIAS:** The newly reactivated AIAS chapter at Cooper Union aims to foster connections between students and industry professionals and facilitate collaboration among architecture students from various institutions. Additionally, the AIAS endeavors to enhance the School's professional resources through our chapter's initiatives. In its inaugural spring 2024 semester, the chapter organized two firm visits, engaging with Marvel and Gluck+. Currently, the chapter is actively networking and collaborating with students from other colleges by arranging campus tours at each respective school.

The School of Architecture closely collaborates with and supports student organizations such as The Architecture Lobby Chapter and The Cooper Climate Coalition, among others. We are especially dedicated to supporting groups that promote student development in areas of collaboration, inclusivity in the built environment, and community engagement, particularly in response to emerging societal challenges.

**Additional:** Students are invited to apply for the intensive summer session in the analog media of visual and narrative communication at Les Écoles d'Art américaines de Fontainebleau, as well as making use of the yearly AIA New York Chapter's Speed Mentoring, Portfolio Review, and Torch University events.

#### SV.5—Strategies for Continuous Improvement:

By establishing a nurturing and encouraging studio environment reinforced by curriculum and projects centered on respect and collaboration, students develop the qualities and experiences necessary for effective engagement with diverse colleagues, communities, and clients. This approach cultivates skills that empower students to excel in collaborative professional settings and prepares them for future leadership roles. In addition to the thesis books produced by graduating fifth-year students in recent years, we are currently developing an annual student publication for the School of Architecture. This student-led project will result in greater visibility of student work in printed form, reaching a broader audience.

The School of Architecture is constantly looking to partner with institutions and non-profits in New York City and the greater US and actively engages with external communities to broaden the reach and impact of our discipline. We are committed to promoting and fostering increased participation in student architecture activist groups such as the Architecture Lobby, The Cooper Climate Coalition, and the AIAS.

**Lifelong Learning:** Architects value educational breadth and depth, including a thorough understanding of the discipline's body of knowledge, histories and theories, and architecture's role in cultural, social, environmental, economic, and built contexts. The practice of architecture demands lifelong learning, which is a shared responsibility between academic and practice settings.

#### **SV.6—Our Approach:**

The School of Architecture is dedicated to equipping our students with the skills and mindset necessary to thrive in a diverse, interconnected world where values such as diversity, individuality, self-worth, and dignity are celebrated and upheld. We encourage our students to take on leadership roles both within our institution and in the broader professional sphere. We aim to broaden their understanding of the wide array of professional opportunities available to them, empowering them to make thoughtful, informed choices.

Lifelong Learning is ingrained in the educational mission of The Cooper Union School of Architecture:

The mission of The Irwin S. Chanin School of Architecture is to provide its students with the finest professional education available within an intellectual environment that fosters and expands their creative capacities and sensibilities and establishes the foundation for a creative professional life. The School is committed to the belief that one of society's prime responsibilities is toward learning and education in the deepest sense: that exercising individual creativity within a willing community is a profoundly social act. Fundamental to the School's mission is the maintenance of an atmosphere in which freedom of thought and exploration can flourish, where students can explore and utilize their strengths and individual talents, interests, and modes of working to their highest potential.



This articulation of our core principles continues to define the learning culture of the School. In practice, these principles encourage a collaborative pedagogy in which faculty situate their own teaching in the broader arc of a curriculum with fixed objectives and goals. A strong emphasis is placed on group work that nevertheless demands and rewards individual development and openness and intellectual curiosity that connects the School to the practice of Architecture as it continues to evolve in the professional setting.

Lifelong Learning manifests in four distinct dimensions:

1. Academic and Curricular Structure: The School's curriculum strives to strike a balance among aesthetic, technological, and environmental considerations within the broad context of contemporary society. This approach extends into fourth year, where the focus shifts to regional and urban issues, emphasizing territories, cities, and architectural scale. Fifth year thesis asks that students articulate the problem and the evaluative context for their projects. Our newly re-focused History, Theory, and Criticism sequence examines architectural and urban history and theory in the specific contexts of the various paths of colonization at different moments in history and will consider the geopolitical influences on principles, concepts, styles, and techniques, both within the centers of power and at the peripheries.

The liberal arts core and electives are designed to close the potential gap between professional training and life skills – factual, interpretative, philosophical, and aesthetic – supporting students to become architects and informed citizens. Professional roles in architectural practice are showcased through faculty expertise, providing exposure to diverse contemporary practices. This exposure is augmented by required courses in **ARCH 143A-B Construction Management** and **ARCH 154A-B Professional Practice** during the fourth and fifth years, respectively. The School actively maintains a network of practicing alumni and faculty, ensuring students are informed about fellowships, internships, and work opportunities. Students can sign up for **ARCH 193 Experience in Practice.** This allows students supervised experience in the practice of architecture or a related discipline in the built environment during the summer break from classes that will enhance their knowledge and design skills. A minimum of 8 weeks/300 hours work is required for credit, and it is expected that the student will be compensated for work as required by law.

- 2. Interrelationships with Cooper Union Schools: The School of Architecture collaborates closely with the Schools of Art and Engineering. Students can cross-register for studio and theory classes, fostering meaningful cross-pollination between the programs. Benjamin Menschel Fellowship proposals are jointly developed across the three schools. In the required Humanities and Social Sciences core sequence, students from different schools mingle, promoting a shared learning experience. The Vertically Integrated Projects (VIP) Program, jointly taught by architecture and engineering or art faculty, further exemplifies the collaborative ethos through the introduction of a new course structure that promotes faculty-led interdisciplinary initiatives from which students can work on large-scale projects over the course of several semesters.
- 3. Extra-curricular Activities: Beyond the formal curriculum, the School offers a diverse array of lectures, including events sponsored by affiliated organizations. These cover a broad spectrum of themes, exploring various modes of practice and architectural subjects. Field trips to architectural, planning, and consulting practices, as well as construction sites in the New York City area, provide real-world exposure. The School actively engages with cultural institutions and participates in international events like the Venice International Biennale, enriching the global perspective of students.
- **4. Cultural and Civic Engagement:** Situated in New York City, the School acknowledges the necessity for a learning culture that extends beyond the classroom. Cooper Union embraces a range of extra and noncurricular activities, including frequent field trips, lectures, and major exhibitions. The School sponsors and cosponsors public events and symposia on global and local issues relevant to the architectural community. Active relationships with New York City cultural and professional institutions such as the American Institute of Architects NY Chapter, The Architectural League of New York, the Whitney Museum of American Art, The Museum of Modern Art, the



Storefront for Art and Architecture, and the New Museum for Contemporary Art position The Cooper Union as a center for critical investigation and engagement. These partnerships demonstrate our collective commitment to transforming, ameliorating, and reframing the conditions of contemporary life through architecture, art, and engineering.

#### SV.6—Strategies for Continuous Improvement:

Our lectures, exhibitions, and symposiums at Cooper serve as a hub for dialogue and exploration within the architecture community, welcoming participation from the public and alumni. They are also <u>archived online</u> for public access and reference. Furthermore, for over 160 years The Cooper Union's Great Hall has stood as a beacon of free speech, social activism, education, culture, and electoral politics. The <u>Voices from the Great Hall</u> digital platform encompasses all known sound and video recordings as well as archival materials from events held in the Great Hall, ranging from John Dewey's 1941 address "In Philosophy," to the 2019 panel "America's Death Penalty Problem," among others.

The School of Architecture has a unique history of documenting student work as an integral part of recording its pedagogy and history. Documentation of faculty-selected models and drawings of student work from the School's annual End of the Year Exhibition takes place each year to maintain a comprehensive record of our unique and rigorous curriculum. In 2016 the Archive initiated its <a href="Student Work Collection Digital Access">Student Work Collection Digital Access</a>
Project, a five-year project to preserve, digitize, and catalog the collection for web-based public access. In 2025 the Archive will launch an online digital platform of its Exhibitions Collection holdings, which will provide public access to materials from over 200 exhibitions produced by the School dating from 1965 to present.

As noted in **SV.4**, the introduction of block scheduling has created fresh avenues for interdisciplinary collaboration among students and faculty. This exchange of skills, backgrounds, and scholarship has resulted in distinctive contributions to the field, enhancing the discipline as a whole and facilitating the development of interdisciplinary knowledge.

For the 2024-25 academic year, we are excited to inaugurate an advisory board to offer continuous guidance to the acting dean and the School of Architecture. The effort aims to engage accomplished practitioners from the field to offer guidance on enhancing the connection between theory and practice within the curriculum. This board will play a key role in providing leadership and external advice on school operations, initiatives, and community partnerships, while also facilitating connections across different fields and industries. More details can be found in Section 5.2.5.

#### 3—Program and Student Criteria

These criteria seek to evaluate the outcomes of architecture programs and student work within their unique institutional, regional, national, international, and professional contexts, while encouraging innovative approaches to architecture education and professional preparation.

#### 3.1 Program Criteria (PC)

A program must demonstrate how its curriculum, structure, and other experiences address the following criteria.

Below, we describe how the Program Criteria are addressed through coursework, co-curricular activities, and assessment. In response to the 2020 Conditions and Procedures, the School of Architecture augmented our existing assessment methods. A detailed explanation of the assessment process is found in <u>5.2 Planning and Assessment and 5.3 Curricular Development</u>.



**PC.1 Career Paths**—How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline's skills and knowledge.

#### PC.1—Our Approach:

The Cooper Union B. Arch. undergraduate architecture program prepares students for different trajectories in the realm of architecture practice. We recognize that some students may thrive as designers while others may serve as policy and decision-makers, public servants, builders, construction managers, educators, and researchers. Some may join allied fields such as history, engineering, or even theater. We strongly encourage this cross-pollination and hope that students discover multiple avenues for their architectural thinking and production.

We encourage students to make conceptual links between the world and their métier by fostering a pedagogical environment that is conscious of 'how' we think about the world, whether through words, drawings, models, or built realities. We recognize that ideas are always embedded within artifacts, spaces, and materials. Thus, we motivate students to help engage society with these tools, especially knowing that others may not have the same tools as part of their creative arsenal.

We ensure that students are exposed to and engaged with many modalities of work, forms of representation, and ways of working. At the same time, we encourage students to engage specific media with depth to excel in a specific area of expertise and demonstrate, through a particular way of working, that design can be transformative and that it can impact the world through its own devices.

That said, steering a long and fulfilling career in architecture and deliberately working on projects of consequence is about more than proficiency in building design. It depends on gaining a wide range of professional experience and expertise while skillfully navigating interactions with many different people, whether on the design team, or contractor team, with the owner, or with outside stakeholders.

#### PC.1—Curricular Aspects:

**ARCH 143A-B Construction Management** is a year-long course focused on the principles and fundamentals of construction management through an introduction to the principles, techniques, and methods of managing the construction process from multiple perspectives: the owner, architect, and builder. While the course covers basic tenets of schedule, budget, construction cost estimating, planning, and the construction administration phase, it endeavors to introduce more complex topics such as risk, digital processes, the role of and relationship with a construction manager, and the general pursuit of excellence. Additionally, it features at least one site visit, offering students firsthand experience of a project in construction and insight into the collaborative efforts of team management and project execution.

**ARCH 154A-B Professional Practice** focuses on a broad overview of the roles and responsibilities of an architect in practice. In this class, the meaning of an architecture career is discussed, beginning with a review of what a professional license is and what the responsibilities of a licensed professional consist of, including successfully navigating the path to licensure. The long arc of a career in architecture is also discussed, from the incoming practitioner to the seasoned professional. Apart from written assignments, the class visits architecture firms of varying sizes to discuss how firm principals and employees work on impactful projects that test their skill sets and expand their understanding of what an architect can do. *Please see <u>SC.2 Professional Practice</u> and <u>SC.3 Regulatory Context for an expanded description of ARCH 154.</u>* 

#### PC.1—Co-Curricular Aspects:

The School of Architecture organizes several initiatives parallel to the required curriculum to prepare students for different career opportunities and guide them toward licensure in the United States.



**Understanding Licensure:** AXP (Architectural Experience Program) Advisor Anik Pearson, supports students in understanding the NCARB process. A yearly seminar by the NYS Education Department's Office of the Professions and NCARB instructs students on the path to licensure, AXP, and ARE. This seminar is available to undergraduate and graduate students alike. Students are encouraged to visit the Center for Career Development for resume and portfolio reviews, to discover job opportunities in the AEC industry, and to apply for the Professional Development Fund, a grant available to all students, made available to cover the cost of the ARE exam, license registration, and the establishment of an NCARB Record.

*Career Fair:* In spring 2024, the School of Architecture and the Center for Career Development organized the inaugural Architecture Career Night. The event was a compact career fair that included fifteen firms and studios, providing students with opportunities to showcase their portfolios and engage in meaningful discussions. Additionally, an alumni networking segment allowed students to connect with a diverse group of the School's graduates. Sixty-three students, almost half of our student body, participated, making it a significant event for our students. This was an impactful evening, filled with fruitful interviews and many promising connections.

**Portfolio Review/Mock Interview:** Portfolio Review/Mock Interview Night offers architecture students an opportunity to engage in multiple rounds of practice interviews with experienced alumni. This program is offered twice each academic year. Students receive constructive feedback on their portfolios and the chance to network with accomplished alumni. This workshop is sponsored by the Office of Alumni Affairs and Development and the Center for Career Development.

Internships/CPT: Many of our students engage in internships at architectural firms during their academic experience, often transitioning smoothly into employment upon graduation. Situated in New York City, our location fosters connections with the professional architecture community. With over 410 architecture firms in the New York City area alone, the city holds the distinction of hosting the second-highest employment level for architects among states nationwide. ARCH 193 Experience in Practice allows students supervised office experience over the summer break for both compensation and academic credit.

**Adjunct/Part-Time Faculty:** Roughly 68% of our faculty actively practice architecture, working in both large and small firms throughout New York and surrounding areas. Their active engagement plays a pivotal role in fortifying our ties with the professional architectural community and ensures student exposure to meaningful architectural practices. These faculty members contribute extensively to our lecture series and play essential roles in teaching core studios and required non-studio courses, providing valuable insights and enriching our students' educational experience.

**Faculty Advisors:** All undergraduate students are assigned a faculty advisor who they can approach with questions about internship opportunities and their future trajectories in the field.

See <u>Appendix A. Selected Events and Exhibitions</u> for a continued list of co-curricular aspects for PC.1.

#### PC.1—Self Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u>, which provide an overview of assessment strategies. Teaching methods are evaluated by tracking active participation in the classroom and on field trips and responses to targeted assignments. Specific course assessment measures for **PC.1 Career Paths** occur in **ARCH 154A-B Professional Practice** and include:

A rubric is used to evaluate written reports where students must demonstrate visualization of the road
map to licensure and practice in New York State. The program has established a benchmark of 100% of
students achieving a score of 65/100 points on the rubric. In fall 2023, 100% of students received at least
80/100 points.

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- A score on a class presentation, where students must demonstrate an understanding of the skills and
  contributions various individuals exercise in the practice of architecture. Students must interview a
  practitioner of architecture and report on their role within the firm and their day-to-day contributions.
  Presentations are evaluated on content, clarity, and presentation to the class. The program established a
  benchmark of 100% of students receiving 65/100 points on their presentation. In fall 2023, 100% of
  students received at least 95/100 points.
- An exit survey is utilized to assess understanding of the ways that different career paths cater to an
  individual's goals, personality, expertise, and interests. Alumni guest speakers present their careers after
  completing the B. Arch. degree and discuss how they reached those alternative paths. The program
  established a benchmark of 100% of students responding with a clear understanding of alternate career
  paths on the survey. In fall 2023, 89% of students responded clearly.

#### Additional holistic assessment metrics for PC.1 include:

- An assessment of the student's path to licensure in concert with the School's licensing advisor.
- Tracking the number of students participating in portfolio reviews, career fairs, internships, and AIAS
  office visits.
- Evaluation of the results from the First Destination Survey to assess the program's ability to meet students' needs and the expectations of the practice community.
- Tracking the number of firms and alums participating in the annual career fair and portfolio review sessions.
- Tracking graduates pursuing licensure after graduation through the data assembled by NCARB, such as NCARB by the Numbers and NCARB's ARE 5.0 Pass Rates by School.
- Tracking ARE (Architect Registration Exam) pass rates of Cooper Union graduates.

Please review the Assessment Report Chart, found in the respective PC.1 folder within the Digital Team Room.

#### PC.1—Highlighted Ongoing Enhancements:

While our inaugural Career Fair was an immense success, we are working to solicit firms with a greater diversity of work types, sizes, locations, and clientele to participate in future career fairs and establish sponsored internships. We are planning annual follow-ups with the firms and studios present at the Career Fair to assess the program's ability to meet the community's expectations in practice.

The Professional Practice course aims to enhance instruction on the essential soft skills necessary for success as an architect. These encompass interpersonal skills, awareness of unconscious bias, interview techniques, effective communication, and adept time management. Additionally, in response to student requests, we are incorporating a workshop dedicated to portfolio preparation for job and fellowship applications into the course curriculum moving forward.

Although the <u>Career Development Office</u> operates independently of the School of Architecture, it remains committed to fostering the continual growth and enrichment of students' employment and career opportunities while allowing alumni to utilize professional development resources and recruit student talent.

To support the development of the AIAS chapter, students secured funding from the School of Architecture to facilitate office visits and inter-school activities with other local schools during its inaugural year. The opportunity to speak with and be mentored by seasoned professionals is also available through the Mentorship for Women in Architecture (MWA) organization, which aims to encourage emerging practitioners to engage in conversation with the vibrant community of experienced professionals; to share tools, to provide support, and to help students envision a myriad of successful career trajectories.

Ongoing improvements in **ARCH 154A Professional Practice** will be implemented through written evaluations and allocating time for peer-to-peer feedback and discussion.



**PC.2 Design**—How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

#### PC.2—Our Approach:

In an era when architects' roles are rapidly evolving, the School prioritizes design principles as they relate to human values, as well as architectural discourse, speculation, analysis, discovery, and experimentation. At The Cooper Union, the design studio lies at the heart of architectural education. It serves as not only a collaborative cohort but also a cultural hub, a physical space, and a platform for practice. It embodies the essence of collective learning and active participation in design pedagogy. The studio environment acts as a testing ground and reflection of the profession, providing students with immersive experiences in disciplinary methods and practices.

The program's studio curriculum is structured around problems of increasing breadth and complexity, where the social and cultural contexts in which students' design work is evaluated are gradually broadened and deepened. The five-year design studio sequence is carefully structured to introduce to students the principles of architectonics, the investigation of program and site, structures, environmental technologies, and building technology in a comprehensive and integrated curriculum. Design studios introduce the basic elements of form, space, and structure; complex institutional design problems in their urban context; and a year-long thesis demonstrating students' ability to instrumentalize design for impactful change within specific social contexts. Analytical and critical uses of digital technologies complement the essential skills of drawing, model-making, and design development.

#### PC.2—Curricular Aspects:

The Architecture program's pedagogical trajectory underscores the importance of integrating multiple factors to shape the design process. The trajectory is composed of two phases: a) the first consists of the first three years – the "core" of the curriculum – when the coordination of the various courses is highly structured top-down and required by all students, with limited electives enrollment in third year; b) the second phase consists of years four and five when option level studios and elective seminars open up to students the possibility to enhance their individual interests, develop areas of focus, and forge their own trajectories toward the development of their thesis project.

**Phase One:** In years one, two, and three, the emphasis of the core studios is to orient all students to a fundamental variety of facets of architectural thinking:

In the first year **ARCH 111A-B Architectonics**, a "proto-architectural" approach allows students to explore formal and spatial experiments through descriptive geometry in dialogue with material constraints, unencumbered by the weight of program and function. Here, students learn through engagement with the representational and generative tools that allow one to understand how architectural thinking is, in some way, a direct outcome of the very instruments through which ideas are construed. Later in the same year, a site is introduced to 'situate' projects to build the ground on which built environments operate. And so too, notions of shelter are also introduced, with very functional constraints being channeled not so much by the program but by the infrastructures that allow spaces to communicate, such as stairs, ramps, elevators, and other ambulatory elements that drive spatial contiguities.

In the second year **ARCH 121A-B Design II**, a more complex synthesis is brought to site, context, program, and tectonic thinking. Here, varied levels of problem solving are introduced, allowing students to explore questions of building typology by analyzing precedents and adapting these analyses to programmatically-driven organizations. So too, in the second year, elements of structure and environmental thinking are introduced to better situate architecture within an inter-disciplinary realm. The second year is capped by a focus on analysis, a studio that is unique to The Cooper Union, allowing students to study a myriad of historical examples, undertaking formal



analysis, breaking down their programmatic and tectonic elements, and attempting to fully explain buildings of different eras and orientations.

In the third year **ARCH 131A-B Design III**, the emphasis is shifted to the scale of urbanism and integration with the various scales at which architecture invariably needs to engage. The first semester is launched with a 'design synthesis studio' with projects that address complex site conditions, programmatic interpretations, and construction modalities. In the second semester, the 'integrated building studio' focuses on housing to reconcile the complexities of multiple scales at the same time: from the domestic interior to shared community courts and public spaces that engage the city. Both these studios encourage a more direct collaboration with building technologies and structures curricula, allowing for a better-informed proposal.

## Phase Two:

The fourth year **ARCH 141A-B Design IV** revolves around option-level studios, with the idea that students can learn more from an incremental sense of independence, fostering more diversity in studio orientations. Option studios might take on the scale of landscape and urbanism, focus on the question of social equity or global warming, or focus on the detail as a generator of architectural thinking. In all, these studios are also a preamble to their thesis studies of the fifth year, with an emphasis on building curiosity towards an ever-changing and dynamic world.

The fifth-year **ARCH 151A-B Thesis** is a one-year independent study reinforced by a structured (collective) studio environment that helps students build up an area of research, a way to define an architectural challenge, and a project that sets out to address varied approaches to their design project. Thesis is an opportunity for each student to position themselves within the expansive field of architecture and its various modes of production and inquiry. Each thesis proposal is both a critical statement and a creative intervention into the current condition of architectural discourse and modes of practice and into the institutions that shape them, including the School of Architecture. It is a year-long quest into a key preoccupation that guides the most significant contributions to the field: what, specifically, is the relevance of different modes of architectural practice in our time? While building on and honing the knowledge, skills, and strengths acquired throughout their time at The Cooper Union, students are required to address this question through an architectural proposition and inquiry that both reveals and intervenes in the processes and forces (be they technological, economic, social, political, and/or environmental) that are currently entangled in the production of space. Thesis students must demonstrate their capacity to critically synthesize architectural knowledge and make precise projects that show their excellence in argumentation, design creativity, technological invention, graphic innovation, and research on architecture, the urban environment, and beyond.

**Elective Courses:** Every semester, a wide variety of design-oriented electives are offered to third-year students and above. Examples of elective courses include:

- ARCH 225.48 Advanced Topics "Don't Touch My Hair," offered by Mokena Makeka (Fall 2020). This
  course investigated global inequality and body politics within the framework of contemporary
  architecture, symbols, civic identities, and institutions in urban environments. It examined design as a
  critical tool for negotiating conflict. Students examined different urban environments and produced a
  visual diary and a summary reflection artifact/drawing.
- ARCH 176.03 Landscape Architecture "Landscape Architecture," offered by Linda Pollak (Fall 2020, Fall 2021, Fall 2022, Fall 2023). The objective of this seminar is to inspire and support students in architecture to integrate landscape thinking and design into their own creative practice, enabling the inclusion of living systems in research and design without segregating them within an exclusive domain of "nature."
- ARCH 186 Workshop "Counter Architecture of Food Production," offered by Mae-Ling Lokko (Fall 2021).
   Taking culinary history and its artifacts as the pathway of inquiry and documentation, this seminar focused on the design and prototyping of a piece of culinary technology on the scale of the kitchen and kitchenware, embodying practices of nutrient recovery, surplus transformation, and repair within integrated food cycles.

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- ARCH 205.19 Advanced Concepts "The Template," offered by Natalie Fizer and Lauren Kogod (Fall 2022, Spring 2022). This course investigated the template, a familiar object to architects but something that could also be a formula, a tool, or a device even an instruction set or recipe. This seminar re-situated "the template" as a hybrid and creative apparatus binding conception and representation, model and drawing, artifact and instrument, process and experience, and sheath and skin.
- ARCH 205.21 Advanced Concepts "T is for Typography," offered by Yoonjai Choi (Fall 2023). This class investigated the fundamentals of typography, the procedure of arranging type, and the art of traversing meaning with form. During the seminar, both technical and conceptual issues were explored through a series of design assignments drawing on historical standards as well as contemporary examples of graphic design.
- ARCH 225.70 Advanced Topics "Cookbooks and Manuals: Re-imagining the Spaces of Food Production,"
   offered by Lydia Kallipoliti (Fall 2023). This course reimagined planetary food systems by looking closely at
   cookbooks, recipes, medical almanacs, and design manuals for science in the kitchen. Students designed
   and fabricated models of interior spaces of food production, focusing on a particular cookbook and the
   design of its setting.
- ARCH 185.03 Crossings "Shaping Light," offered by Thomas Phifer (Fall 2022). This course explored how light can be shaped in architecture— or rather— how architecture can be shaped around light. The goal was to develop an awareness of light with an appreciation of the role that design plays in shaping light and the role that light plays in shaping design. Students participated in a collaborative project over the semester on documenting light.
- ARCH 225.68 Advanced Topics "Epistemologies of Aesthetics," offered by Michael Young (Spring 2023).
   This seminar explored the theoretical formats for aesthetic judgment, arguing that it is important for architects to understand not only how we evaluate the aesthetics of designs but also understand the lineage of different arguments and how they relate to other cultural practices both in the past and in contemporary work.
- ARCH 205.23 Advanced Concepts "Design of the Book" offered by Laura Coombs and Phillip Denny (Spring 2024). In this project-based seminar, students engaged in designing and creating books with contemporary processes. Students analyzed the book as an architectural object, investigated the materiality of the printed page, examined age-old and cutting-edge print technologies, and gained familiarity with the primary elements of graphic design, including form, composition, image, color, material, sequence, and typography.
- ARCH 225.50 Advanced Topics "The Architecture of Metabolism," offered by Lydia Kallipoliti (Spring 2021) This course explored architectural strategies of local production and self-sufficiency (e.g. urban agriculture, renewable energy), as well as ways to integrate into the built environment the by-products of urban life (e.g. livestock, agriculture, forest residues) as resources. Students were asked to investigate circular systems that limit material and resource loss and explore alternative pathways. Finally, the students developed strategies in the built environment to generate resources food, energy, or materials.
- ARCH 225.54 Advanced Topics "Housings: Unauthorized Epistemologies," offered by Daisy Ames (Fall 2021). This course examined how knowledge of territories referred to as "urban" or "metropolitan" and especially how a fundamental constituent of these territories—"housing"—is acquired, codified, stored, represented, troubled, and reimagined. Through experiments in drawing and writing on and about urban geographies and housing representations in New York City's five boroughs, the students interrogated typology and modes of dwelling outside various permissions.

## PC.2—Co-Curricular Aspects:

**Collaborative Projects:** From an extracurricular perspective, this report has already mentioned a series of institutional engagements with museums and participation in global exhibitions and biennales that have been transformational for our program. Please see <a href="Extending the School's Engagement with New York City and Beyond">Extending the School's Engagement with New York City and Beyond on page 14 for more details. In tandem, the Architecture Archive maintains robust student participation in forming new exhibitions and events that drive the program's cultural atmosphere.



**Events and Exhibitions:** We support a wealth of varied public programming with a breadth of practitioners, researchers, and educators. *Please see <u>Appendix A. Selected Events and Exhibitions</u> for the public programming supplementing student learning.* 

## PC.2—Self Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u> which provide an overview of assessment strategies.

The assessment process is iterative, integrative, and diverse in its conduct. With design studios being structured around formal design reviews, interim pin-ups, and weekly desk crits, part of the discursive approach to studio revolves around the participation of students, not only on their own projects but as active participants and interlocutors on the reviews of their peers. The pin-ups and reviews are commonly populated with diverse voices: designers, engineers, historians, theorists, and faculty from the Schools of Humanities, Art, and Engineering also join these reviews. The integrated environment of student reviews is inclusive, ensuring that diverse points of view broaden students' perspectives.

The students' perspective is important to the feedback loop of our pedagogies. As such, each semester is structured around studio conversations after mid-semester and final reviews to evaluate the student experience in their courses, establishing the degree to which new experiments were successful, how exercises might be improved, or how courses might be better integrated. This is also followed up by an anonymous course questionnaire in which the students can write a more thorough review of their ideas.

Student participation has been increased on all governing committees; as such, their participation on the Curriculum Committee is another venue where they may advocate for pedagogical transformations, explorations, and revisions. As a matter of common practice, the Curriculum Committee meets every semester (several times as necessary) to evaluate and assess new experiments and transformations.

Specific assessment measures for **PC.2 Design** occur in all our studios from the first to fifth year, in both the fall and spring semesters.

• In ARCH 111A-B Architectonics, ARCH 121A-B Design II, ARCH 131A-B Design III, ARCH 141A-B Design IV, ARCH 151A-B Thesis a standardized rubric that outlines the essential skills of design is used to evaluate students' performance in studio across the years, completed by studio faculty for each student at the final review. The rubric is developed to ensure it captures the essential nature of a design studio and the learning outcomes demonstrated by students at the final review. The program has established a benchmark of 80% of students in a studio receiving 12/16 points. In spring 2024, 88% (22/25) of first-year students received 12/16 points or greater, 82% (19/23) of second-year students received 12/16 points or greater, 86% (20/23) of third-year students received 12/16 points or greater, 60% (15/25) of fourth-year students received 12/16 points or greater, and 85% (24/28) of thesis students received 12/16 points or greater. The rubric is revisited, and the data is evaluated by the individual design faculty as well as the Curriculum Committee at the end of the spring semester before the summer break.

Please review the Assessment Report Chart, found in the respective **PC.2** folder within the Digital Team Room. Additional assessment metrics for this Program Criterion include:

- Review practitioner comments in end-of-semester studio review surveys.
- Review student feedback in the form of Course Questionnaires.
- Assess input and concerns raised by students in the meetings with the dean and the associate dean.
- Critically evaluate the design studio work in the End of Year Show.



• Launch a School of Architecture Advisory Board to seek feedback from key practitioners on how graduates are performing in design practices.

## PC.2—Highlighted Ongoing Enhancements:

Our program has improved through good communication at all levels. Dean Vidler began a bi-semester class meeting where students can speak directly about their ongoing experiences. Dean Tehrani and now Acting Dean Eber have continued this process and Eber has structured conversations with her faculty and students several times a semester. The curriculum is developed in collaboration with the Curriculum Committee, the faculty, and students; thus, checks and balances are set up within the oversight of changes, which are communicated at all levels. The results of each semester are tabulated through exhibitions and archival documentation, sponsoring discussions on areas of improvement, and failed experiments. Most of all, effective communication is also sought between our faculty and critics at large: external reviewers, alumni, and visiting architects alike, whose voices have always been a presence in our program.

Over the next two years, the School plans to recruit at least 2-3 new full-time, tenured/tenure-track faculty members. The faculty is dedicated to prioritizing candidates with robust design backgrounds, aiming to enhance the overall quality of design pedagogy within the department.

Each semester, we extend at least 3-4 invitations per Design Studio to exceptionally seasoned external reviewers to assess student design projects and provide insightful feedback on our studio pedagogy. These reviewers, who are esteemed faculty members from various universities across the country, actively participate in final studio reviews. Their presence elevates the level of discourse and fosters heightened expectations regarding the quality of design work produced in our studios.

The Curriculum Committee meets to support the continual development of the studio sequence and engage design faculty in making modifications to their syllabi. Upcoming improvements to Design I-IV and Thesis include:

- ARCH 111A-B Architectonics: Augment syllabus with site visits, more one-on-one desk critiques, and peer-led reviews.
- ARCH 121A-B Design II: Augment syllabus with more peer-led reviews.
- **ARCH 131A-B Design III**: Provide students with academic support for time management and incorporate integrated workshops addressing interdisciplinary project development.
- ARCH 141A-B Design IV: Integrate years 1-3 studios with more independent projects to familiarize students with the rigor expected in ARCH 141B. Invite Cooper design faculty to visiting faculty internal reviews and desk crits to support student work.
- ARCH 151A-B Thesis: Integrate years 1-3 studios with more independent projects to familiarize students
  with the rigor expected in ARCH 151B and encourage research to design work integration at an earlier
  phase in the semester. Discuss amending Design I-IV syllabi to require student attendance at all or part of
  thesis mid-reviews and/or final-reviews. Encourage students to work at a wider variety of scales in their
  design process.

As mentioned in <u>Section 5.2.5</u>, we are in the process of launching an Architecture Advisory Board to solicit feedback from key practitioners on school operations, initiatives, and community partnerships and foster connections across various fields and industries.

**PC.3 Ecological Knowledge and Responsibility**—How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.



#### PC.3—Our Approach:

Addressing climate change via a synthetic understanding between the built and natural environment is critical to the School's vision and curriculum. In several courses weaved through the course of studies—criticism, professional practice, building technology, and design—students learn to conceive and design buildings not as isolated entities but as integral components of larger ecosystems. Central to the curriculum is the notion of responsibility—responsibility to the planet, to future generations, and to the communities we inhabit. Moreover, climate change is recognized not simply as a technical problem but as an aesthetic and experiential problem, most importantly as a form of social injustice. Students are equipped with the tools to critically assess the environmental impact of their designs, considering factors such as resource consumption, carbon footprint, and resilience to climate change.

Beyond the design studio, students are encouraged to integrate advanced building performance techniques and principles of ecological design and advocate for climate equity within the profession and broader society. They are empowered to create structures that not only minimize harm but actively contribute to environmental repair by regenerating resources, recirculating waste, harnessing natural elements, and enhancing comfort and well-being while simultaneously reducing reliance on fossil fuels and other non-renewable resources.

The curricular and co-curricular aspects of **PC.3** are closely connected to, and work in tandem with the curricular aspects of **SC.1** and **SC.4**. Curricular and co-curricular aspects detailed in **PC.8** provide the critical context and understanding of the diverse nature of humanity and its peoples that live, work, and play within our built environment.

#### PC.3—Curricular Aspects:

The **ARCH 124A-B Environments** sequence is mandatory in the second-year curriculum, introducing critical issues of the "natural" environment, as well as the instruction of contemporary interior spaces as complex environments, both mechanical and passive. The sequence of these courses provides students with a conceptual grounding in environmental issues at the urban and building scales, directly aligned with the Design II studios, through common faculty and shared project assignments.

**ARCH 124A Environments** introduces students to the intersections of architecture with climate change, including environmental degradation, the erasure of natural habitats, climate migration and environmental inequality, and the building industry's contribution to the carbon footprint. Within the framework of the course, architecture's role and agency confront challenging new realities, both geopolitically and environmentally, raising not only material problems but also cultural and aesthetic problems. Students are asked to reflect on how the production of built spaces and alternative natural and technological expressions aim toward decarbonization and the mitigation of extractive protocols. Throughout the course, they are asked to design a series of inhabitable domestic spaces that recirculate their energy and resources and are equipped to process waste into viable energy or water input.

**ARCH 124B Environments** narrates a history of how architectural thought has been shaped by the widespread use of fossil fuels over the last two centuries. This unique energy source, which creates a condition of energy abundance, has shaped society in many ways, including the size, scale, and disposition of architecture and urban systems. In turn, buildings and cities work to reify and exacerbate a culture of exorbitant energy use. In short, this course teaches that there is a reciprocity between social and spatial form, and as such, architects bear an especially important responsibility at this time – both because the consequences of our current built environment must be better understood and because built form must change radically in the coming decades. **ARCH 124B** begins by defining terms and concepts that explain how energy use shapes society. Energy transition and the rise of colonialism, industry, and capitalism are discussed. Then, the course works chronologically to study the evolving spatial history of a fossil fuel society, starting with early changes to the city under the Industrial Revolution, to Modernism in the 20th century, to the spread of the suburbs, and finally, neoliberal real estate development. Overall, the aim is for students to expand their environmental understanding beyond the individual impact of



specific materials and buildings and to understand that there is an environmental impact on architectural thought itself, which, when fully embedded within the cultural and material conditions of carbon modernity, risks replicating the very same conditions that cause climate change itself.

Elective Courses: The School of Architecture's commitment to environmental stewardship and professional responsibility is evident in numerous elective courses offered in the undergraduate curriculum from the third to the fifth year of studies. An elective course that has been continually offered since the fall of 2020 is the interdisciplinary endeavor for the Solar Decathlon, a research initiative in which students work in multidisciplinary (architecture and engineering) teams led by faculty, contributing to their research, innovation, and/or design efforts. This initiative is aligned with the collegiate competition sponsored by the U.S. Department of Energy since 2002, inspiring student teams to design and build highly efficient buildings powered by renewables while optimizing for key considerations, including affordability, resilience, and occupant health.

Other elective courses in the field of environmental stewardship include:

- ARCH 176.03 "Landscape Architecture," offered by Linda Pollak (Fall 2020, Fall 2021, Fall 2022, Fall 2023). The objective of this seminar is to inspire and support students in architecture to integrate landscape thinking and design into their own creative practice, enabling the inclusion of living systems in research and design without segregating them within an exclusive domain of "nature."
- **ARCH 225.44 Advanced Topics** "Contested Histories of Ecological Design," offered by Lydia Kallipoliti (Fall 2020). This course analyzed different worldviews as manifest in various perceptions of architecture and the environment, and the timeline of their positions as genealogies of ecological design.
- ARCH 225.46 Advanced Topics "Countrysides," offered by Anthony Vidler (Fall 2020). This seminar explored the question of "countryside" historically and conceptually, tracing the various understandings of the word and its object over the period of what is now called the Anthropocene, shifting definitions of the "country" and the "city" and successive ideas of "nature" and "non-nature."
- ARCH 225.50 Advanced Topics "Edible and the Architecture of Metabolism," offered by Lydia Kallipoliti (Spring 2021). This course examined new forms of localization and the design of circular economies via architectural strategies of local production and self-sufficiency (e.g. urban agriculture, renewable energy, livestock, agriculture, forest residues), examining the byproducts of urban life as resources.
- ARCH 186 Workshop "Counter-Architectures of Superfoods," offered by Mae-Ling Lokko (Fall 2021). The
  course explored contemporary cultures of food production and consumption within an expanding cyclical
  agricultural crisis.
- ARCH 225.59 Advanced Topics "Of Air, Waters, and Sites: Elemental Narratives and Environmental Violence," offered by Anthony Vidler (Fall & Spring 2022). This course examined courses and narratives outside mainstream ecological thought by surveying different writers who have attempted to warn the inhabitants of the earth of the toxicity of inhabitation.
- ARCH 194.04 "To Un-make and Re-earth: Design for Transition," offered by Elisa Iturbe (Fall 2022).
   Against the dominant view of sustainability as a matter of technological progress, this course focused on how energy capture, culture, social structure, and spatial organization transform in relation to each other, with the goal of developing new spatial organizations that support alternative economies and modes of life.
- ARCH 225.66 Advanced Topics "The Geophysical City," offered by Susannah Drake (Fall 2022). The
  seminar interrogated the extraction of materials, transportation, waste, ocean bleaching from elevated
  CO2 levels, and development of green-field sites that impact the environment and offered insights into
  the topics of biodiversity, habitat, ground permeability, tree cover, and reflectivity.
- ARCH 225.66 Advanced Topics "Territories in Transition," offered by Susannah Drake (Fall 2023). The
  course related the changing relationship of human settlement to natural features and qualities of the
  landscape, delving into various concepts of ecological urbanism.
- ARCH 225.72 Advanced Topics "Climate Migration," offered by Rosalie Genevro (Spring 2024). Through research, site visits, and guest lecturers from relevant agencies and institutions, the class investigated the



- sources and scale of climate migration to and in New York City, and ways in which it can be accommodated.
- ARCH 225.73 Advanced Topics "Architecture, Cities, and Nature," offered by Stan Allen (Spring 2024). The course examined a nuanced ecological account suggesting that the built and the natural the city and the countryside are complexly intertwined and that nature operates across a continuum of rural, ex-urban, suburban, and urban landscapes.

#### PC.3—Co-Curricular Aspects:

**Lectures and Events:** The School of Architecture's lecture series in 2020-2021 and 2022-2023 were almost exclusively dedicated to exploring environmental awareness, new practices in the age of climate change, and environmental inequality.

In particular, the 2020-2021 Lecture Series curated by Lydia Kallipoliti and entitled *Landing: Architecture in the Age of Extinction, Entanglements, and Other Bodies* claimed climate change, social inequality, and economic deregulation as indivisible and intertwining problems and envisioned the materialization of these three factors as a landing process down to earth. Via a series of online lectures, debates, and interactive conversations, the aim was to question and assume responsibility for architecture's political, ecological, and social agency (see attached brief). The 2022-2022 Lecture Series curated by Elisa Iturbe and entitled *Architectures of Transition* interrogated architecture's alliance with the project of carbon modernity, from the early moments of industrialization to today's advanced stages of fossil capitalism.

**Exhibitions:** In addition, Professor Iturbe organized an exhibition and a symposium in alliance with **ARCH 124B Environments** on *Confronting Carbon Form* in spring 2023, two events that largely involved the student community and impacted the pedagogy of the School. The exhibition and the symposium examined the fossil fuel age: new building typologies and urban archetypes that emerged to meet the demands of a new economy while unprecedented mobility fundamentally changed human perception of space (see attached brief). Professor Kallipoliti organized an exhibition and the launch of her book *Histories of Ecological Design* in spring 2024. This event was in alliance with research electives that she offered between 2022 and 2024 and ongoing discussions with students in thesis.

Please see <u>Appendix A. Selected Events and Exhibitions</u> for an extended list of relevant lectures and exhibitions.

Collaborative Projects: The Cooper Union has also participated in a collaborative student and faculty design and build research project at the 2022 Tallinn Architecture Biennale (TAB) co-curated by Professor Kallipoliti. An installation that reframed the relationship of architecture and planetary food systems focused on the dining table and was designed and fabricated by students of The Irwin S. Chanin School of Architecture, subsequently presented at the Estonian Museum of Architecture. The project exhibited was the result of a spring 2022 workshop class co-taught by Acting Dean Hayley Eber and adjunct professor Mae-Ling Lokko, based on a fall 2021 seminar taught by Professor Lokko that explored design in the context of culinary practices. The work on view at TAB, the largest architectural festival in the Baltics, was part of a series exploring how metabolic processes related to food are linked to everyday domestic spaces and activities.

Finally, the Cooper Union's Solar Decathlon team was awarded the 2023 US Department of Energy Solar Decathlon Design Challenge Competition Commercial Grand Prize. *Please see SV2 on page 22 for more details*.



#### PC.3—Self Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u>, which provide an overview of assessment strategies.

**PC.3 Ecological Knowledge and Responsibility** is assessed at the student-understanding level in the second year of studies, where both in the fall and spring, the **ARCH 124A-B Environments** sequence courses are conducted in correlation with the design studios. There are ongoing efforts to better integrate course material between classes which ensures that sustainability is being integrated at the onset of design, rather than siloed into other courses. Specific assessment measures occur in **ARCH 124B.** 

• ARCH 124B Environments: Students must complete weekly reading responses and identify the main critical argument the author makes in the text. Students are evaluated by their quality of analysis and critical thinking skills demonstrated in their responses, whether they can engage the material, think critically about the author's arguments, and form their own opinions based on the text. The benchmark for success is 75% of students achieving an average reading response score of 3/5 points or higher. In spring 2024, 78% of students achieved an average reading response score of 3 points or higher.

Please review the Assessment Report Chart, found in the respective PC.3 folder within the Digital Team Room.

#### PC.3—Highlighted Ongoing Enhancements:

History, Theory, and Criticism Restructuring: The HTC underwent a significant restructuring of the curriculum to update elements of the required sequence. As part of that effort, instructors in the History-Theory-Criticism sequence integrated more emphasis on sustainability concerns into their curriculum, particularly in ARCH 115A-B History of Architecture I. Considering the success of these enhancements over the past several years, we will continue to integrate sustainability and ecological concerns into the syllabi. We will spotlight recent successes in this area by archiving student final projects so that they are accessible to other students, faculty, and alumni.

**Faculty/New Hires:** In 2021, Pamela Cabrera, Eric Teitelbaum, and Tommy Schaperkotter all joined our School, adding expertise in the areas of sustainability and performance modeling. Cabrera is a senior associate, architect, and engineer at Transsolar | KlimaEngineering. In addition, Mokena Makeka joined The Cooper Union as the special advisor to the Vice President of Alumni Affairs and teaches at the School of Architecture, sharing his background in ecological justice and sustainable forestry.

**Software:** Software updates have continuously been integrated into the program, ensuring our students are up to date and have access to current programs. This includes live modeling and simulation software such as BIM, Climate Studio, and SimaPro.

Institute of Sustainable Design: In 2016, the Institute of Sustainable Design (ISD) faced a cessation of grant funding, leading to its closure despite its previous successes. However, under the guidance of Mokena Makeka, efforts are underway to revitalize the ISD in a new form, aiming to reestablish it as an integral part of the institution. The renewed focus involves operating across various schools within the institution, with sustainability as a central theme uniting its activities.

**VIP Courses:** Several of the Vertically Integrated Projects offered tackle topics of advanced building performance, adaptation, and resiliency principles. The School of Architecture has made a concerted effort to increase architecture student enrollment in these courses. Low enrollment has typically resulted from scheduling conflicts with the core design studios and other required architecture credits.

**ARCH 124A-B:** Faculty will provide written feedback on student reading responses and will direct students to the Center for Writing and Learning to improve their reading and writing skills.



**PC.4 History and Theory**—How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

#### PC.4—Our Approach:

While Cooper Union prides itself on its studio-centered and practice-based approach to architectural education, we passionately believe in the importance of fostering critical thinking within the discipline. The broad contexts in which design is received and evaluated at a sociocultural, historical, and aesthetic level is the focus of required courses in the revised **History, Theory, and Criticism (HTC)** sequence and a rich offering of electives that explore how design is understood as part of a larger intellectual discourse, both historically and in terms of contemporary challenges. The emphasis here includes a focus on non-Western traditions, on alternative readings of sociocultural contexts for understanding architecture, and on the ethical implications of making architecture today.

The **HTC** sequence, comprised of five courses, delves deep into the evolution of architectural ideas manifested through the spatial production of form. It explores architecture's cultural, ideological, and material influences and key historical junctures that have shaped the field's conceptual frameworks and material expressions.

Furthermore, our studio courses integrate precedent studies into their curriculum, reinforcing the application of critical thinking skills based on thorough analysis of historical precedents. **ARCH 121B Design II** Formal Analysis, a cornerstone of our program, exemplifies our unique approach to analysis as a didactic, structural, and abstract discipline. It employs a diverse array of techniques and methods of representation, complemented by **ARCH 127A Representation III Analysis** and **ARCH 127B Representation IV Imaging.** 

Given our location in New York City, students can also engage with the city as a living laboratory for architectural study. Many of our classes incorporate field trips to significant historical and contemporary architectural sites, enriching students' understanding of the built environment and urbanism.

#### PC.4—Curricular Aspects:

The **HTC** sequence introduces the history of architecture and human settlements with a transcultural perspective, including diverse canons and traditions. The course sequence addresses architecture's cultural, ideological, and material influences and exchanges, as well as the points of rupture throughout history that have determined the development of the field's conceptual frameworks and material instrumentalities. These courses place architectural and urban history and theory in the specific contexts of the various paths of colonization at different moments in history and will consider the geopolitical influences on principles, concepts, styles, and techniques, both within the centers of power and at the peripheries.

ARCH 115A History of Architecture I: Introduction to Architecture & History, Theory, and Criticism and ARCH 115B History of Architecture I: Introduction to History of Urban Form are large-scale and thematic introductions to transnational concepts in the practice and theory of architecture across millennia, read in terms of the cultural, material, sociopolitical, and environmental forces that shape them. ARCH 115A foregrounds disciplinary specificity asking not only what architecture "is," but also for whom and under which conditions. ARCH 115B presents urban settlements as nodes among networks of exchange, locations of the concentration of power and material wealth (often extracted from afar), and sites of political representation and cultural expression.

ARCH 125A History of Architecture II: Architecture and Globalization and ARCH 125B History of Architecture II: Socio-Political Movements and Modern Architecture are chronologically organized histories of world architecture and urbanism from the 14th-17th centuries and 18th-mid 20th century, respectively. ARCH 125A considers aspects of the formation of the discipline in the context of globalization and the early emergence of modern capitalism and colonialism. ARCH 125B explores key ideas and processes related to the evolution of Modernity in transnational



contexts (including imperial enterprises). The course also describes the ways in which industrial and technological developments and architecture-as-spatial-production have operated with and against one another as symptoms of and catalysts for social, political, economic, and environmental transformations.

ARCH 133 Introduction to Urban Histories and Theories: A Critical Study of Architectural Ideologies Post-WWII investigates architectural production, movements, and theory from roughly 1950-2010, from the post-war period through post-colonial and postmodern phases to the digital transformations, attending not only to neoliberal global and corporate professional practices but also to the "expanded field" of architectural discourse and practice. The expanded field includes a range of not-strictly-architectural professions in which the knowledge and skills of a B. Arch. degree are valuable.

Architectural history and theory engage in design studios through precedents and case studies, which are most evident in **ARCH 121B Design II** Formal Analysis but are also present in the **ARCH 135A-B Building Technology** sequence.

*Elective Courses:* Many upper-level elective seminars are history, theory, and criticism courses, whether they are focused on landscape architecture, aesthetic philosophy, 20<sup>th</sup>-century urban theory, pedagogy, 18<sup>th</sup> to 20th century domestic economy, the political turn of public art in the 1970s-2000 and—not least—classes commissioned by the Museum of Modern Art and The Metropolitan Museum of Art, in which students first study and then build museum-quality models of the architecture to be an upcoming exhibit. Examples of such courses include:

- ARCH 205.05 Advanced Concepts "New York as Incubator of 20<sup>th</sup>-Century Urbanism," offered by Joan
  Ockman (Fall 2021). This seminar explores the central issues that preoccupied Lewis Mumford, Robert
  Moses, Jane Jacobs, and Rem Koolhaas, from civic representation and environmental sustainability to
  large-scale infrastructure and urban renewal, from community and complexity to architecture's role in the
  urban imaginary. In a final written paper, students are asked to outline differing conceptions of the 20th
  century city shaped by New York City's urban and architectural development.
- ARCH 225.57 Advanced Topics "Potential Pedagogies," offered by Eva Franch I Gilabert (Fall 2021). This
  design seminar invited participants to reflect on the fundamental aspects of architectural education,
  critically dismantle prevalent pedagogical models, and propose new referents for the social, political,
  technological, and material agency architects have in affecting the designed environment. Students
  designed a syllabus, a student manual, and a visionary curriculum introducing new agendas, methods, and
  institutional structures for architecture education and practice.
- ARCH 225.55 Advanced Topics "Parallel Histories of Ecological Design," offered by Lydia Kallipoliti (Fall 2021). This course documented the intersection of architecture and design with ecology, environmental history, governance, and law. In a term paper, students rendered evolving perceptions of nature, its relation to culture, and human and non-human subjects' occupation of the natural world.
- ARCH 225.64 Advanced Topics "Architecture and Astropolitics," offered by Lydia Kallipoliti (Fall 2022).
   This course interrogated how architecture constitutes and distributes power as a geomorphic force, through processes of depletion, extraction, and exploitation. In a term paper, students were asked to critique geopolitics—defined by the organization of terrestrial states—and astropolitics—defined by the organization of Earth's atmosphere, its orbital layers, and what lies just beyond.
- ARCH 225.61 Advanced Topics "The Spatial Politics of the Social Turn," offered by Esther Choi (Spring 2022, Fall 2023). This course examined projects by artists, architects, and designers from roughly 1970 to the present that engage with aspects of the built environment to explore themes of identity, difference, exclusion, representation, and belonging. Issues such as the politics of urban space, land rights, housing, digital geographies, and the commons were addressed alongside the study of texts from fields such as



- race and ethnicity studies, media studies, environmental studies, gender and sexuality studies, and postcolonial theory.
- ARCH 225.58 Advanced Topics "Foundations: Pedagogy and Practice," offered by Anna Bokov (Spring 2022). The seminar brought together scholars, educators, and practitioners of architecture to evaluate inherited models, discuss current trends, and speculate about future challenges of the foundations of architectural education. Conceived as a series of (mini)symposia, the seminar served as a platform for interaction between students and faculty, between academic and professional communities, and for dialogue between the invited guests and The Cooper Union protagonists.
- ARCH 225.59 Advanced Topics "Of Air and Waters; Elemental Narratives of Environmental Violence,"
   offered by Anthony Vidler (Spring 2022, Spring 2023). This course examined courses and narratives
   outside mainstream ecological thought by surveying different writers who have attempted to warn the
   inhabitants of the earth of the toxicity of inhabitation.
- ARCH 225.67 Advanced Topics "Construction and Slavery; The Architecture of the Black Atlantic," offered by Jonah Rowen (Spring 2023). This course examined concepts of labor and how black enslaved people worked to construct buildings for the entire period of Atlantic slavery. As skilled joiners, masons, and unskilled laborers, enslaved people constructed the landscapes of enslavement in Africa, the Americas, and Europe. The scope was to prompt interdisciplinary inquiry across histories of race, economics, environments, and aesthetics via readings, discussions, and writing assignments.
- ARCH 225.74 Advanced Topics "An Investigation of Historical Concepts and Practices Tied to the 18th
  Century Aesthetic Category and Landscape Movement Called the Picturesque" offered by Lauren Kogod
  (spring 2024). This architectural history and theory seminar examined the Picturesque, not as an objective
  list of characteristics but as a subjective designation in the mind of educated spectators, attending to the
  political, economic, and philosophical context of Enclosure Acts, Slave Trade, Caribbean Colonial Wealth
  and Orientalism.
- ARCH 225.25 Advanced Topics "Avant-Garde as Method: Vkhutemas and the Pedagogy of Modernism," was offered by Anna Bokov (Spring 2021). This course investigated the origins of modernism through the lens of a radical avant-garde school—Higher Art and Technical Studios, known as Vkhutemas, a counterpart of the Bauhaus. The final project included critical writing and production of analytical drawings and models in conjunction with an exhibition on the subject of Vkhutemas at The Cooper Union in the spring of 2023.
- ARCH 225.45 Advanced Topics "The Mask of Architecture," offered by Tamar Zinguer (Spring 2021). This
  course investigated the long cultural history of the mask in architecture, from the town squares of the
  Middle Ages where masked men danced in rituals as animal characters, to John Hejduk's Masques in the
  1980s, which were not merely buildings but cultural acts, creating dialogues between city and characters.
  Working with sociologists, psychologists, artists, and art historians, students wrote short essays, compiled
  critical texts, and gathered illustrations to create an anthology.
- ARCH 225.51 Advanced Topics "Architecture and the City: From Urbanism to Urban Design, 1945-2020,"
   offered by Anthony Vidler (Spring 2021). This course investigated the relationship between architecture
   and urbanism via cases of urban renewal projects in response to World War II repair.

## PC.4—Co-Curricular Aspects:

**Events and Exhibitions:** Complimented by its robust exhibitions program, the School employs its annual lecture series as a vital avenue to deepen students' comprehension of the histories and theories of architecture and urbanism beyond the traditional curriculum. This series serves as a platform for graduates and practitioners within the community to delve into lesser-known aspects of architectural history and theory, featuring presentations from a diverse array of invited speakers. With each semester, the lecture series expands in both its breadth of topics and the diversity of perspectives presented, enriching the educational experience for all participants. *Please see Appendix A. Selected Events and Exhibitions.* 



#### PC.4—Self Assessment and Strategies for Continuous Improvement:

This section should be read with reference to **5.2 Planning and Assessment** & **5.3 Curricular Development**, which provide an overview of assessment strategies. All **HTC** courses assess student learning using both direct and indirect measures. Direct measures include written responses, papers, presentations, a final research project, and the quality and quantity of class participation; indirect measures include scheduled office hours conversations and course evaluations. Modifications made to improve students' learning experience and quality of work vary by professor and may only be established by those teaching the same course at least twice. Some of these modifications have included instituting in-class research and writing workshops, beginning final research assignments earlier in the semester with more progress benchmarks along the way, and having students submit questions and/or comments on the required readings by email before class.

- ARCH 115A History of Architecture I: Students apply critical methods of observation, inquiry, and
  research to engage with and interpret the built environment through various media, including buildings,
  drawings, and texts. Students will be evaluated based on their completion and the depth of a
  notebook/portfolio which includes notes, research, sketches, and other forms of media produced
  throughout the course. The program established a benchmark for success of 100% of students achieving a
  score of 75/100 points or higher on their notebook/portfolio. In fall 2023, 96% of students achieved a
  score of 100/100 points.
- ARCH 115B History of Architecture I: Students identify and analyze how national and global forces in society, including culture, economics, politics, migration, etc., shaped specific urban theories and designs in the modern period. Students complete one 30-40-minute case study presentation that they make as part of a group one week of the semester. Student case study presentations are evaluated out of 30 points. The program developed a benchmark for success of 100% of students achieving a score of 23/30 or higher on their case study presentation. In spring 2024, 100% of students achieved a score of 30/30 points.
- ARCH 125B History of Architecture II: Students demonstrate an understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to sites, buildings, and structures. Students complete a 3,000-word research paper based on a theme relevant to the construction of modernism and modernity explored in this course. Final papers are evaluated out of 40 points. The program established a benchmark for success of 100% of students achieving a score of 30/40 or higher on their final paper. In spring 2024, 100% of students achieved a score of 33/40 points or higher.

Please review the Assessment Report Chart, found in the respective **PC.4** folder within the Digital Team Room.

Our ongoing assessment of the History and Theory program criterion is mostly evident in the **HTC Subcommittee**, which was formed in the summer of 2020 to critically review the existing required HTC courses. The subcommittee's work largely focused on a comprehensive assessment of the HTC sequence. Further elaboration on this assessment can be found in <u>5.3 Curricular Development</u>.

The content and sequence of the HTC courses were rewritten in response to the recognition that concepts of urbanism, settlement, and group form ought to be introduced much earlier in the sequence. Moving a rewritten thematic overview of **ARCH 133 Urban History and Theory** to the second semester of first year, on the heels of **ARCH 115A History of Architecture I**, students are given the necessary tools to anticipate questions of scale, density and context, monumentality and the vernacular, social power and social responsibility, and public audience in subsequent years. Such foundational knowledge also allows them to make greater and more meaningful use of their experiences in New York City. This updated curriculum enables history and theory faculty to offer students an



enriched, non-Western perspective on architectural history, encompassing regions such as India, China, Africa, South America, and other areas outside the Western canon.

#### PC.4—Highlighted Ongoing Enhancements:

**Course Enhancements: ARCH 115A-B History of Architecture I** were recently restructured to be thematic explorations of transnational concepts in architecture and urbanism, specifically tailored to introduce students to current themes upon entry into the program. Key features of these changes include:

- New faculty, bringing fresh perspectives and expertise to the classroom.
- Integration of more aspects of a global curriculum.
- Fostering a more comprehensive connection between historical contexts and theoretical frameworks.
- Increasing student engagement through discussion groups and reading responses, facilitating diverse avenues for assessing learning outcomes.
- Directly immersing incoming architecture students into contemporary theoretical concerns, such as sustainability and equity, from the outset, rather than postponing exploration until later years.

Due to recent successful developments in the **HTC** sequence addressing **PC.4**, student work, such as notebooks, folios, and final projects, will be archived so that they are accessible to other students, faculty, and alumni for years to come. We are proud to include this work in our annual End of Year Show.

**New Hires:** In this next Academic year, the School will launch a search for a new tenured/tenure-track faculty member in the **HTC** sequence. The search committee is dedicated to prioritizing candidates whose research interests complement current faculty strengths and whose scholarship and teaching agendas will contribute to the diversity and excellence of The Cooper Union and the local architecture community.

We continually strive to offer our students a wide variety of history- and theory-oriented electives that explore how design is understood as part of a larger intellectual discourse, both historically and in terms of contemporary challenges.

**PC.5 Research and Innovation**—How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

## PC.5—Our Approach:

Research and innovation are fundamental aspects of any architectural pedagogy, as the field of architecture discourse and practice is changing faster than ever in response to cultural demands and technological transformations. As such, each year's design studio includes research into material assemblies, representational techniques, programming, site analysis, historical precedent, and environmental factors. Innovation in design is evaluated based on how students introduce new methods and ideas, as well as on how the learning experience fosters creativity, the evolving demands of the architectural profession, and the integration of key aspects of innovation: technology integration, interdisciplinary approaches, environmental literacy, experiential learning, collaborative and participatory methods, critical / reflective thinking, and emphasis on ethics, social responsibility, and accountability. To aid the students in understanding both the history of the discipline and the transformative value of research and innovation, studios are coupled with sequences of courses (HTC, Environments, Environmental Technologies, Building Technology, and Representation) strategically across the curriculum.

#### PC.5—Curricular Aspects:

The School of Architecture has many aspects that develop the students' ability to perform research and to evaluate innovations in the field:

- The **HTC** sequence establishes a knowledge of the cross-cultural history of architecture and urbanism and critical reflective thinking. These histories provide a necessary base through which the students can evaluate contemporary cultural transformations within the discipline and require students to complete rigorous architectural research throughout. See PC.4 for course descriptions.
- The two-year sequence of representation courses ARCH 117A Representation I: Freehand, ARCH 117B Representation II: Descriptive Geometry, ARCH 127A Representation III: Analysis, and ARCH 127B Representation IV: Imaging develop students' skills and spatial understanding. The sequence begins with drawing from observation and descriptive geometry, then proceeds to animations, digital modeling, and the conventions of architectural representation. These courses are theoretical and historical but also ask the students to experiment and innovate new expressions of creative practice once the knowledge of these histories is understood. The Representation sequence becomes a key platform for technology integration and forms the basis for elective courses implementing digital fabrication techniques, advanced software and tools, and immersive environments.
- The ARCH 124A-B Environments sequence set a basis through which the students can evaluate innovation in environmental sciences in relation to architectural design and cultural discourse. These courses require the students to research developing ideas in ecology and the historical lineage of environmental design, documenting and verifying their research through writing and drawing. See PC.3 for expanded course description.
- ARCH 135A-B Building Technology is a two-semester sequence requiring students to understand
  construction technologies through full-scale detail constructions and analytical studies of key precedents.
  The students research different systems of building assembly, both historical and contemporary, where
  the functions of how material elements come together are explicated and understood. The course
  includes site visits to exemplary buildings in conjunction with understanding how the buildings are drawn
  and detailed. This aspect of experiential learning instituted in field trips and collaborative learning
  experiences is vital in establishing criteria of innovation.
- ARCH 121B Design II formal analysis studio teaches the study of precedent through formal analysis. Students analyze a variety of buildings from different cultures and eras using analytic methods that disclose the dynamics of architectural form. They also build a vocabulary of spatial concepts while learning to critically deploy specific representational techniques in both two- and three-dimensional form to communicate their readings and interpretations. The analysis studio is taught in teams, establishing collaborative and participatory methods by fostering a student culture where students work in teams, share ideas, and critique each other's work to enhance collective learning and creativity.
- ARCH 151A-B Thesis is a year-long project that rigorously investigates an architectural topic selected by
  the thesis candidates under the guidance of their faculty and advisers. Thesis students must demonstrate
  their capacity to critically synthesize architectural knowledge and make precise projects that show their
  competence in argumentation, design creativity, technological invention, graphic innovation, and
  research on architecture, the urban environment, and beyond. The Thesis focuses on architecture as a
  hybrid field, preoccupied with disciplinary conversations and the reflection of architecture and spatial
  issues in society. Thesis also promotes interdisciplinary approaches and encourages collaboration across
  different fields, celebrating the culmination of students' architectural education.

**Elective Courses:** Every semester, a wide variety of research and innovation-oriented electives are offered to third-year students and above.

- ARCH 185.18 Crossings "Synthesis/Distinction," offered by Austin Wade Smith (Fall 2021). This course was
  an investigation into design technology and creative agency through prototyping. Throughout the course,
  students researched emerging methods in digital fabrication and computation, from foundational details
  to more complex assemblies, mediating between the distinctions of digital logic and the synthesis of
  analog practices within the larger design field.
- ARCH 185.16 Crossings "Beyond the Screen," offered by Austin Wade Smith (Fall 2020). This course explored media and computing as an environmental phenomenon. Organized as a survey, students

- learned a range of emerging tools, including workflows in robotics, IoT, mixed reality, motion tracking, web development, and "bots," in order to create immersive environments and experiences beyond the screen, with critical context to architectural applications.
- ARCH 194.03 "Aesthetics, Gas Exchanges, and The Right to Breathe," offered by Zulaikha Ayub (Fall 2022).
  This course investigated the legal and scientific forms by which breathing is understood relative to
  environmental, racial, and economic injustice. Students engaged in conversation with international legal
  and media scholars and explored topics on the architecture of weaponizing air against incarcerated
  protestors, the erasure of intergenerational cancer transmission, the politics of air filtration, and the
  production of racial violence in medical autopsies.
- ARCH 177.05 "Introduction to Building Information Modeling," offered by Tyler Putnam and Gjergji Shkurti (Fall 2023). The course introduced the concepts of a Building Information Modeling approach to create a technical set of coordinated construction documents, analysis, and visualizations. By studying and documenting case studies of notable single-family residential structures, students learned not only the mechanics of producing data-rich 3-dimensional models but also the grammar of professional documentation, including view references of varying scales, annotations, bills of materials, and rendering.
- ARCH 205.22 Advanced Concepts "First Edition," offered by Owen Nichols and Clara Syme (Fall 2023), focused on printmaking to construct architectural images, evading the analog/digital dichotomy. After examining visual sources in the form of architectural prints, drawings, and hybrid media, students developed their own representational projects in the a83 printmaking studio, providing an opportunity to explore concepts through the production of a series of prints.
- ARCH 225.41 Advanced Topics "Experimental Structures," offered by Gina Morrow and Xiaoxiao Wu
   (Spring 2021, Spring 2022, Spring 2023, Spring 2024). This course explored structural drawings and the
   distinct legibility of their graphic, technical language, that may reveal the clarity (or lack thereof) in the
   inherent geometry and material systems of buildings. Students studied different engineering concepts
   through the reading and making of structural drawings, through a sequence of drawing and analysis
   exercises to develop a structural design and set of drawings.
- ARCH 225.62 Advanced Topics "Decentralized Architecture," offered by Benjamin Aranda (Spring 2022).
  The seminar investigated current use cases of cryptocurrency and NFTs that mark a turn away from an internet of server/client addresses towards a decentralized version with network verification protocols and blockchains. Students engaged in lectures, invited talks, group research presentations, and a generative NFT workshop and completed a group project exploring a long-form generative project on a decentralized platform.
- ARCH 377.01 Adv Digital Architecture "Robotic Fabrication," offered by Zach Cohen and Harrison Tyler (Spring 2023). The course centered on the use of the AACE Lab's 6-axis robotic arm. Culminating in a group research project, students used the robotic arm to conduct both technical exercises and "material-thought experiments," speculating how this emergent tool could be used in the design process.
- ARCH 185.17 Crossings "Generative Algorithms for Art & Architecture," offered by Ben Aranda and Sam Keene (Spring 2021, Spring 2023). This interdisciplinary seminar explored generative and machinelearning approaches to art and architecture. In the class, students created multiple projects with generative and machine learning algorithms to explore the conceptual boundaries of their discipline, analyzing output results from large datasets.
- **ARCH 205.23 Advanced Concepts** "Design of the Book," offered by Laura Coombs and Phillip Denny (Spring 2024). See <u>PC.2</u> for course description.
- ARCH 225.52 Advanced Topics "Tactics for a Post-Sovereign Polar Research Outpost," offered by Gary Bates (Spring 2021). This course investigated Svalbard as an emerging post-sovereign state within complex global political, informational, and economic systems. With Svalbard's strategic position as a logistical juncture within future global shipping routes, optic cable paths, and geopolitical systems, students investigated climate research, concepts of polar tourism, food production in arctic climates, clean energy to replace nonrenewable resources, alternative forms of housing, polar technology, and space research.

- ARCH 225.53 Advanced Topics "Simulation: Theories, Environments, and Events," offered by Farzin Lotfi-Jam (Spring 2021). This seminar asked how simulations and models like digital twins read and represent cities. A hybrid seminar-workshop, the class combined readings and discussions with design workshops, tracing the emergence of a field of knowledge—spanning military, commercial, and entertainment domains—concerned with making human decisions quantifiable and computable. Students used the Unreal Gaming Engine—a software package for developing immersive simulations—to analyze and animate historical theories, contemporary algorithms, and global marketing campaigns that simulate the city.
- **ARCH 199 Independent Study.** Students identify the faculty they wish to work with, define the scope of the research, outline deliverables and a schedule, and sign a contract with the faculty involved.

#### PC.5—Co-Curricular Aspects:

**Lectures and Events:** The School of Architecture lecture series exposes students to many of the most pressing issues facing contemporary architecture through the lens of internationally recognized thinkers and practitioners. There are typically three lecture series each semester at the School. First, the School of Architecture hosts a series of invited lectures curated by a different faculty member every year. Second, there is a student-run lecture series in which the students have the agency and support to invite who they would like to have to speak to the student body. Third, there are a series of endowed and cosponsored lectures that bring leading voices to the School. *Please see Appendix A. Selected Events and Exhibitions for an extended list.* 

**Exhibitions:** The School hosts several exhibitions every semester that allow the students to directly access primary materials of architectural production. In conjunction with the exhibitions, there is a series of gallery talks by the architects exhibited or the curators that open the material to larger historical and developing disciplinary discourses. *Please see Appendix A. Selected Events and Exhibitions for an extended list.* 

**Faculty Research:** Faculty members in the School of Architecture are key to advancing new forms of research and creating advancements that innovatively address pressing global challenges. Their ongoing, distinguished research and creative work benefits the reputation of the university and its students. Examples of their exemplary research activities can be reviewed in the faculty resumes, appended at the end of this document, as well as in summary in 1—Context and Mission, and in 2—Shared Values.

#### PC.5—Self Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u>, which provide an overview of assessment strategies.

• ARCH 151A-B Thesis Guest Juror Survey: Students must demonstrate their capacity to critically synthesize architectural knowledge and make precise projects that show their competence in argumentation, design creativity, technological invention, graphic innovation, and research on architecture, the urban environment, and beyond. As of spring 2024, student final reviews are evaluated through a thesis guest juror survey. The benchmark for success is A) at least 80% of jurors strongly agree that students presented diverse or innovative approaches to architectural representation and B) at least 80% of jurors strongly agree that students demonstrated the ability to utilize different technological tools, formats, and media to develop novel methods of presentation and representation in their proposals. In the spring of 2024, 87% of jurors agreed with criteria A, and 80% of jurors agreed with criteria B.

Please review the Assessment Report Chart, found in the respective **PC.5** folder within the Digital Team Room. Additional assessment measures for **PC.5** include:

Track and share faculty research via our weekly newsletter and social media/website.



 Track the number and reach of faculty research publications, conference presentations, books written, design awards won, and exhibitions participated in/curated to measure the impact of knowledge generation and innovation.

## PC.5—Highlighted Ongoing Enhancements:

The need for research and innovation is an integral part of our curriculum and pedagogy and is often a topic of deliberation in ongoing meetings.

**New Hires:** We have hired some new visiting faculty who will advance our curriculum in areas of research and innovation. Brad Samuels is participating in the **Thesis** studio. He is a founding partner at SITU and the Director of SITU Research—an organization that merges data and design to create new pathways for justice, mobilizing an arsenal of technologies to identify and surface critical evidence. Tei Carpenter will be joining the Architectonics team; her studio Agency is an award-winning architectural design studio that pursues a better world through the transformative potentials of design. Stan Allen will lead an elective course on Urban Ecologies and play a crucial role in the **ARCH 121B Design II** team. His extensive background in landscape and ecology brings a critical perspective on the interplay between architecture and the environment.

**New Infrastructure:** Since our last accreditation, The Cooper Union has opened two spaces to advance knowledge and foster innovation. The IDC Foundation Art, Architecture, Construction, and Engineering (AACE) Lab opened in 2021, and The Benjamin Menschel Civic Projects Lab, opened in 2022. *Please see* <u>5.6.2</u> *Physical Resources for a description of these two spaces.* 

**Funding:** Various grants support research and innovation. The Cooper Union Grant Program provides funding for projects that enhance our students' learning experiences, faculty's teaching, scholarship, and practice, innovative ideas for our future, and opportunities for our community to come together in addressing the critical societal issues of our time. The School of Architecture supports faculty development for coursework/study and advancing skills for new teaching strategies and research.

For students, the IDC Foundation Innovation Fellowship is a merit-based scholarship awarded to rising fifth-year architecture students who demonstrate exceptional academic performance and career potential to develop innovative, interdisciplinary solutions to pressing societal needs. The Fellowship provides a full tuition scholarship for the recipient's final undergraduate year at The Cooper Union and a \$1,000 award for expenses related to their thesis, capstone project, or research project.

*Off Campus Initiatives:* Student-based/faculty-led research and innovation include participation in the Festival des Architecture Vives in Montpellier (2019) Shenzhen Bi-City Biennale of Urbanism/ Architecture (2019), Venice Biennale (2021), Tallin Biennale (2022) as well as research collaborations with the Museum of Modern Art (2018 and 2021) and The Metropolitan Museum of Art (2023).

**Al Advisory Council:** Mokena Makeka, Special advisor to the Vice President of Academic Affairs, is forming The Cooper Union Al Advisory Council, a non-fiduciary and voluntary transdisciplinary network of leaders working in Al. The network is a body of esteemed practitioners working on the innovation end of (generative) Al. The body highlights recommendations and insights, primarily enhancing accountability toward making an equitable and better world.

**PC.6 Leadership and Collaboration**—How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and



dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

## PC.6—Our Approach:

Within our architecture program, a deliberate focus is placed on equipping students with a comprehensive understanding of various leadership approaches that address the evolving demands of the profession. Recognizing that traditional benchmarks, such as winning design awards or gaining public recognition, may fall short of capturing the essence of contemporary leadership in architecture, our curriculum emphasizes the need for a more collaborative and empathetic form of leadership in day-to-day practice. We guide students in defining their roles as leaders who initiate and orchestrate change, not only within their careers but also by extending their influence as architects in their communities. Moreover, our program recognizes the significance of leadership in public service, encouraging students to explore opportunities as citizen architects who actively contribute to problem-solving at local, state, and national levels.

Crucially, we challenge the idea that leadership requires extensive years of experience, recognizing the enthusiasm of emerging professionals, even within the realm of architecture school, to explore diverse paths in their pursuit of leadership roles. Above all, we instill in our students the awareness that irrespective of the specific form leadership may take, the common denominator remains people—whether they are fellow students, community members, employees, or collaborators. As emphasized in our program, a leader's overarching duty is to give back to the people they serve, recognizing the dynamic interplay of multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts in solving complex architectural problems through effective collaboration.

## PC.6—Curricular Aspects:

To cultivate leadership capacity rooted in collaboration and empathy, we provide a range of courses, pedagogical models, and collaborative opportunities that expose students to these practices:

Within the **ARCH 121B Design II** design studio students actively collaborate in groups throughout the entire semester. In the third-year **ARCH 135A Building Technology** course student teams must work together to construct full-scale building mockups, addressing challenges spanning design, logistics, and budget considerations throughout the project.

In **ARCH 143A-B Construction Management**, students are introduced to the leadership role of the architect within the construction process and the multi-faceted approach required in collaborating with all members of a Project Team. In **ARCH 154A-B Professional Practice**, we immerse students in the fundamentals of architecture as a profession, engaging in discussions about the multifaceted factors influencing management and the regulatory landscape in which one must navigate, lead, and collaborate.

Furthermore, we have introduced an embedded "convergence project" that highlights the interconnectedness of ARCH 135A-B Building Technology, ARCH 143A-B Construction Management, and ARCH 154A-B Professional Practice. Students form groups spanning the 3rd, 4th, and 5th years to explore these subjects through the lens of a single project, fostering a comprehensive understanding of their interrelated dynamics.

*Elective Courses:* In 2020, The Cooper Union implemented a new course structure that allows students to participate in long-term projects with colleagues from other disciplines while working in an environment that lets them apply their theoretical knowledge to real-world problems. As part of this institution-wide initiative, we've implemented block scheduling to facilitate interdisciplinary courses in collaboration with the other schools. Interdisciplinary courses assemble a group of professors and/or students who set out to solve a research problem that demands input from a range of disciplines, bringing together students from diverse backgrounds, including



Architecture, Art, and Engineering, to draw on their disciplinary expertise. Some examples of these courses are listed below:

- ARCH 185.17 Crossings "Generative Algorithms for Art & Architecture," offered by Ben Aranda (Architecture) and Sam Keene (EE) (Spring 2021, Spring 2023). See PC.5 for course description.
- ARCH 225.71 Advanced Topics "Public Art as Alimentary Infrastructure," offered by Nora Akawi
  (Architecture), Ninad Pandit (Humanities and Social Sciences), and Guillermo Ruiz de Teresa (Storefront
  for Art and Architecture) (Fall, 2023), is a multi-disciplinary, multi-method seminar that engages with
  questions around colonialism and decolonization within the context of New York City. The overarching
  theme of the seminar is anti-colonial infrastructures, connecting sites of struggle against colonization
  relationally from across the Global South, as well as North America and Europe, with specific sites and
  mobilizations around The Cooper Union campus and in New York City at large.
- **EID 364-2** "Data Science Projects for Social Good," offered by Will Shapiro (Architecture), Sam Keene (EE), and Taylor Woods (Art). Explores applications of machine learning, data science, and software engineering to projects in education, equality, justice, health, public safety, economic development, or other areas. Students work in interdisciplinary teams across the three schools on projects with external partners and focus on solving problems while emphasizing the greater New York City Area.
- VIP 38XB "Solar Decathlon," offered by Melody Baglione (MechE), Julian Palacio (Architecture), Cosmas Tzavelis (CivE), and David Wootton (MechE). The project continues via the VIP (Vertically Integrated Projects) undergraduate research initiative in which students work in multidisciplinary teams led by faculty, contributing to their research, innovation, and/or design efforts. Students are encouraged to participate for at least 3 semesters and up to 6 semesters, providing deeper learning experiences and leadership opportunities. The long-term nature of VIP creates an environment of mentorship, with faculty and graduate students mentoring teams and experienced students.

## PC.6—Co-Curricular Aspects:

**Partnerships:** Our collaborative efforts extend beyond the confines of Cooper Union, encompassing various organizations and institutions within and beyond New York City. Notably, our engagement with the University of Puerto Rico in the aftermath of Hurricane Maria and our partnership with HELP USA in Design III for housing projects in the Bronx and Brooklyn exemplify initiatives that align Cooper Union with the urgent social issues of our time. These endeavors address pressing challenges and cultivate meaningful dialogue with local communities.

Collaborations: In a similar vein, our ongoing collaborative courses with various New York institutions have produced remarkable outcomes, exemplified by the creation of compelling models featured in recent exhibitions at prestigious venues such as the Museum of Modern Art's "Toward a Concrete Utopia: Architecture in Yugoslavia, 1948-1980" and "The Project of Independence: Architectures of Decolonization in South Asia, 1947-1985." Additionally, our collaboration extended to The Metropolitan Museum of Art's "Tree & Serpent: Early Buddhist Art in India, 200 BCE–400 CE Exhibition." We have also recently partnered with the Storefront for Art and Architecture for a new pedagogical experiment entitled "Public Art as Alimentary Infrastructure," a multidisciplinary seminar probing colonialism and decolonization within the New York City context.

In Spring 2024, third-year students from **ARCH 135B Building Technology** and additional student volunteers collaborated in groups with Shigeru Ban Architects. Together, they constructed and installed a full-scale version of the renowned Paper Log House on The Glass House estate in New Canaan, Connecticut. This hands-on experience proved invaluable, providing students with practical lessons in collaboration, coordination, and effective troubleshooting as they tackled real construction challenges throughout the project.

In the workshop elective "Everything's on the Table," taught by Hayley Eber and Mae-ling Lokko, students developed physical culinary prototypes included in the exhibition for the Tallin Architecture Biennale, that expanded on the seminar's themes around nutrient recovery, farming, and cooking rituals on the table. Defining 'counter architectures of superfoods' as a broad set of practices that activate nutrient recovery, surplus



transformation, or repair within the food cycle, students designed a piece of culinary technology on the scale of "kitchenware" objects ranging from cookware and processing chambers to food carts.

**Student Opportunities:** Beyond coursework, students are presented with a broad range of opportunities for leadership and collaboration in the School's governance structure, extracurricular activities, and part-time employment opportunities offered within the School.

The School of Architecture Student Council is an elected student body with a significant role in the School's Governance, including voting representation at Faculty meetings and all standing committees of the Faculty. Since 2015, two voting Student Representatives have been voted to the Board of Trustees. See <u>5.1 Structure and Governance</u>.

An all-volunteer Student Lecture Committee administers the Diane Lewis Student Lecture Series, and student volunteers monitor the School of Architecture Study Collection when it is open after class hours for quiet study.

Motivated, highly responsible students can work for the School in positions of responsibility such as:

- Monitors in the School of Architecture Computer Lab. The position requires students to maintain the facility, track usage for future planning, perform hardware troubleshooting, manage output, and assist other students using the facility as necessary.
- The School of Architecture Archive offers positions for student interns to assist with special collections, prepare and install exhibitions, prepare publications, and the documentation of student work.
- The School of Architecture Office hires students to serve as tour guides who also explain the School's culture and pedagogy to prospective applicants and their families.
- Students can apply to teach weekly classes in drawing, painting, graphic design, and architecture to New York City teens through The Cooper Union Saturday Program.
- Students can apply to teach in our Introduction to Architecture Summer Program for high school and college students.
- Students can apply to serve as resident assistants in The Cooper Union Residents' Hall.

**Research Assistantships:** Our faculty members frequently secure grants, start-up funds, or institutional support, enabling them to employ student assistants to aid in their research and creative endeavors. This provides a valuable opportunity for student learning and growth. Students are often entrusted with responsibilities, faced with challenges, and presented with leadership opportunities not typically encountered in their regular coursework.

American Institute of Architecture Students (AIAS): This newly re-established and dynamic student organization offers students another avenue for leadership growth, communication development, and engagement with external stakeholders. AIAS students exemplify strong leadership skills and consistently enrich the School's cultural fabric through their active contributions.

Please see Appendix A. Selected Events and Exhibitions for an expanded list of co-curricular activities.

## PC.6— Self-Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u> which provide an overview of assessment strategies. We continuously evaluate our efforts to foster leadership and collaboration, employing formal and informal methods. This includes regular meetings of undergraduate committees and conversations among faculty about pertinent issues. Additionally, faculty participation in studio critiques plays a pivotal role. These sessions provide valuable insights into the efficacy of team-based approaches within specific studios, allowing for identifying and discussing any challenges arising in group dynamics. Addressing the complexities of assessing and grading team-based projects, **ARCH 121B Design II** and **ARCH 135A-B Building Technology**, are another focus of faculty discussions, enabling effective resolution of related issues.



Specific assessment measures for PC.6 occur in ARCH 143A-B Construction Management and ARCH 154A-B Professional Practice.

- ARCH 143A Construction Management: The fall semester final project asks students to role-play as the project architect during the value engineering process. Students must identify aspects of a precedent that if cut or significantly altered would be detrimental to the success of the design. Students then describe construction or design strategies which would result in removing significant cost from the project, with a target of reducing cost overall by 2%. The deliverables ask students to describe through images and text why the removal of these aspects would not compromise the design premise of the project. The assignment reveals to students the challenges and realities of cost and budgeting within a project, and how the Architect leads their multidisciplinary team through the process of value engineering. Students are evaluated on their identification of costly design and construction strategies, overall budget analysis, and cost reduction estimations. The program established a benchmark of 80% of students achieving a score of 8/10 or greater on their fall semester assignment. In fall 2023, 96% of students received an 8/10 or greater.
- ARCH 154A Professional Practice: Students are scored on a class presentation, where they must demonstrate an understanding of the skills and contributions various individuals exercise in the practice of architecture. Students must interview a practitioner of architecture, and report on their role within the firm and their day-to-day contributions, how they communicate with other disciplines, and how they navigate complex relationships with various constituents and stakeholders. Presentations are evaluated on content, clarity, and presentation to the class. The program established a benchmark of 100% of students receiving 65/100 points or more on their class presentation. In fall 2023, 100% of students received at least 95/100 points.

Please review the Assessment Report Chart, found in the respective **PC.6** folder within the Digital Team Room. Additional assessment metrics for this Program Criterion include:

- Gathering and curating updates for our weekly newsletter broadcast, spotlighting the notable achievements of our alumni in leadership roles, positions of responsibility, and collaborative endeavors.
- The firms engaging in our CPT program offer invaluable feedback on students' performance in professional settings, evaluating both their expertise and interpersonal skills. This feedback is essential for assessing the School's capacity to fulfill student needs and align with the expectations of the professional community.
- Tracking graduate ARE pass rates and rates of promotion to firm leadership to understand student capacities to serve as firm leaders and community collaborators.
- Launching an Architecture Advisory Board to solicit feedback from key practitioners on how graduates are performing in leadership, collaboration, and community engagement.

#### PC.6—Highlighted Ongoing Enhancements:

We firmly uphold the architect's responsibility to the built environment and their communities, recognizing their potential as leaders in such initiatives. We continue to pursue initiatives and collaborations so that our students can acquire firsthand experience in listening, collaborating, and addressing real-world challenges through diverse pedagogical and community projects, understanding the influence and accountability they possess as architects.

Specific ongoing enhancements for PC.6 occur in ARCH 143A-B Construction Management and ARCH 154A-B Professional Practice.

- **ARCH 143A Construction Management**: The faculty will provide additional class hours as needed to support students struggling with their final project and provide example material to assist students.
- ARCH 154A Professional Practice: Students will be encouraged to interview non-architects as well as
  professionals from related fields to prepare for a wide range of career paths, in and outside the field.



**PC.7 Learning and Teaching Culture**—How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

#### PC.7—Our Approach:

Within our studios, a vibrant community of students and faculty collaborates to cultivate a culture of rigorous inquiry, discussion, and critique. Team teaching is emblematic of the School as it promotes meaningful dialogues where knowledge, viewpoints, and methodologies flow freely between faculty and students each year. The importance of process is emphasized as essential in the growth of knowledge and development of creative options in a project's development towards completion throughout the five years.

Dean Tehrani established a semiannual Convocation in fall 2016, which now stands as a testament to the collaborative spirit embraced by members of the School of Architecture. At the beginning of each semester, the Convocation offers a platform for faculty to present their studios and seminars to their fellow instructors and students. This event fosters a shared interest between the academic cohorts by informing the community of the semester's subjects of study and facilitates new connections among the diverse members of the School of Architecture.

The best example of learning and teaching culture between students occurs within the shared studio. Students from years one through four complete their coursework in this shared environment, creating connections across the cohorts. A significant amount of learning occurs outside the traditional classroom, as classes and seminars are often held in the studio in the form of pin-ups, desk critiques, round tables, and group work sessions. Students in the upper years provide guidance and support to students in the lower years as all architecture students' progress through the same curriculum, often completing the same exercises year to year. This shared wisdom facilitates respect and innovation among the students, where everyone, including faculty, continually learns from one another. Aspects of **PC.7** are closely connected with **SV.3** and **PC.8**.

## PC.7—Curricular Aspects:

**ARCH 141A-B Design IV** and **ARCH 151A-B Thesis** exemplify the different ways our school's teaching and learning culture manifests within the curriculum.

**ARCH 141A-B Design IV** was restructured in 2017 around option studios, offering fourth-year students the ability to select from three to four different studio topics each semester. Most **Design IV** studios delve into urban and territorial questions. A recent example is Professor Diana Agrest's studio "Beauty, Horror, Myth, and the Sublime Los Angeles," which examined multifaceted challenges posed by climate change, geophysics, geography, ecology, and geopolitics. Students developed a formal "reading" of the city through research following individual narratives focusing on the visible and invisible forces at play in the generation of urban form. The pedagogical innovation in this studio lies in generating architecture as a transformation of an expanded understanding of urban form developed as a continuum between research and project, thus producing not only creative responses but also thoughtful considerations of the impact on both formal and social conditions on the city and architecture.

**ARCH 151A-B Thesis** offers an opportunity to explore different modes of working, sharing, and collaboration. While individual design and research are emphasized, collective discussions, including workshops, lectures, writing sessions, and progress presentations, guide the development of each thesis. Formats of critique and debate are carefully examined to foster a culture of robust dialogue and critical examination. Discussions are reliant on creating a shared environment that is positive and respectful, and that encourages respect, sharing, engagement,



and experimentation. Students participate in peer reviews and round table workshops with their classmates, whereby all students feel a sense of agency and collective involvement.

**Interdisciplinary Elective Courses:** As mentioned in <u>PC.6</u>, The Cooper Union has made a concerted effort to offer a greater variety of interdisciplinary elective courses across the three academic schools and the Humanities and Social Sciences department. These courses foster collaboration and respect between students of the three schools and often develop innovative engagement between faculty and students.

- ARCH 185.17 Crossings "Generative Algorithms for Art & Architecture," offered by Ben Aranda (Architecture) and Sam Keene (EE) (Spring 2021, Spring 2023). See PC.5 for course description.
- ARCH 225.71 Advanced Topics "Public Art as Alimentary Infrastructure," offered by Nora Akawi (Architecture), Ninad Pandit (Humanities and Social Sciences), and Guillermo Ruiz de Teresa (Storefront for Art and Architecture) (Fall 2023). See PC.6 for course description.
- **EID 364-2** "Data Science Projects for Social Good," offered by Will Shapiro (Architecture), Sam Keene (EE) and Taylor Woods (Art). *See PC.6 for course description.*

## PC.7—Co-Curricular Aspects:

**Public Programming:** Lecture Programs, including a dedicated Student Lecture Series, serve as conduits for informal learning. These programs give students the opportunity to engage in post-lecture discussions with faculty members, guests, and their peers on topics raised during the lectures. **Please see Appendix A. Selected Events and Exhibitions.** 

**Shared Governance:** Faculty meetings operate as democratic forums, inviting open and respectful discussions among faculty, student representatives, and administrative staff. Consensus-seeking and voting on decisions concerning the School are integral to this process, ensuring that the diverse voices within the community are heard and considered.

Regular meetings of the School's standing committees, including Administrative, Curriculum, Admissions and Academic Standards, involve full-time, proportional-time, and adjunct faculty, along with student representation. These meetings thoroughly review the learning culture, both in broad terms and on a course-by-course basis, ensuring continuous improvement. The administration actively participates in the academic organization and extracurricular programs, maintaining communication with students and faculty. This collaborative process involves an academic administrator, an Archive director and team, and the acting dean herself, who not only oversees all administrative aspects but also teaches and stays in constant contact with both faculty and students.

**Resources:** The Center for Writing and Learning's mission is to improve student learning across the curriculum and support faculty in teaching reading and writing. For detailed information about the Library's role in daily academic life, please see 5.8 Information Resources.

## PC.7—Self-Assessment and Strategies for Continuous Improvement:

This section should be read with reference to **5.2 Planning and Assessment** & **5.3 Curricular Development**, which provide an overview of assessment strategies. The primary form of assessing the School's learning and teaching culture from the students' perspective is through student representative meetings and class meetings with the dean and the associate dean. Through these, we can assess the overall quality of the learning and teaching culture and address issues affecting it. We see these issues as ranging from simple things like schedule conflicts between course assignments and studio deadlines to larger systemic issues like discrepancies in the levels of preparedness of instructors or lack of participation from engineering and art students in interdisciplinary efforts, forcing architecture students to bear the brunt of group projects.



From the faculty's perspective, the primary form of assessment of the learning and teaching culture is discussions in the monthly faculty meetings. Meetings are open to all faculty, including all resident faculty, adjunct faculty, and student representatives.

During both faculty and student meetings with the dean and the associate dean, we consistently engage in introspection to enhance our program's teaching and learning environment. Recognizing the prevalence of toxic and unsustainable practices in architectural education, we have taken proactive measures to foster a healthy convivial atmosphere. This includes a reduction in building hours to prioritize adequate rest and mental well-being. Faculty members are encouraged to be mindful of students' studio workload and to synchronize deadlines with other courses whenever feasible. These initiatives aim to cultivate a supportive and sustainable learning culture within our program.

Please review the Assessment Report Chart, found in the respective PC.7 folder within the Digital Team Room.

#### PC.7—Highlighted Ongoing Enhancements:

The Curriculum Committee evaluates results in learning progress through students' academic performance in classes relative to the curriculum's overall structure. Students' evaluations of courses and the curricular sequence are helpful in terms of student and faculty academic interaction. At the same time, student participation in extracurricular activities is a useful mode of calibrating the relationship between curricular and extracurricular activities in terms of participation and attendance.

- ARCH 111A-B Architectonics, ARCH 121A-B Design II, ARCH 131A-B Design III, and ARCH 141 A-B Design IV: An informal survey will be administered to directly assess positivity, respect, sharing, optimism, engagement, and innovation within the shared studio space. The Student Council will implement a suggestion box to receive student comments and concerns regarding learning and teaching culture. Students with low studio attendance and participation will be given more individual support by faculty to ensure they receive the benefits through pin-ups, reviews, workshops, discussions, lectures, and desk-crits.
- ARCH 151B Thesis: Formal discussions will be conducted to evaluate the shared thesis studio spaces, to
  help determine how effective each learning space is in supporting a positive and respectful learning and
  teaching culture. These discussions will inform the learning objectives of Thesis, which are dependent on
  a positive and encouraging teaching and learning environment.

**PC.8 Social Equity and Inclusion**—How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

## PC.8—Our Approach:

At The Irwin S. Chanin School of Architecture, we consider social equity and inclusion as principles that must be reflected in all aspects of the curriculum and any strategic planning for future initiatives for the School. These principles are also reflected in everyday practices in how we approach pedagogy, administration, and public discourse. We believe that architectural education must center the values of social equity and inclusion for the architectural profession to adequately address the social and environmental injustices of our time and educate architects as citizens who may advocate for equity, justice, and inclusion.

Equal access to education remains a core value at The Cooper Union, and the College continues to advance in its strategic plan to return to offering full scholarships for all undergraduate students. In addition, we work collectively as administrators, staff, and faculty to ensure that social equity and inclusion are integrated in: 1) diversifying the core and elective curriculum and centering an approach to architecture pedagogy and practice that



fosters inclusion and equity in academia, in the workplace, and the world at large; 2) the recruitment and retention of a diverse body of students, staff, and faculty; 3) community engagement opportunities, public programs, and institutional partnerships; and 4) establishing a robust strategy for the assessment of our approach to social equity and inclusion, and implementing the mechanisms for improvement. Curricular and co-curricular aspects of PC.8 Social Equity and Inclusion operate with <a href="Style="color: blue;">Style="color: blue;">Style="color: blue; blu

## PC.8—Curricular Aspects:

At Cooper, we work to support a diverse community with both academic and social support while increasing the enrollment and retention of students from underrepresented groups. Student recruitment efforts from underresourced and underrepresented communities are sustained by free or subsidized high school-level architectural educational programs, including the Saturday Program, designed specifically for public school youth in New York City, and the Summer Program.

We continually develop our curriculum with our diverse communities in mind, as well as with the goal of offering a rigorous and robust architectural education that allows students, faculty, and graduates to address the environmental and social challenges we face, both locally in New York City and globally.

History, Theory, and Criticism (HTC): The HTC sequence at The Irwin S. Chanin School of Architecture has been restructured to diversify and expand historical and conceptual understandings of our discipline and move beyond Western canons to include scholarship and creative production by a wide variety of historians, theorists, designers, and artists. Maintaining The Cooper Union's standards of rigor and excellence, both in HTC courses and across all courses in the program, such updates to the curriculum guided by DEI values have benefited from hiring new full-time faculty, adjunct faculty, and visiting faculty. Please see PC.4 History and Theory for an expanded description of the HTC sequence, and course descriptions for ARCH 115A-B History of Architecture I, ARCH 125A-B History of Architecture II, and ARCH 133 Introduction to Urban History & Theories.

All design studio courses provide opportunities for students not only to learn architectural design and representation tools, methodologies, and precedents but also to critically examine their agency in fostering equitable, healthy, and sustainable built and natural environments. From the ARCH 131B Design III housing studio to the ARCH 141A-B Design IV option studio, or ARCH 151A-B Thesis, students learn to position themselves in relation to environmental, social, and political conditions and consider the variety of modes of practice in architectural design through which they can participate in bringing about positive change in the world. Specifically, ARCH 131B Design III plays a crucial role in promoting social equity and inclusion by addressing social parameters in spatial production. These include questions like economic vulnerability, social integration, community empowerment, and policies that may combat discrimination and support underprivileged populations.

- In spring 2024, **ARCH 131B Design III** focused on creating a new housing design collaboration for our students focusing on public housing, in collaboration with the New York City Housing Authority [NYCHA] and Michael Jones, the organization's Director of Design and Real Estate Development.
- In spring 2023, **ARCH 131B Design III** focused on developing housing strategies within the larger historical context of discriminatory 'redlining' policies in Baltimore that have caused severe socio-economic inequality, particularly within the black and immigrant neighborhood communities as defined by the Home Owner's Loan Corporation in the early 1930s. Students investigated this policy at the urban scale while developing new housing proposals for three blocks located within the redlined zones in Baltimore, between Union and Franklin Square. The studio began by carefully creating a sequence of urban studies that examined the larger context of the neighborhood through the thematic lens of health, education, environment, and public space, which helped contextualize the significance of their buildings and design



- proposals. These analysis exercises emphasize the importance of developing new housing projects within the larger socio-political context of urban environments.
- In spring 2019, **ARCH 131B Design III** students worked on the development of two blocks in East New York and the Bronx, in collaboration with HELP USA not-for-profit-organization, that specializes in creating affordable housing for the homeless. Students met the directors from HELP USA through a sequence of inhouse lectures and company visits led by Lawrence Cann. They were taken on multiple site visits to meet the residents of existing built HELP USA projects, such as single women with children who have survived domestic abuse and unhoused veterans. The president of HELP USA presented a lecture alongside his team that described various challenges and problem-solving solutions in the construction of affordable housing projects for the unhoused in parallel with site visits of their new housing mid-construction projects for our students.

Moreover, the fourth-year option studio **ARCH 141A Design IV** "Models of Justice" centered on the spaces of justice and accountability. It focused on human rights violations and state-sponsored violence, contextualizing how reporting and documentation have changed—from the rarefied world of forensic science to a contemporary model that relies heavily on user-generated content and citizen documentation of sites of protest, excessive use of force, war crimes and other abuses of power.

**ARCH 151A-B Thesis:** During the thesis year, students tackle some of the most critical challenges architects face today. These challenges are rigorously examined and explored through an architectural proposal and investigation that grapples with issues of social justice, human rights, and equity, which are deeply intertwined in the creation of space.

**Elective courses** have been expanded to include deeper engagements with a diversity of often understudied histories, theories, cultures, and environments. They have also included diverse approaches to modes of practice in architecture, responding to social, political, environmental, and technological developments in our time. Examples of courses that delve into questions of equity and inclusion are:

- **ARCH 225.67 Advanced Topics** "Construction and Slavery; The Architecture of the Black Atlantic," offered by Jonah Rowen (Spring 2023). See PC.4 for course description.
- ARCH 225.69 Advanced Topics "Praxis of Design and Spatial Justice," offered by Ifeoma Ebo (Spring 2023). This seminar explored various principles and practices of using design to address equitable access and environments of safety and well-being, particularly for communities of color. Students were introduced to the practice of Design and Spatial Justice by building a shared foundation of anti-racist forms of communal knowledge and spatial practices grounded in lived experiences.
- **ARCH 225.61 Advanced Topics** "The Spatial Politics of the Social Turn," offered by Esther Choi (Spring 2022, Fall 2023). *See PC.4 for course description.*
- ARCH 225.71 Advanced Topics "Public Art as Alimentary Infrastructure," offered by Nora Akawi
  (Architecture), Ninad Pandit (Humanities and Social Sciences), and Guillermo Ruiz de Teresa (Storefront
  for Art and Architecture) (Fall 2023). See PC.6 for course description.
- ARCH 225.72 Advanced Topics "Climate Migration and the Future of New York," offered by Rosalie Genevro (Spring 2024). See PC.3 for course description.
- ARCH 185.03 Crossings "The Feltman Seminar: Light Without the Promise of Form," offered by Torkwase
  Dyson (Spring 2024). This seminar focused on errantry as a liberatory practice along with determinacy,
  nomadicity, and movement to imagine world-building with lumens designed to promote radical motion
  and multi-sensory experience.

For some parts of the curriculum, institutional partnerships have helped shape certain design studios and elective seminars. The elective seminar **Public Art as Alimentary Infrastructure** on the histories of social movements through public art in the Lower East Side, in partnership with the **Storefront for Art and Architecture** took place in fall 2023.



## PC.8—Co-Curricular Aspects:

**Lectures and Events:** Recent lecture series have focused on models of architectural practice that are collaborative and that center social movements for justice and equity, centering the voices of historically marginalized communities, particularly Black, Indigenous, and People of Color, as well as LGBTQ+ communities. In particular, the *Pluriversal, Bewildered, and Otherwise* lecture series (2021-2022) invited architecture collectives whose work defines architectural practice not as a tool for colonial and capitalist extraction but one rooted in social movements for social and environmental justice. *Please see Appendix A. Selected Events and Exhibitions*.

**Student Lecture Series:** The Diane Lewis Student Lecture Series has also consistently represented architectural practices that advance social equity and inclusion in the field. "What Black Is This, You Say?" was a 2023 public symposium organized in partnership with the Storefront for Art and Architecture on public art and the plurality, complexity, and nuance of Black experience(s) through the lens of the work of Amanda Williams. Furthermore, the "Anti-Racism in Thesis" workshop was a day-long event held in 2021 that addressed the question: how does decolonial and anti-racist pedagogy translate onto the Thesis syllabus, conversation, review formats, and advising models?

Collaborative Projects: Faculty members and students collaborated on an installation in the 2021 Venice Biennale's main exhibition titled How Will We Live Together? The installation questioned communal identifications in the multi-class, multi-ethnic, multi-lingual metropolis and addressed New York City's diverse interiorities: 1) sanctuary spaces for undocumented people; 2) the segregating façade envelope; 3) spaces of climatic control; and 4) the un-natured public park.

Facilities and Resources: Interdisciplinary centers and public programs contribute to an environment where questions on social equity and inclusion are addressed across the various disciplines at The Cooper Union. In 2022, The Cooper Union inaugurated the Civic Projects Lab, a classroom, workspace, and public showcase for interdisciplinary projects aimed at civic-focused issues. The Center for Writing and Learning organizes public programs on the social and political meanings of higher education, such as "Teaching at Cooper: A History" and "Universal Design for Learning and Other Paradigms for Inclusive Classrooms." The Intersectional Justice Program featured interdisciplinary events that introduce students to how a career choice (as an artist, architect, or engineer) has both the capacity and the responsibility to consider justice as intrinsic to their practice. The Race and Climate Reading Group fosters discussions across all three schools that center issues of race and social justice and how they intersect with the climate crisis.

*Clubs:* Student life at Cooper is also enhanced academically and socially through the consistent and creative work of student organizations. These include the Black Student Union, The Cooper Climate Coalition, and the Architecture Lobby Chapter at Cooper, among others. They provide a forum for BIPOC and international students to address the concerns and interests of underrepresented groups in architecture.

## PC.8—Self-Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u>, which provide an overview of assessment strategies.

The Anti-Racism Questionnaire: In 2021, the Curriculum Committee, with full faculty endorsement, developed an anti-racism course questionnaire. At the conclusion of each academic year, students receive this questionnaire alongside the regular course evaluations. It is dedicated to addressing issues of anti-racism, decolonization, and sustainability throughout the year, reflecting our commitment to fostering an inclusive and equitable learning environment. Results are reviewed by the curriculum committee, who then draft suggestions for faculty to increase the study of non-western subjects throughout the years. The anti-racism course questionnaire asks a series of six questions and is administered to students across all



five years of study. Success in **PC.8** is measured by the percentage of student responses, which reflect improvement toward an anti-racist curriculum. Responses include the following: "to a very great extent," "to a great extent," "to a limited extent," "not at all," and "N/A." Survey results are evaluated by cohort so that the curriculum committee can identify strengths and weaknesses at specific moments in student education. The program established a benchmark of at least 75% of total students responding, "to a very great extent," "to a great extent," or "to a moderate extent" to each of the 6 questions. In spring 2024, the cumulative results of the questionnaire showed over 75% of students responding positively to all six questions.

Please review the Assessment Report Chart, found in the respective PC.8 folder within the Digital Team Room.

## PC.8—Highlighted Ongoing Enhancements:

Curricular Development: Alongside the heightened focus on issues of race, colonialism, and decolonization, there has been a notable emergence of these topics as central themes of discourse and debate. While our revised history and theory sequence already encompasses discussions on these themes, we are now integrating them into additional course offerings. These include specialized studios like ARCH 141 Design IV "Models of Justice," as well as elective courses such as ARCH 225 Advanced Topics "Principles & Praxis of Design & Spatial Justice." This expanded incorporation enables a comprehensive exploration of these critical issues across our curriculum. Specific planned, curriculum-wide improvements include: incorporating more diverse voices and case studies; conducting roundtable discussions between students and faculty to integrate more diverse voices; providing faculty training to expand representation of non-Western worldviews; providing faculty training for encouraging greater diversity of thought and opportunities for student engagement; inviting a more diverse body of guest architects for exhibitions and lectures; facilitating conversation between students and faculty to reduce toxic power-dynamics in the learning environment; encouraging the student-council to re-establish student critique nights; and encouraging students to work with faculty in making guest critic invitations. Individual developments for each cohort include:

#### • First-year curriculum improvements:

 Discuss the incorporation of ethical practice, material sourcing, and sustainability practices with first-year faculty.

## • Second-year curriculum improvements:

 Raise concern with second-year faculty and workshop ways they can encourage more diversity of thought and opportunities for contribution.

## Third-year curriculum improvements:

- O Discuss diversity with third-year faculty to encourage the incorporation of de-colonial precedents in the curriculum. Pool resources to aid faculty in this task.
- Raise concerns regarding ethical praxis with third-year faculty. Examine course syllabi to identify specific courses which could support greater social equity and inclusion.

## • Fourth-year curriculum improvements:

O Discuss diversity with fourth-year faculty to encourage the incorporation of de-colonial precedents in the curriculum. Pool resources to aid faculty in this task.

## • Fifth-year curriculum improvements:

o Invite fifth-year faculty to share their methods of creating an open environment that encourages diversity of thought and opportunity with other architecture faculty.

## Course improvements include:

ARCH 131B Design III: We will work with third-year faculty to invite a more diverse pool of guest lecturers
to inform the studio on socially conscious design; incorporate a greater representation of non-Western
canonical precedents in the course syllabus; provide individual help to students struggling to integrate
social, technological, material, organizational, and material methods in their design process; and help



- students develop presentation skills to articulate their socially conscious, integrative approaches to housing, through writing center appointments and presentation workshops.
- ARCH 115B History of Architecture I and 125B History of Architecture II: Improvement will be achieved by archiving final projects for alumni, present students, and future students to reference.
- ARCH 151 A-B Thesis: We will integrate more instruction and exploration of technology to help students conduct their research and analysis.

**New faculty hires:** We have recently hired faculty members whose practice, research, and teaching are explicitly centered on social justice and racial equality. Notable individuals such as Brad Samuels, Leslie Lokko, Ifeoma Ibo, artist Torkwase Dyson, Samantha Josephat, Esther Choi, and others have joined our ranks. Their expertise enriches and strengthens our ability to engage with the most pressing and contemporary issues within our discipline.

**Funding:** The Cooper Union Grant Program provides funding for projects that enhance our students' learning experiences, faculty's teaching, scholarship, and practice, innovative ideas for our future, and opportunities for our community to come together in addressing the critical societal issues of our time.

## 3.2 Student Criteria (SC): Student Learning Objectives and Outcomes

A program must demonstrate how it addresses the following criteria through program curricula and other experiences, with an emphasis on the articulation of learning objectives and assessment.

**SC.1 Health, Safety and Welfare in the Built Environment**—How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

## SC.1—Our Approach:

Health, safety, and welfare in the built environment is a prime responsibility of architectural education, which is shaped in our program in different facets: first, in understanding the significance of safety and structural integrity outlined in courses of structural design; second, in teaching principles of health and well-being taught as is evident in indoor air quality, ergonomics, and accessibility; third, in developing a nuanced understanding of sustainability principles; and finally in learning risk management in professional practice, as well as ethics, assessment of mitigating risks and learning about building codes.

The courses outlined below build awareness of architecture's impacts, emphasizing the responsibility that architects and designers bear in a moment of environmental crisis. Students are introduced to this responsibility in their second year and use this understanding as the foundational context for other lenses of examination. In the third year, a focus on building science and structure, building life cycles, and environmental welfare is emphasized throughout students' required coursework. Curricular aspects of **SC.1** are closely connected to, and work in tandem with the curricular aspects of **SC.4** and **SC.6**. Co-curricular aspects detailed in **PC.8** provide the critical context and understanding of the diverse nature of humanity and its people that live, work, and play within our built environment.

#### SC.1—Curricular Aspects:

**ARCH 124A Environments** is the first course in a two-semester sequence. **ARCH 124A Environments** focuses largely on the construction and calibration of indoor atmospheres, the role of indoor air quality in human well-being, and the importance of natural ventilation. Topics covered in this course include:

- Lectures focusing specifically on the meaning of psychrometric charts, the concept of the human comfort zone, and the regulation of temperature and moisture in air content.
- According to recent reports from the Environmental Protection Agency, the development of the 'sick building syndrome' in the 1980s has been linked to increased time spent indoors.



- Techniques in developing natural ventilation systems, which students implement and explore in short design exercises.
- Exploration and lectures on phytoremediation techniques both indoors and outdoors.

**ARCH 124B Environments** is the second course in a two-semester sequence. **ARCH 124B Environments** emphasizes architecture's role in the climate crisis formation and acknowledges the subsequent impact climate change will have on human health, safety, and welfare. This course teaches students to identify the deep connection between architecture and climate change beyond the carbon footprint of the built environment. Students learn through readings, lectures, and a group project to identify the spatial paradigm of carbon modernity; make connections between energy, power, and form while using the concept of carbon form to treat decarbonization as a theoretical problem for architectural and urban thought; and use history, precedent, and spatial-political theory to understand the climate crisis more fully. Topics covered in this course include:

- The foundational argument that over time, specific building types and urban configurations have evolved around industrialization and manufacturing, how these types and urban configurations negatively impact human inhabitants, and what solutions architecture may offer.
- The study of built form at all scales, from the domestic arrangements of industrial society to building typologies specific to industrial and capitalist activity to urban archetypes designed to accommodate petromobility and other energy-intensive ways of life.
- The deep examination into why and how architecture came to have such a profound and lasting environmental impact and what the future of the discipline must accomplish to mitigate and reverse these adverse impacts.

**ARCH 132A Structures II** is the first course in a two-semester sequence, introducing students to graphic and algebraic methods for designing structures and the fundamental analyses required to evaluate the strength, safety, and appropriateness of different structural types and their associated construction methods. Topics covered in this course include:

- Identification of structural typologies, their appropriate applications, and the construction technologies that reflect material characteristics and influence construction process considerations.
- Emphasis on the roles of and interaction between the architect and engineer and the care and collaboration required to design and construct safe, load-bearing, and long-lasting structures we live and work in daily.
- Study and practice of Graphic Statics and the relationship of force and form through visualization of their behaviors, with exercises asking students to apply graphic statics in real-world scenarios.
- Investigation and practice of how individual mechanical laws and properties (elasticity, strength), geometric properties (span, cross-section properties), and physics (force, gravity) are interacting with each other and why certain parameters have exponentially higher influence (span, beam depth) on the structural integrity than others.

**ARCH 132B Structures II** is the second course in a two-semester sequence, elaborating on the algebraic methods for designing structures and analyses established in **ARCH 132A Structures II** and developing a framework required to evaluate the strength, safety, and appropriateness of a wide variety of materials and sustainability principles. Topics covered in this course include:

- Study of traditional and conventional materials as well as emerging materials such as mass timber, steel, glass, fiber-reinforced polymers, textiles-reinforced concrete, and rammed earth.
- Analysis of these materials against embedded energy, carbon footprint, off-gassing of VOCs, and other
  effects from material sourcing and fabrication, with an emphasis on the impact these effects have on
  human inhabitants and the environment.

**ARCH 134A Environmental Technologies** is the first course in a two-semester sequence, introducing students to the fundamentals of building technology and the dynamic relationship of buildings to their environment. Students will learn about thermodynamics in buildings to understand energy flows and design possibilities in response to specific climates and comfort goals. The objective of this course is to introduce building science to students for multiple goals: (1) to integrate building performance to the design of buildings, (2) to understand the negative

impact of the operation of buildings to the environment, (3) to design better and more comfortable spaces minimizing carbon emissions. Topics covered in this course include:

- How architecture directly impacts building performance, occupant comfort, energy use, and carbon emissions.
- Study of active systems used for heating and cooling in both large and small buildings and how these systems can create different energy efficiency impacts in a building.
- How building performance can be integrated into the design of buildings, leading to better and more comfortable spaces for human inhabitants and minimizing carbon emissions.
- Study of the negative impact the buildings' operation has on the environment, and the inherent connection to the climate crisis and its impact on human welfare.

**ARCH 134 B Environmental Technologies** is the second course in a two-semester sequence divided into two modules. **Module 1** studies the matter and materials from which our world is made and the terrestrial, temporal, and societal consequences of their use. **Module 2** examines leveraging architectural design as a critical step for designing a building's mechanical systems. Topics covered in these modules include:

- Mapping material properties to compare the capabilities and consequences of material production through terrestrial processes, ecological impacts, and human health and labor.
- Preparing an embodied carbon assessment of material assemblies designed in class to simulate how realworld constructions contribute to the climate crisis and human health and welfare degradation.
- Analysis of conventional and modern building systems, design approaches, the methods of assessing those systems, and the resulting impacts on the built environment.
- Examining how design can enhance system efficiencies to promote low carbon impact for all new constructions and retrofits.
- Recognizing established life cycle assessments and material declaration tools and procedures.

#### SC.1—Student Learning Outcomes:

Each course detailed above has individual Student Learning Outcomes that encapsulate several different Student Criteria and are found within the respective syllabi. A sample of the Student Learning Outcomes relevant to **SC.1** includes:

- ARCH 124A Environments: Students will be able to discern and analyze basic principles in relating architecture to environmental phenomena and in how environmental problems are embodied as lived experiences, thus influencing health, safety, and wellness in the built environment.
- **ARCH 124B Environments**: Students will be able to identify the deep connection between architecture and climate change beyond the built environment's carbon footprint (carbon form).
- ARCH 132A-B Structures II: Students will be able to recognize how designing strong and long-lasting structures protects the health, safety, and welfare of all those who live, play, and work within the built environment.
- **ARCH 134A Environmental Technologies:** Students will be able to recognize principles of climate engineering and how they can improve numerous aspects of the built environment.
- ARCH 134B Environmental Technologies: Students will be able to perform an embodied carbon
  assessment of material assemblies to evaluate the impact of the climate crisis and speculate about
  sustainable ways to mitigate those impacts.
- **ARCH 131B Design III:** Students will develop an architectural design that integrates the building envelope, life safety, and structural systems through the articulation of egress, exterior wall, and structural grid building components. Students will gain a working knowledge of building health and safety codes.

As a program, through the above courses, we ensure that:

• Students will understand the impact of the built environment on the health, safety, and welfare of those who inhabit it through the study of architectural precedent and development at multiple scales, from individual buildings to urban sites, structural systems, and environmental systems.



#### SC.1—Self-Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u>, which provide an overview of assessment strategies. Assessment of SC.1 occurs every academic year in all six courses detailed under curricular activities. Specific assessment of the Student Learning Outcomes includes:

- ARCH 124A Environments: Students must demonstrate the capacity to discern and analyze basic principles in relating architecture to environmental phenomena and in how environmental problems are embodied as lived experiences, thus influencing health, safety, and wellness in the built environment. Students' understanding of basic principles relating architecture to environmental phenomena is assessed through five design-oriented assignments. Each assignment requires research and innovative design proposals integrating environmental systems to better the built environment. Students package the five assignments into one final submission and are evaluated for their research on materials and environmental systems, their design innovation in integrating environmental systems, their editorial capacity to assemble and construct arguments, and their drawing skills in technical systems and infrastructures. The program established a benchmark of 90% of students receiving a score of 75% or higher on the final submission. In fall 2023, 91% (22/24) of students received a score of 75% or higher. Student feedback after the final review is utilized to improve the syllabus and increase engagement in subsequent semesters, directly resulting in an improvement of final submissions.
- ARCH 124B Environments: Students are assessed through scores on reading responses and in-class discussions. Success is determined by 100% of students achieving an average score of at least 3.75/5 on their reading responses. In spring 2024, 57% (12/21) of students achieved an average score of 3.8/5 or higher on reading responses.
- ARCH 132A-B Structures II: Students are taught to successfully apply and use algebraic methods to
  analyze structures or create new ones. This know-how, combined with in-depth knowledge about various
  construction approaches, and construction materials, enables them to successfully comprehend the
  relationships of architectural design and structural systems. In combination with a critical discussion of
  the environmental consequences of material and system choices, the students are able to make informed,
  synthesized decisions in their design work. Students are assessed through a final project in ARCH 132A
  and a midterm exam in ARCH 132A-B.
  - ARCH 132A Structures II: The established benchmark of success requires 80% or more students to achieve a grade of 75% or more on their final project. In fall 2023, 73% (17/23) of students achieved a score of 90% or more on their final project.
  - ARCH 132B Structures II: Student midterms are deemed successful if 80% or more of students receive a grade of 75% or higher on their midterm exam. In fall 2023, 40% (9/23) of students received a score of 75% or higher on their midterm exam.
- ARCH 134A Environmental Technologies: Students' understanding of climate engineering is assessed through a final project. Students work in groups and select a concentration: light, sound, heating, cooling, or ventilation. Groups then analyze an architectural precedent and produce models to test their precedent against their chosen concentration. The final project is evaluated by the content of deliverables presented at the final review, the iterative process of developing the deliverables throughout the semester, and the final presentation. The established benchmark of success requires 80% or more of students to receive a score of 3.75/5 or more on their final project. In fall 2023, 82% (19/23) of students received a score of 3.9/5 or more on their final project.
- ARCH 134B Environmental Technologies: Learning outcomes are assessed through a 9-week group
  project that requires students to design, build, and analyze a chair. Students calculate embodied carbon
  emissions, study material properties, evaluate costs, and test structural integrity. The established



benchmark of success requires 80% of students to receive a score of 75% or higher on their chair project. In spring 2024, 100% of students received a score of 83% or higher on their final chair project.

Please review the Assessment Report Chart, found in the respective SC.1 folder within the Digital Team Room.

#### SC.1 — Highlighted Ongoing Enhancements:

Greater emphasis on code and its impacts on health, safety, and welfare is planned to be incorporated into the sequence of courses detailed above. The critical understanding of "why" and "how" code becomes law will provide students with a wider understanding of the interconnected landscape between the built environment, those who design for it, and those who pass laws governing it. **SC.1** is closely connected with elements of **SC.2** and **SC.3**, with the curricular aspects of **SC.1** laying the foundation for students' comprehension of the Architect's role and how it affects human health, safety, and welfare. By introducing students to the legislation governing building codes, accessibility, and zoning earlier in the curriculum, students will be better prepared to engage with the professional responsibility of the discipline.

- **ARCH 124A Environments**: Student feedback after the final review is utilized to improve the syllabus and increase engagement in subsequent semesters, directly resulting in an improvement of final submissions.
- **ARCH 124B Environments**: The syllabus is being adjusted to encourage more connection with other classes in the second-year curriculum.
- ARCH 132A-B Structures II: Student homework and the mid-review exam will directly relate to their
  studio work to ensure students are spending adequate time studying course material. Curriculum
  Committee members will discuss course-workloads with third-year faculty to ensure adequate time is
  given to students to engage with course material. Student exams will be promptly returned to students
  and reviewed in class. Faculty will offer students opportunities to amend low exam grades with extracredit assignments.
- ARCH 134A Environmental Technologies: Faculty has modified the syllabus and schedule to allow for more desk critiques and informal reviews during work on the final project.
- **ARCH 134B Environmental Technologies:** Students will be encouraged to apply similar calculations for carbon emissions, cost, and sustainability value to their design projects.

**SC.2 Professional Practice**—How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

## SC.2—Our Approach:

Pursuing a fulfilling career in architecture depends largely on a wide range of experience and expertise. One must also negotiate the complexities of professional ethics, regulatory requirements, business processes, and the dynamic forces influencing these areas in the architectural profession.

New York City is an excellent framework regulated by many boards and committees that impose additional regulations and requirements on the fundamental duties and business processes relevant to architectural practice. We use the city as our laboratory in many instances throughout our curriculum, and students are introduced to examples of communities and municipalities engaged in addressing the current pressures on our built environment, including but not necessarily limited to human health, climate change, energy shortage, urbanization, aging infrastructure, growth, and innovation.

## SC.2—Curricular Aspects:



**ARCH 154A-B Professional Practice** is a two-semester sequence that focuses on a broad overview of the roles and responsibilities of an architect in practice. In this class, the meaning of an architecture career is discussed, beginning with reviewing what a Professional License is and what the responsibilities of a Licensed Professional consist of, including successfully navigating the path to licensure. The long arc of a career in architecture is also discussed, from the emerging practitioner to the seasoned professional. Apart from written assignments, the class visits architecture firms of varying sizes to discuss how firm principals and employees work on impactful projects that test their skill sets and expand their understanding of what an architect can do.

**ARCH 154A Professional Practice,** taught in the fall semester, focuses on the presentation and communication skills that an architect must develop to obtain a commission, successfully navigate the necessary approvals with stakeholders outside the immediate design and construction team, and bring a project to completion while balancing budgets and managing expectations. This course has been organized to parallel the acquisition and delivery of a typical architectural design services project, from marketing and contract negotiation to project management and project delivery. Topics in the fall semester include:

- Negotiation and contract documents, and the architect's role in the administration of a contract in relation to all the parties they are expected to interact with during a construction project.
- Introduction to the New York State Office of the Professions and the role of regulatory agencies.
- Identifying typical zoning challenges and illustrating unintended consequences of zoning codes.
- Introduction to the roles played by people outside the practice of architecture and their contributions to producing a successful project.
- The shortfalls of local, state, and federal regulations in addressing the climate crisis and how architects can drive change.
- Examination of the external forces that can put pressure on a project and how to articulate the objective value of design persuasively.
- Visits to various local firms and discussions on the value of their work with employees of those firms.

**ARCH 154B Professional Practice**, taught in the spring semester, further elaborates on the architect's role and the code of ethics they must abide by. Visits to job sites are organized to review the architect's role in the administration of a contract and in relation to all the parties they are expected to interact with during a project in construction. Topics covered in the spring semester include:

- Evaluation of how the profession has evolved throughout history due to socioeconomic pressures and technology.
- Speculation on the profession's future, the demand for architects, and how their evolving skills may be needed.
- The moral responsibility and duty of an architect to protect the health, safety, and welfare of the public.
- Group presentation assignments emphasizing skills in engagement with the public during the hearing process for the New York City Landmarks Preservation Commission, Zoning Board, or Community Board meetings.

## SC.2—Student Learning Outcomes:

## **ARCH 154A-B Professional Practice** ensures that:

- Students will understand the roles of licensed architects in the United States: their contractual responsibility to their clients to follow local, state, and federal laws, rules, and codes and their ethical responsibility to protect the health, safety, and welfare of the public.
- Students will understand how architects must be catalysts for change, both to help improve equity in the field and to address various social and environmental challenges.
- Students will comprehend how to assemble project teams, timelines, and delivery methods from within and without the office.
- Students will understand how the profession has evolved historically due to socioeconomic pressures and will learn to adapt their evolving skills to future demands.



#### SC.2—Self-Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u>, which provide an overview of assessment strategies. ARCH 154A-B Professional Practice teaching methods are evaluated by tracking active participation in the classroom and field trips and by tracking responses to targeted assignments. Group presentations are evaluated on the contributions of all team members, as well as the cohesiveness of the overall presentation. Specific assessment measures of the above Student Learning Outcomes occur every academic year and include:

- A survey, questioning students' understanding of the New York State Board of Education and their role in architectural licensing, and what is considered ethical and moral misconduct. Students must respond to the questions such as:
  - O What is a Professional License, and what are the responsibilities of a Licensed Professional?
  - What are professional ethics, and how do they apply to law and codes?

The established benchmark requires 100% of students to achieve a score of 65% or higher. In fall 2023, 89% (25/28) of students achieved a score of 80% or higher on this assignment; three students did not submit.

- Office visit survey: This survey questions students' understanding of how regulatory agencies influence the design and execution of a project and how this manifests at different firms. The established benchmark of success requires 100% of students to receive a score of 65% on their office visit survey. In the fall of 2023, 92% (26/28) of students received a score of 80/100 or higher; two did not submit.
- A score on a class presentation requires students to demonstrate an understanding of the skill set to
  practice architecture. Students must interview a practitioner of architecture and report on their role
  within the firm and their day-to-day contributions. Presentations are evaluated on content, clarity, and
  presentation to the class. The program established a benchmark of success of 100% of students receiving
  a score of 65% or higher on their class presentation. In fall 2023, 100% of students received a score of 95%
  or higher.
- Fall semester assignment 4 asks students to role-play and prepare a schedule of basic milestones and fees as laid out by the Basic Services of the Architect in AIA Document B101-2017. Students must demonstrate an understanding of the phases of architectural services and how to distribute compensation. The established benchmark of success requires 100% of students to achieve a score of 60% or higher on assignment 4. In the fall of 2023, 46% (13/28) of students achieved a score of 60% or higher.
- Spring semester assignment 1 asks students to role-play and prepare a Request for Qualifications (RFQ). Students are evaluated on the originality of their concept, the specificity of their approach, the comprehensiveness of their "office" structure, and the overall professionalism of their response. The established benchmark of success requires 100% of students to achieve a score of 60% or higher on assignment 1. In spring of 2024, 100% of students achieved a score of 60% or higher.

Please review the Assessment Report Chart, found in the respective SC.2 folder within the Digital Team Room.

#### SC.2—Highlighted Ongoing Enhancements:

**SC.2 Professional Practice** is closely connected with the curricular and co-curricular aspects detailed in **PC.1 Career Paths** and **SC.3 Regulatory Context.** Students are encouraged to attend NYC City Planning Commission (CPC), Landmarks Preservation Commission (LPC), Community Board, Land Use or Parks Committee meetings/hearings. The aim of these exercises is for the students to experience how the actions of the commission, committee, or members of the public affect either the design or the practice of architecture. The opportunity to speak with and be mentored by seasoned professionals is also available through the Mentorship for Women in Architecture (MWA) organization, founded by alumna and faculty Anik Pearson. The mentorship aims to encourage emerging practitioners to engage in conversation with the vibrant community of experienced professionals, share tools, provide support, and help students envision numerous accomplished career trajectories.

In weekly presentations, each student reports their findings about current articles on the State of Practice in the United States. The topics of these presentations are noted and used to build a holistic understanding of the



students' interests regarding the discipline and practice. By focusing on relevant topics brought by students, participation throughout the semester increases, creating a favorable learning environment where all students are engaged with the teaching material.

**SC.3 Regulatory Context**—How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

## SC.3—Our Approach:

To ensure that students understand the fundamental principles of regulatory contexts, different strategies are applied within the framework of our program: first, the ARCH 154A-B Professional Practice sequence specifically focuses on regulatory frameworks including life safety, fire protection, the building code, disability standards, and the ethics of practice; second, practical experience and application is conducted in part in specific design studios, particularly in ARCH 131A-B Design III third-year projects; third, students come into contact with experienced architects, professionals, and industry experts in guest lectures and studio reviews; finally, various types of simulations and software tools are introduced in elective seminars including ARCH 225 Advanced Topics "Building Information Modeling (BIM)," and simulation exercises in ARCH 134A-B Environmental Technologies. Moreover, the context of New York City, which the majority of courses use as a field of study, is rich with bureaucratic bodies and fosters an environment of mutual respect between these regulatory bodies and practitioners of architecture. It offers a prime platform to understand the processes by which codes and laws are written. Curricular aspects of SC.3 are closely connected to the curricular aspects of SC.2, and the co-curricular opportunities and resources outlined in PC.1.

#### SC.3—Curricular Activities:

**ARCH 154A-B Professional Practice** is a two-semester sequence focusing on Professional Ethics and Education Law through the lens of the local, state, and national licensing bodies such as the New York State Education Department, NCARB, and the AIA. Topics regarding **SC.3 Regulatory Context** span both semesters and include:

- Investigation of the licensed architect's responsibility to apply knowledge of architectural design, construction detailing, construction procedures, building materials, and systems, and how that may manifest within an architectural project.
- Studying the licensed architect's responsibility to follow local Zoning Codes and determining what can be built on a property.
- Studying the licensed architect's responsibility to meet or exceed the minimum standards of local and state Building Codes.
- Examining federal laws, such as the Americans with Disabilities Act (ADA), and how they will influence the design process.
- Examination of local building codes to assess what measures exist to address local vulnerabilities and consideration of the governing bodies that write the building codes.
- Research of resilient design solutions to implement in a project and the benefits of designing in excess of prescribed solutions within the local regulations.

## SC.3—Student Learning Outcomes:

## **ARCH 154A-B Professional Practice** ensures that:

- Students will become familiar with the various regulatory agencies that architects need to interact with to realize projects, and with the organizations that provide support for architects.
- Students will be able to understand how zoning and regulations were created in response to major historical events (disease, fire, overcrowding, water, noise, and air pollution) and how these regulations can affect projects and the built environment at all scales.



Students will be able to recognize the current pressures on the built environment, from extreme weather
events, rising sea levels or temperatures, to water scarcity; analyze how current codes and regulations
aren't updating fast enough to address the issues; and learn about solutions architects can immediately
implement to help mitigate the impacts on health, property, safety and welfare.

Students will know where to find and how to navigate the information architects need to find to evaluate existing building sites, including but not necessarily limited to the relevant environmental, social, and historical background of the site; environmental, geologic, zoning, and flood maps; building information systems; and national/state/local codes in effect.

#### SC.3—Self-Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u>, which provide an overview of assessment strategies. For **ARCH 154A-B Professional Practice**, written assignments and oral presentation assignments are given to assess the students' understanding of the processes by which the regulatory requirements are assigned, adhered to, tested, and implemented, from approvals, construction, signoff, to post-occupancy performance of buildings as well as of the greater neighborhoods. Specific assessment measures of the above Student Learning Outcomes occur every academic year and include:

- ARCH 154A Professional Practice: Assignment 2 requires students to role-play and prepare a zoning analysis and diagram of a site in East Hampton. Students must research local zoning law, determine what can be built by the zoning code, and prepare a design of the requested program through a site plan. Students are evaluated on the design's compliance with the zoning code. The established benchmark of success requires 85% of students to receive a score of 15/20 or more on assignment 1. In fall 2023, 68% (17/25) students achieved a score of 15/20 or greater.
- ARCH 154A Professional Practice: Assignment 3 asks students to role-play and prepare a project design pitch for a chosen site that faces environmental vulnerabilities. Students must research local building codes to find what measures are in place to address environmental vulnerabilities and develop resilient design strategies that exceed local regulations. Students are evaluated on the application of building codes, the application of resiliency strategies, and the graphic and written description of the proposal. The established benchmark of success requires 100% of students achieve a score of 65/100 or greater on assignment 3. In the fall 2023, 100% of students achieved a score of 75/100 or greater.
- ARCH 154B Professional Practice: Assignment 3 asks students to role-play and prepare a presentation to the Landmarks Preservation Committee and Community Board. Students are given a site within a historic district in New York City. To propose modifications to the historic façade and areaway and prepare a narrative articulating the rationale behind the proposed modifications, students must research the history of the building, research historical precedents in the district, and make a present-day photographic survey of the site and surrounding context. Students are evaluated on their proposals' historical accuracy, the accompanying narrative quality, and the role-play presentation to the faculty, who acts as the LPC and Community Board. The established benchmark of success requires 100% of students to achieve a score of 65% or greater on assignment 3. In spring 2024, 89% (25/28) students achieved a score of 75% or greater.

Please review the Assessment Report Chart, found in the respective SC.3 folder within the Digital Team Room.

#### SC.3—Highlighted Ongoing Enhancements:

Visits to various architecture firms, from small and medium to large firms, are organized to engage the students in learning about all the external factors that affect today's projects of all scopes and sizes, including residential, institutional, commercial, hospitality, industrial, and mixed-use buildings. The external factors are, among others, environmental, economic, social, and regulatory. In future semesters, more guest lecturers from regulatory boards will visit the class to engage students with their work, ensuring students recognize that these boards are run by people like them and are not inaccessible monoliths.



**ARCH 154A-B Professional Practice:** To improve results, the course faculty has determined that working with students to conduct code analysis will ensure students can research all applicable code requirements independently. Course faculty will continue to collect data and reassess in the fall of 2024.

**SC.4 Technical Knowledge**—How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

#### SC.4—Our Approach:

The architecture program at The Cooper Union ensures that students understand the established systems, technologies, and assemblies of building construction and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects through three courses: ARCH 132A-B Structures II, ARCH 134A-B Environmental Technologies, and ARCH 135A-B Building Technology. These courses are taught throughout the third year of the 5-year program. Each course is configured to include lectures and discussions that introduce and explain the theoretical principles underpinning the various subject matters, inclass and homework assignments that involve testing the principles using physical and computer models (thus illustrating the tangible significance of the principles), and student-built projects in 1:1 scale, instilling a physical appreciation of the forces involved and their ramifications. ARCH 132A-B Structures II, ARCH 134A-B Environmental Technologies, and ARCH 135A-B Building Technology are integrated with the ARCH 131B Design III Integrated Housing Studio throughout the spring semester. These three courses greatly emphasize the impact of technological and material choices on climate change and an acknowledgment of structural racism and classism in building design and construction. Curricular aspects of SC.4 are closely connected to and work in tandem with the curricular aspects of SC.1, SC.5, and SC.6.

#### SC.4—Curricular Aspects:

**ARCH 132A-B Structures II** teaches structural analysis and design principles based on algebraic methods, addressing both steel and timber structures in ways that incorporate the study of inherent material characteristics and construction process considerations. The students learn how to analyze and design new structures through graphic statics methods. Comprehension of key relationships between form and forces, forces and elasticity, pretension and deformation is achieved not only through lectures and class discussions but also through physical modeling and testing. Combined with critical discussions of the environmental consequences of material and system choices, the students can make informed, synthesized decisions in their design work.

**ARCH 132A Structures II** is the first course in a two-semester sequence. **ARCH 132A Structures II** introduces students to graphic and algebraic methods for designing structures and the fundamental analyses required to evaluate the strength, safety, and appropriateness of different structural types and their associated construction methods. Topics covered in this course include:

- Identification of structural typologies, their appropriate applications, and the construction technologies that reflect material characteristics and influence construction process considerations.
- Investigation and practice of how individual mechanical laws and properties (elasticity, strength), geometric properties (span, cross-section properties) and physics (force, gravity) are interacting with each other and why certain parameters have exponentially higher influence (span, beam depth) on the structural integrity than others.
- The rules and formulas governing elasticity (Hooke), bending analysis (Bernoulli), and buckling (Euler), and the "why" behind their critical importance in designing safe structures.

**ARCH 132B Structures II** is the second course in a two-semester sequence. **ARCH 132B Structures II** elaborates on algebraic methods for designing structures and the fundamental analyses required to evaluate the strength, safety, and appropriateness of a wide variety of materials and sustainability principles. Topics covered in this course include:



- Traditional and conventional materials and emerging materials such as mass timber, steel, glass, fiber-reinforced polymers, textiles-reinforced concrete, and rammed earth.
- Established and emerging technologies connected to the above materials and how they are applied in structural design.

**ARCH 134A-B Environmental Technologies** educates students about mechanical, electrical, plumbing, and life safety technologies and systems and the critical importance of understanding how architectural design as well as these systems can and should be underpinned by an understanding of thermodynamics, energy choices and consequences, thermal comfort, natural ventilation and illumination, passive design strategies, and sustainability.

**ARCH 134A Environmental Technologies** is the first course in a two-semester sequence. **ARCH 134A Environmental Technologies** introduces students to the fundamentals of building technology and the dynamic relationship of buildings to their environment. Students will learn about thermodynamics in buildings to understand energy flows and design possibilities in response to specific climates and comfort goals. Topics covered in this course include:

- How architecture has a direct impact on building performance, occupant comfort, energy use and carbon emissions.
- Active systems used for heating and cooling in both large and small buildings and how these systems can create different energy efficiency impacts in a building.
- Building performance can be integrated into the design of buildings, and how this can lead to better and more comfortable spaces for human inhabitants as well as minimize carbon emissions.

**ARCH 134B Environmental Technologies** is the second course in a two-semester sequence and is divided into two modules. **Module 1** studies the matter and materials from which our world is made, and the terrestrial, temporal, and societal consequences of how they are used. **Module 2** examines leveraging architectural design as a critical step for designing a building's mechanical systems. Topics covered in these modules include:

- Mapping material properties to compare the capabilities and consequences of material production through terrestrial processes, ecological impacts, and human health and labor.
- Preparing an embodied carbon assessment of material assemblies designed in class to simulate how real-world constructions contribute to the climate crisis and the degradation of human health and welfare.
- Analysis of conventional and modern building systems, design approaches, the methods of assessing those systems, and the resulting impacts on the built environment.
- Examining how design can be used to enhance system efficiencies with the goal of promoting low carbon impact for all new constructions and retrofits.

**ARCH 135A-B Building Technology** introduces students to the full range of traditional and contemporary building materials and construction assemblies through a combination of lectures, homework discussions, and mock-up construction projects. The course emphasizes the importance of comprehending the essential nature of each material and the crucial forces assailing them when they are gathered in a wall or roof assembly to achieve designs that avoid failure. Students incorporate what they learn into their studio design projects through iterative detailing of their projects' walls and roofs.

**ARCH 135A Building Technology** is the first course in this two-semester sequence. Students construct actual building details out of concrete, steel, wood, glass, bricks, terracotta, etc., and document the process from design to execution. Topics covered in the course include:

- Emphasis on the importance of comprehending the essential nature of materials and their origins, from extraction to invention.
- How Architects can articulate their ideas using building materials with intention, grace, and nuance.
- How cultural patterns open or constrain choices of material and assembly.
- Innovations in other fields that have been borrowed and adopted by construction and architecture.

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- Opportunities and limitations that evolved with the transition to computer-mechanized design and fabrication.
- The site: siting, topography and grading, soils, water, floods, site drainage, vegetation and erosion, paving, trees, roots, solar angles, site work, surveys and layout, wind, heavy winds, climate change.
- Footings and foundations: soil bearing capacity, excavations, and shoring, piles, underpinning, undermining, subsurface drainage, groundwater, water tables, foundation waterproofing and insulation.
- Concrete: structural concrete, architectural concrete, formwork, rebar, mesh, and other reinforcing materials, additives for special effects, ductile concrete, and inserts.
- Masonry: stone, brick, concrete masonry units, terra cotta, cavity and solid walls, cavity insulation, ties and reinforcing, lintels, moisture penetration and drainage, mortar, and control joints.
- Structural steel and related assemblies: why beams are deep; cantilevers happy or stressed, connections, trusses, metal deck, fireproofing, cold rolled steel framing.
- Wood: hard and soft woods, grain and its implications, moisture and its relentlessness, how lumber is cut, traditional lumber and framing, mass timber and framing, plywood, fiberboard, wood flooring/subfloors.

**ARCH 135B Building Technology** is the second course in this two-semester sequence. Lectures cover a comprehensive overview of components critical to the construction of a typical building, expanding on the material covered in the fall semester. Students spend the second half of the semester developing detailed wall and roof sections of their studio designs. Topics covered in the course include:

- Architectural woodwork: solid wood, veneer plywood, other plywoods, glass-fiber reinforced materials, bamboo, plastic laminates, solid polymers, cabinetry, and paneling.
- Thermal and moisture issues: human comfort, natural ventilation, sustainable heating and cooling strategies, heat-transfer strategies, insulation, moisture risks to buildings, air-vapor barriers, moisture barriers, condensation, building papers, thermal bridging, thermal masses, pressurization issues, radiant slabs.
- Roofing systems: stone, terra cotta, wood, metal, built-up asphalt/modified bitumen, membranes, insulation, slopes, flashings, gutters, snow guards, vapor control and ventilation, "green" roofs.
- Glass and glazing: brittleness, clarity ranges, windows, skylights, flashings/drips/weeps, insulated glazing units, glazing films, structural glass, patterned glass.
- Curtain walls, rain screens, and veneer panel systems: glass, metal, stone, brick, precast.
- Partitions: lath and plaster, gypsum boards, metal studs, and accessories, rated assemblies.
- Architectural and coordination aspects of MEP: mechanical equipment, ducts, plumbing piping
  configurations, electrical conduits and panels, sprinkler systems, plumbing systems, and low-voltage
  systems; essential knowledge for architects to remember.

#### SC.4—Student Learning Outcomes:

The courses detailed above all support that goal by educating students specifically to understand methods and criteria architects use to evaluate those technologies against project design, economics, and performance objectives. Each course has individual Student Learning Outcomes outlined in the respective syllabi. A sample of the Student Learning Outcomes associated with **SC.4 Technical Knowledge** includes:

- **ARCH 132A-B Structures II:** Students will be able to understand various materials' mechanical properties, performance parameters, fabrication technologies (past and present), and sustainability aspects.
- ARCH 134A Environmental Technologies: Students will be able to identify the established and emerging climate engineering systems and the methods by which architects and engineers evaluate those systems.
- ARCH 134B Environmental Technologies: Students will be able to identify and analyze material assemblies and specifications.
- ARCH 135A Building Technology: Students will be able to compare different materials and identify how
  different materials can enable and limit formal architectural articulations.



ARCH 135B Building Technology: Students will be able to understand the various natures of basic building
materials (wood, steel, concrete, masonry, aluminum, etc.) and how they are assembled to compose
foundations, walls, roofs, and fenestration.

Through the courses above, our program ensures that:

- Students will understand established and emerging construction systems so that they have a clear consciousness of how buildings have been and can be built and how various systems impact the planet and the occupants.
- Students will understand building construction assemblies so that their formal expressions in their studio work are informed by basic understandings of materiality, structure, and environment. Thus, they will be able to achieve designs that are not only formally and spatially developed and resolved but credible as buildings.

#### SC.4— Self-Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u>, which provide an overview of assessment strategies. The courses have formal reviews that allow faculty and invited critics to assess how well the topics have been understood. Additionally, the <u>ARCH 131B Design III</u> Integrated Housing final review reveals how effectively the students have incorporated knowledge of structures, environmental requirements, and materiality into their design projects. Each of the faculty teaching these courses attends the final reviews of the other two courses and of <u>ARCH 131B Design III</u>, both to engage directly with the subjects and to help evaluate student performance. After each semester, the faculty members leading these courses meet to review results and discuss possible changes that would improve results. Assessment of <u>SC.4 Technical Knowledge</u> occurs every academic year in all six courses detailed under curricular activities. Specific assessment of the Student Learning Outcomes includes:

- ARCH 132A Structures II: Students will understand various materials' mechanical properties, performance parameters, fabrication technologies (past and present), and sustainability aspects. Students will be able to successfully apply and use graphic statics methods to analyze structures or create new ones. Students will be able to comprehend the relationships between architectural form and mechanical laws. One method of achieving these outcomes is through the final project. Working in teams, students select a set of two historical and contemporary precedents for analysis. Pairs of precedents are selected for their similar structural systems, material, or scale. Students apply the methods and vocabulary of structural typology and graphical statics. Models, drawings, diagrams, and quantitative analysis are presented at the final review. The program developed a benchmark for success of 100% of students achieving a score of 75% or higher on their final project. In fall 2023, 82% (19/23) of students achieved a score of 75% or higher.
- ARCH 134A Environmental Technologies: Students will be able to understand why buildings need active systems for heating and cooling, and how they could be replaced with passive strategies. This outcome is achieved through final projects. These are group projects that are developed throughout the second half of the semester and require that students apply class knowledge of a topic, such as light, sound, heating, cooling, and ventilation, through analysis of a vernacular architecture building. Students create physical models and complete model tests. The program established a benchmark of success of 100% of students achieving a score of ¾ or higher on their cumulative final project and presentation grades. In fall 2023, 100% of students achieved a score of ¾ or higher.
- ARCH 134B Environmental Technologies: Students will map material properties with course software and compare the capabilities and consequences of material production through terrestrial processes, ecological impacts, and human labor/health. The final project for this course requires students to design, analyze, and build a chair. This project is a culmination of semester readings, lectures, workshops, and design iterations. In teams, students must provide drawings, diagrams, and other documentation. Students share qualitative and quantitative measurements of waste and other externalities of the final



- project. Each portion of the project is assessed individually and combined into one overall project grade. The program established a benchmark of success of 100% of students achieving a score of 22.5/30 or higher on their final project. In spring 2024, 100% of students achieved a score of 24/30 or higher.
- ARCH 135A Building Technology: Students will be able to understand the various natures of basic building materials (wood, steel, concrete, masonry, aluminum, etc.) and how they are assembled to compose foundations, walls, roofs, and fenestration. Students work in groups of four to six to complete a large-scale "mock-up" of a fragment from a built architectural project. The program established a benchmark of success of 100% of students achieving a score of 75% or higher on their "mock-up" project. In fall 2023, 100% of students received a score of 93% or higher on their project.

Please review the Assessment Report Chart, found in the respective SC.4 folder within the Digital Team Room.

#### SC.4—Highlighted Ongoing Enhancements:

- ARCH 132A Structures II: Faculty will provide more in-class time to develop projects. The syllabus will be amended to include internal pin-ups to review and support project development.
- ARCH 134A Environmental Technologies: Discussion with third-year faculty to allow for balanced schedule and workload, to make more time in third-year schedule for completing ARCH 134A assignments. In fall 2024, students will be asked to participate in a group discussion reflecting on the successes and failures of the final project. This roundtable discussion will be used to inform future ARCH 134A classes.
- **ARCH 134B Environmental Technologies:** The syllabus will include internal pin-ups to review student progress on their final projects and encourage teams to engage with other teams' projects.
- ARCH 135A Building Technology: In fall 2024, the acting dean will discuss with the faculty possibilities for
  integrating more sustainable projects that reduce waste and carbon footprint. Funds have been budgeted
  for the upcoming academic year to support student projects.

**SC.5 Design Synthesis**—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

#### SC.5—Our Approach:

The challenge of bringing together multiple requirements and constraints, sometimes conflicting, into a single architectural response that is both conceptually coherent and technically proficient is the hallmark of a design education at The Cooper Union. While students encounter this challenge in every design studio throughout their time at the School of Architecture, students in **ARCH 131A Design III** focus uniquely on this skill set for designing a building in the public realm in the first semester and housing in the second. Curricular aspects of **SC.5** are closely connected to and work in tandem with the curricular aspects of **PC.3**, **SC.1**, and **SC.4**.

#### SC.5—Curricular Aspects:

**ARCH 131A Design III** builds from analysis to synthesis, ranging from analysis of total building assemblages and smaller-scale design exercises to the development of a comprehensive design for a complex programmatic institution. The design of any building faces numerous issues that must be brought into a synthetic relationship for the project to be successful. These include questions of site and context, the building's program, its organization of functions, the performance of the structural system, the thermal performance of its envelope, the environmental impacts of its construction and life cycle, the accessibility of its spatial distributions, and adequate quantities of daylight. All of these issues, and many more, can be posed as problems to solve, with metrics to determine their successful resolution. And in this studio, each student will address and synthesize these issues into a coherent building design.

Design synthesis, however, is much more than simply solving a series of problems. How architecture defines these conditions is a creative, qualitative design act where the multitude of factors affecting a project relate to each



other as a dynamic system. How these are mediated through formal development and architectural representation establishes the background that architecture develops within. This is a critical proposition. These are all qualitative relations, not boxes to check on a list for a successful synthesis. They are all questions of design and are thus part of the speculations that architecture puts forward regarding how the world can be other than we assume it to be.

Students create a work of architecture responsive to a given site, program, and environment so that human activities may align with natural processes to minimize destructive environmental impact. This brings together user requirements, regulatory constraints, and environmental exigencies into a single building on a complex site. The understanding of site uses an ecological framework to investigate the larger urban, regional, and occasional global issues of context. Through drawings, an ecological analysis uncovers these more extensive relationships—be they geological, hydrological, or urban—and opens the student to design concepts they otherwise might not encounter. The program brings together problems of user requirements and accessible design into the site. This complexity is managed by having the students first break down the building into smaller related parts and create a flexible system of understanding their program. Each student works individually and is responsible for describing a building through models and drawings. ARCH 131A Design III demands a rigorous and conceptual exploration of building concepts—site, program, and environment—into a single designed organization. At the student's disposal is a team of faculty that offer a wide range and depth of expertise and experience to meet that challenge.

#### SC.5—Student Learning Outcomes:

#### ARCH 131A-B Design III:

- Students will be able to research, identify, and represent a given site and context through issues including urban character, infrastructure, environmental orientations, cultural contexts, existing building characteristics, and natural conditions.
- Students will be able to research, qualify, and distribute a series of functional requirements into a programmatic and formal narrative that organizes and sequences a series of spaces around conceptual and experiential relations.
- Students will be able to research and represent building and zoning regulations that impact the design of a building.
- Students will be able to develop, document, and integrate accessible requirements and qualities into the design of a building.
- Students will be able to think through and measure the environmental impacts of a building's material, construction, energy consumption, and life cycle. This includes passive strategies for ventilation, daylighting, and thermal regulation, as well as the questions of adaptive reuse.
- Students will be able to synthesize the structure, spatial distribution, and material envelope of a building to respond to a conceptual idea as well as a critical engagement of the issues of design synthesis.

#### SC.5— Self-Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u>, which provide an overview of assessment strategies. **ARCH 131A** is composed of assignments and desk crits that lead to pin-ups. Emphasis is placed on developing the student's unique concepts and incrementally adding complexity. There is a dynamic between desk critiques, formal and informal pin-ups, and midterm and final reviews that ask students to learn new tools through critical thinking, drawing, and model development. Assessment of the above **SC.5 Student Learning Outcomes** is a holistic review of the student work produced throughout the semester through assignments and the refined, aggregated work presented at the final review. Students are evaluated on the following criteria:

Synthesis Assignments: Four design synthesis charettes will take place across the semester to familiarize
the students with the key elements (site context, program proposal, regulation studies, and
environmental impacts) that will drive their design. Students are assessed on the depth and clarity of the
work developed for each phase, in relation to verbal and graphic presentations.

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- Mid-review Design Synthesis Proposal: The mid-review asks each project to present a clear and cohesive
  initial synthetic strategy for their proposal, utilizing the synthesis assignments to develop their argument.
  Students are assessed on the depth and clarity of the work developed for each phase, in relation to verbal
  and graphic presentations, as well as the clarity of their design proposal in relation to the initial strategies
  established in the synthesis charettes.
- Final Review Building Design Proposal: Students will present their final building design proposal through
  resolved representational methods including plans, sections, elevations, axonometric diagrams, massing
  models, section models, and composite imaging of spatial qualities. Final proposals are assessed on depth
  and clarity of each phase in relation to graphic and verbal presentation, the clarity of design concepts in
  relation to the initial strategies of design synthesis, and the conceptual and formal resolution of those
  concepts into a complete and cohesive building proposal.

Please review the Assessment Report Chart, found in the respective **SC.5** folder within the Digital Team Room.

#### SC.5—Highlighted Ongoing Enhancements:

ARCH 131A has taken many different forms in past semesters. Significant efforts have been made to create a more inclusive and accessible narrative that drives the site, program, and design intent of the fall semester of Design III. Ongoing improvements include introducing students to working with their Structures, Building Technology, and Environmental Technology faculty on their studio proposals, to prepare them for the Building Integrated Design Studio in their spring semester of third year. Students have also expressed interest in more lectures from city representatives who work on specific projects related to the studio's site and its relationship to the surrounding context. These lectures, along with increased opportunities for site visits during the semester, will allow for students to create more grounded and intentional design programs with success.

**SC.6 Building Integration**—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

#### SC.6—Our Approach:

The Building Integrated Design Studio, **ARCH 131B Design III**, asks students to program and design innovative housing projects in urban neighborhoods with demanding socioeconomic needs through new residential projects that are affordable and accessible to all. The pedagogical framework of the studio is structured around multiple scales of investigation, with a focus on the urban-, building-, and room-scale. Students examine three distinct infill sites within existing New York City Housing Authority (NYCHA) developments and design medium-density housing projects that accommodate vulnerable user groups, ranging from the elderly to persons with disabilities. Students work with their studio faculty throughout the semester to develop innovative programmatic adjacencies and unit/building assemblies. Projects carefully examine domesticity through an understanding of building systems and how they impact the performance and positioning of accessible bathrooms, bedrooms, kitchens, and living rooms in parallel with innovative use of shared collective spaces and façade techniques for the chosen urban neighborhood and block.

As the Building Integrated Design Studio, students continually receive desk critiques from their **ARCH 132B Structures II**, **ARCH 134B Environmental Technologies**, and **ARCH 135B Building Technology** faculty during studio hours throughout the semester. These faculty also join the studio faculty at key pin-up reviews, working with the students to integrate their design concepts and buildings with innovative deployment of envelope systems, structural systems, heating/cooling strategies, and material strategies. The spring third-year curriculum, structured around these three courses and **ARCH 131B Design III**, allows for students' housing projects to be developed in both the studio and the classes that teach specific technical content. Curricular aspects of **SC.6** work in tandem with co-curricular aspects of **PC.8** and curricular aspects of **SC.1** and **SC.4**.

#### SC.6—Curricular Aspects:



#### In ARCH 131B Design III, students examine:

- What it means to work through the development and integration of all building systems for their design
  projects as part of the overall third-year curriculum and the required ARCH 132B Structures II, ARCH 134B
  Environmental Technologies, and ARCH 135B Building Technology courses.
- What it means to develop housing through progression in scale by discovering innovative building design
  concepts through emerging socioeconomic frameworks such as shared/collective living, live-work
  economies, and multi-generational family living typologies, where typical boundaries of units, buildings,
  and city blocks are programmatically challenged, reconfigured, and carefully developed by each student.

The **ARCH 131B Design III** studio encourages students to examine the programming of innovative collective spaces and develop a spatial balance between individual rooms and shared multipurpose space distribution. The importance of improving existing housing standards and increasing the quality of life is emphasized through a series of lectures that focus on innovative use of zoning policies, egress, life safety, and construction techniques for residential projects throughout the semester. The studio asks students to confront the reality of providing housing that supports our most vulnerable individuals, such as seniors, people who live with physical disabilities, parents with children, couples, and single individuals.

Students learn about current housing policies and construction challenges through lectures and workshops with local housing experts. In the spring of 2023, Deputy Director Sarah Watson from the organization Citizens Housing and Planning Council (CHPC) presented a lecture on her work at CHPC's research and education initiatives that have a real impact in public policy. More information about previous partnerships in **ARCH 131B Design III** can be found in <u>PC.8 Social Equity and Inclusion</u>.

#### SC.6—Student Learning Outcomes:

#### ARCH 131B Design III ensures that:

- Students will be able to present and develop a visually comprehensive building design layout through detailed articulation of multi-scalar drawings and key models that demonstrate their building design concepts for a range of diverse user groups, building configurations, and urban block contexts.
- Students will be able to develop unit, egress, and building configurations through the deployment of innovative programming for flexible, collective spaces for diverse user groups, such as single living, multigenerational living, living with a physical disability, living with kids, and senior living.
- Students will be able to construct and draw detailed wall sections showing appropriate assemblies of their chosen façade material, integrating building envelope systems with architectural design.
- Students will be able to demonstrate an understanding of the interdisciplinary practice integral to building integration and collaborate with engineers to develop an architectural design that integrates building envelope, life safety, and structural systems through articulation of egress, exterior wall, and structural grid building components.
- Students will be able to analyze and implement structural systems in their proposal, with spans and load-bearing capabilities appropriate to the chosen material.

#### SC.6—Self-Assessment and Strategies for Continuous Improvement:

This section should be read with reference to <u>5.2 Planning and Assessment</u> & <u>5.3 Curricular Development</u> which provide an overview of assessment strategies.

**ARCH 131B Design III** asks students to develop detailed floorplans, sections, exterior elevations, structural diagrams, detailed wall and envelope sections, and produce physical models at a variety of scales throughout the semester. These deliverables are prepared with the guidance and help of studio faculty and the faculty from **ARCH 132B Structures II**, **ARCH 134B Environmental Technologies**, and **ARCH 135B Building Technology**. Assessment of



the above **PC.6 Student Learning Outcomes** occurs as a holistic review of the student work produced throughout the semester in four assignments and the refined, aggregated work presented at the final review.

- Assignment 1 asks students to situate the sociopolitical context of housing through a series of urban-scale
  analytical diagrams and mappings, focusing on themes of education, health, infrastructure, public space,
  and environment. Diagrams and maps must highlight significant urban transformations through the
  spatial overlap of time and scale. Through this exercise, students establish their foundational
  understanding of the studio's urban neighborhood, site, and context, both in time and space, and key user
  groups for which they are being tasked with designing housing.
- Assignment 2 asks students to create an integrated "kit-of-parts" through a study of contemporary housing precedents that accommodate unique user groups in parallel with innovative programming of units, collective spaces, and building performance strategies across the world. Students learn to examine the efficiency and cost repercussions through careful analysis of room, unit, and building construction strategies through the positioning of plumbing risers, egress routes, and structural spans and grids. Students use this knowledge to produce an organizational diagram that reveals iterative possibilities for unit variations, aggregation methods, and material logics. ARCH 132B Structures II and ARCH 135B Building Technology faculty work with students during studio hours and help explore new structural and building technology techniques. Students' ability to understand and integrate innovative use of building systems with architectural design is assessed through a set of organizational diagrams and analytical plans, sections, elevations, and exploded axonometrics that capture the unique aspects of building efficiency and performance.
- Assignment 3 builds upon the organizational diagram produced in Assignment 2 and asks students to test the efficiency and flexibility of the "kit-of-rooms" approach. Students carefully prepare detailed unit types, building configurations, shared collective spaces, envelope conditions, and egress boundaries. The "kit-of-rooms" are transformed into massing studies to further develop the overall architectural design in response to site and environmental conditions, such as sun angles, existing green spaces and transit routes, noise, and heat. To integrate life safety systems with their proposed concepts for housing, students must identify circulation and egress routes for specific user group residents. Students further develop their structural systems with consideration for material and occupancy capacity and the resulting impact on overall fire safety, with continued input from their ARCH 132 Structures II faculty.
- Assignment 4 amplifies the experience of the proposed domestic units by carefully developing the design's interior and exterior boundaries through animation of apertures such as doors, windows, and skylights. Students must integrate façade material with envelope systems, using passive cooling and heating strategies to maximize the efficiency of their proposed buildings. ARCH 134B Environmental Technologies and ARCH 135B Building Technology faculty join students during studio hours to guide them through integration of these systems. Students perform R-value analysis and create heating/cooling diagrams, exterior wall details, and unrolled elevation studies alongside detailed sectional models for their proposed housing projects. Students' ability to integrate envelope systems and environmental control systems with architectural design is assessed through the animation and activation of the building's apertures. Windows, doors, skylights, and thresholds of the exterior and interior boundaries are used by students to create a gradient of private to public space within their proposed housing projects. Programmatic research completed in Assignment 1 becomes the basis for community and public programming within the proposal, seeking to fulfill unmet needs of the neighborhood.

Holistic assessment is conducted at the final review:

• Students are evaluated by each phase of their projects. The studio assessment is based on student attendance and the visual progress in weekly drawings and model deliverables, as described in the syllabus. Grading reflects student performance at weekly desk critiques, review pin-ups, workshops, and in-class discussions. Each phase represents 25% of the student's overall grade. The program has established a benchmark of 100% of students receiving a score of ¾ or more on ¾ phases or more. In spring 2024, 100% of students received a score of ¾ or more on ¾ project phases.



A standardized rubric that outlines the essential skills of design is used to evaluate students' performance
in studio across the years, completed by studio faculty for each student at the final review. The rubric is
developed to ensure it captures the essential nature of a design studio and the learning outcomes
demonstrated by students at the final review. The program has established a benchmark of 80% of
students in a studio receiving 12/16 points. In spring 2024, 86% (20/23) of third-year students received
12/16 points or greater.

#### SC.6—Highlighted Ongoing Enhancements:

To further support the **ARCH 131B Design III** studio within the overall third-year curriculum, **ARCH 133 Introduction to Urban History and Theories** will become **History of Architecture 1950-2010** and will foreground domesticity at diverse scales. This change will commence in the spring semester of 2025.

Against the social, material, and technological history backdrop, this course compares a "single-family" house and a multi-unit housing project by the same architect or team each week. In these cases, the commissioned private home can be understood as the materialization of the architect's (or team's) own architectural "program" relatively unencumbered by codes and budget. In the housing project, we see the architect or team facing complexities, including a variety of unit types, creating scales of association and community, an urban-scale presence, and, in most cases, an ungenerous budget for its middle-to-lower-class residents. By attending to architectural consistencies and divergencies between the two projects, the students understand the decisions architects make when facing dramatically different commissions. ARCH 133 Introduction to Urban History and Theories exposes students to a global variety of housing projects and developments. It highlights both successful and unsuccessful aspects through the lens of architectural design, construction type and material use, urban principles, social and community incentives, the political system under which the housing was planned, and how the project has fared since completion.

Additionally, we are creating the framework for greater participation from NYCHA representatives throughout the semester. **ARCH 131B Design III** faculty will invite NYCHA representatives for guest lectures, reviews, and potentially workshops. A budget will be made to support NYCHA representatives' increased support of student projects. Faculty will consult NYCHA representatives when formulating the syllabus.

#### 4—Curricular Framework

This condition addresses the institution's regional accreditation and the program's degree nomenclature, credit-hour and curricular requirements, and the process used to evaluate student preparatory work.

#### 4.1 Institutional Accreditation

The APR must include a copy of the most recent letter from the regional accrediting commission/agency regarding the institution's term of accreditation.

The Cooper Union is accredited by the <u>Middle States Commission on Higher Education</u>. "Accreditation is a process of peer review that the educational community has adopted for its self-regulation since early in the 20th century. It is a voluntary process intended to strengthen and sustain the quality and integrity of higher education, making it worthy of public confidence. Institutions choose to apply for accredited status, and once accredited, they agree to abide by the standards of their accrediting organization and to regulate themselves by taking responsibility for their own improvement." (2010, <u>Middle States Commission of Higher Education</u>).

The <u>Middle States Commission on Higher Education</u> (MSCHE) is a voluntary membership association that "defines, maintains, and promotes educational excellence across institutions with diverse missions, student populations, and resources." As a participating institution, The Cooper Union engages in a self-study process every ten years. The core principles for colleges and universities accredited by the MSCHE focus on the student learning



experience, with an emphasis on institutional assessment and assessment of student learning, and continuous institutional improvement and innovation.

Accreditation means that standards of quality and excellence have been met. *Please see <u>Appendix C. Additional Documentation for the 2018 Middle States Commission on Higher Education accreditation certification.*</u>

#### 4.2 Professional Degrees and Curriculum

The NAAB accredits professional degree programs with the following titles: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and optional studies.

**4.2.1 Professional Studies.** Courses with architectural content required of all students in the NAAB-accredited program are the core of a professional degree program that leads to licensure. Knowledge from these courses is used to satisfy Condition 3—Program and Student Criteria. The degree program has the flexibility to add additional professional studies courses to address its mission or institutional context. In its documentation, the program must clearly indicate which professional courses are required for all students. *Programs must include a link to the documentation that contains professional courses that are required for all students.* 

Please see our website: <a href="https://cooper.edu/architecture/curriculum/bachelor">https://cooper.edu/architecture/curriculum/bachelor</a>

# MAB

The charts below document the curricular requirements for all students in the B. Arch. program.

First-year	Course Name	NAAB Credit	Sem 1	Sem 2
ARCH 103	Calculus and Analytic Geometry	General Studies	3	-
ARCH 106	Concepts of Physics	General Studies	-	3
ARCH 111	Architectonics	Professional	4	4
ARCH 115	History of Architecture I	Professional	3	3
ARCH 117	Representation I, II	General Studies	3	3
FA 100RA	Shop Tech	General Studies	1	1
HSS 1	The Freshman Seminar	General Studies	3	-
HSS2	Texts and Contexts: Old Worlds and New	General Studies	-	3
Total Credits			17	17

Second-year	Course Name	NAAB Credit	Sem 1	Sem 2
ARCH 121	Design II	Professional	5	5
ARCH 122	Structures I	Professional	2	2
ARCH 124	Environments	Professional	2	2
ARCH 125	History of Architecture II	Professional	3	3
ARCH 127	Representation III, IV	General Studies	3	3
HSS3	The Making of Modern Society	General Studies	3	-
HSS4	The Modern Context: Figures and Topics	General Studies	-	3
Total Credits			18	18

Third-year	Course Name	NAAB Credit	Sem 1	Sem 2
ARCH 131	Design III	Professional	5	5
ARCH 132	Structures II	Professional	2	2
ARCH 133	Introduction to Urban History and Theories	Professional	-	2
ARCH 134	Environmental Technologies	Professional	3	3
ARCH 135	Building Technology	Professional	2	2
	Electives/Optional Studies*	Optional Studies	3	3
Total Credits			15	17

Fourth-year	Course Name	NAAB Credit	Sem 1	Sem 2
ARCH 141	Design IV	Professional	5	5
ARCH 142	Structures III	Professional	2	2
ARCH 143	Construction Management	Professional	1	1
	Electives/Optional Studies*	Optional Studies	5	5
Total Credits			13	13

Fifth-year	Course Name	NAAB Credit	Sem 1	Sem 2
ARCH 151	Thesis	Professional	6	6
ARCH 152	Structures IV	Professional	2	-
ARCH 154	Professional Practice	Professional	2	2



Total Credits			17	15
	Electives/Optional Studies*	Optional Studies	5	5
ARCH 205/225	Advanced Concepts/Topics	General Studies	2	2

Total [First Year through Fifth Year] Semester 1 Credits: 79 Total [First Year through Fifth Year] Semester 2 Credits: 81

Credits Total	Professional	107
Credits Total	Required General Studies	27
Credits Total	Optional Studies	26

#### Total Credit Requirements for B. Arch. Degree

160

**4.2.2 General Studies.** An important component of architecture education, general studies provide basic knowledge and methodologies of the humanities, fine arts, mathematics, natural sciences, and social sciences. Programs must document how students earning an accredited degree achieve a broad, interdisciplinary understanding of human knowledge. In most cases, the general studies requirement can be satisfied by the general education program of an institution's baccalaureate degree. Graduate programs must describe and document the criteria and process used to evaluate applicants' prior academic experience relative to this requirement. Programs accepting transfers from other institutions must document the criteria and process used to ensure that the general education requirement was covered at another institution.

Programs must state the minimum number of credits for general education required by their institution <u>and</u> the minimum number of credits for general education required by their institutional regional accreditor.

<u>Please see 4.2.1 Professional Studies.</u> The Bachelor of Architecture curriculum includes 27 credits of required coursework in general studies (non-professional coursework outside the discipline of architecture). In addition to general studies, students also complete 26 elective/optional studies credits. The elective/optional studies component can be fulfilled by elective/optional studies courses in subject areas such as architecture, humanities and social sciences, visual arts, mathematics, engineering, and science. Among the elective/optional studies credits, at least 6 elective/optional studies credits must be completed in humanities and social sciences.

Additionally, a minimum of 7 elective credits must be completed outside the discipline of architecture for a total of 13 elective/optional studies credits in general studies.

The Middle States Commission for Higher Education, MSCHE establishes that The Cooper Union must be "authorized or licensed to operate as a postsecondary educational institution and to award postsecondary degrees. Authorization or licensure is from an appropriate governmental organization or agency within the Middle States region (Delaware, the District of Columbia, Maryland, New Jersey, New York, Pennsylvania, Puerto Rico, and the U.S. Virgin Islands), as well as by other agencies as required by each of the jurisdictions, regions, or countries in which the institution operates."

Cooper Union's degree requirements are established by the New York State Department of Education, NYSED. The credit requirement minimum is indicated as **120 credits.** 



This guidance is intended to assist institutions of higher education in New York State in meeting the requirements of the Rules of the Board of Regents, Section 3.47(c), Requirements for Earned Degrees, Undergraduate Degrees:

"Undergraduate degrees shall be distinguished, as follows, by the minimum amount of liberal arts content required for each degree. The required liberal arts core shall not be directed toward specific occupational or professional objectives."

Award/Degree	Minimum Total Credits for Award	Minimum Numb of Credits in LAS
Associate in Arts (A.A.)	60	45
Associate in Science (A.S.)	60	30
Associate in Applied Science (A.A.S.)	60	20
Associate in Occupational Studies (A.O.S.)	60	0
Bachelor of Arts (B.A./A.B.)	120	90
Bachelor of Science (B.S.)	120	60
Bachelor of Science in Education (B.S. in Ed.)	120	60
Bachelor of Science in Nursing (B.S. in Nursing)	120	60
Most specialized baccalaureate degrees (e.g., B.Arch., B.B.A., B.E., B.F.A., B.I.D., B.M./Mus.B., B.P.S., and B.Tech.)	120	30

New York State Department of Education, NYSED - Department Expectations for the Curriculum.

The Middle States Commission for Higher Education, MSCHE requires that we maintain a credit hour policy. To ensure ongoing compliance with federal, state, and accreditation requirements, The Cooper Union uses the credit hour as the measurement of academic credit granted for course work completed. The appropriate assignment of credit hours to courses plays a critical role in meeting the requirements of government and accrediting agencies, disbursing federal financial aid to students (Title IV), and conducting internal reviews of new and existing program requirements. A credit hour is "a unit of measure that gives value to the level of instruction, academic rigor, and time requirements for a course taken at an institution of higher education" (Credit Hour Policy, Middle States Commission on Higher Education, effective July 1, 2022).

The Cooper Union adheres to the New York State Education Department ("NYSED") semester hour regulations; United States Department of Education ("USDE") credit hour (the Institutional Eligibility Under the Higher Education Act of 1965, U.S. Department of Education, 600.2 Definitions, Clock Hour & Credit Hour, p. 78); and the Middle States Commission on Higher Education, MSCHE credit hour policy and procedures.

**4.2.3 Optional Studies**. All professional degree programs must provide sufficient flexibility in the curriculum to allow students to develop additional expertise, either by taking additional courses offered in other academic units or departments, or by taking courses offered within the department offering the accredited program but outside the required professional studies curriculum. These courses may be configured in a variety of curricular structures, including elective offerings, concentrations, certificate programs, and minors.

The program must describe what options they provide to students to pursue optional studies both within and outside of the Department of Architecture.



\*Elective/Optional Studies: The Bachelor of Architecture curriculum includes 27 credits of required coursework in general studies (non-professional coursework outside the discipline of architecture). In addition to general studies, students also complete 26 elective/optional studies credits. The elective/optional studies component can be fulfilled by elective/optional studies courses in subject areas such as architecture, humanities and social sciences, visual arts, mathematics, engineering, science, and languages. Among the elective/optional studies credits, at least 6 elective/optional studies credits must be completed in humanities and social sciences. Additionally, a minimum of 7 elective credits must be completed outside the discipline of architecture for a total of 13 elective/optional studies credits in general studies.

NAAB-accredited professional degree programs have the exclusive right to use the B. Arch., M. Arch., and/or D. Arch. titles, which are recognized by the public as accredited degrees and therefore may not be used by non-accredited programs.

Programs must list all degree programs, if any, offered in the same administrative unit as the accredited architecture degree program, especially pre-professional degrees in architecture and post-professional degrees.

The Irwin S. Chanin School of Architecture offers the following degree programs:

- 5-year, NAAB-accredited, Bachelor of Architecture Professional Degree
- 3-semester Master of Science in Architecture Post-Professional Degree

The number of credit hours for each degree is outlined below. All accredited programs must conform to minimum credit-hour requirements established by the institution's regional accreditor. Programs must provide accredited degree titles, including separate tracks.

**4.2.4 Bachelor of Architecture.** The B. Arch. degree consists of a minimum of 150 semester credit hours, or the quarter-hour equivalent, in academic coursework in general studies, professional studies, and optional studies, all of which are delivered or accounted for (either by transfer or articulation) by the institution that will grant the degree. Programs must document the required professional studies courses (course numbers, titles, and credits), the elective professional studies courses (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

<u>Please see 4.2.1 Professional Studies.</u> The above section 4.2.1 includes the Bachelor of Architecture degree requirements outlined by semester/year, including required and optional courses with course numbers, titles, and credits. Information about academic coursework in general studies and optional studies is included in the notes below the curriculum plan.

#### 4.3 Evaluation of Preparatory Education

The NAAB recognizes that students transferring to an undergraduate accredited program or entering a graduate accredited program come from different types of programs and have different needs, aptitudes, and knowledge bases. In this condition, a program must demonstrate that it utilizes a thorough and equitable process to evaluate incoming students and that it documents the accreditation criteria it expects students to have met in their education experiences in non-accredited programs.

**4.3.1** A program must document its process for evaluating a student's prior academic coursework related to satisfying NAAB accreditation criteria when it admits a student to the professional degree program.

See also Condition 6.5



**General Transfer of Academic Credit at The Cooper Union:** Every effort is made to provide admitted students with a preliminary evaluation of their transfer credit. School-wide policies dictate that a grade of B or better must be earned to be eligible for credit transfer.

To seek credit or if they have questions about whether a class taken at a previous institution is eligible for transfer of credit, students need to contact the department chairperson or respective dean of the School to which they are interested in obtaining credit.

Each department/school reserves the right to request additional information, such as coursework, syllabus, portfolio, etc., before granting transfer credit.

Currently enrolled students must always contact the appropriate department chairperson or academic dean at The Cooper Union prior to registering for classes at other colleges or universities if they are interested in obtaining transfer credit at The Cooper Union. The department chairperson and school dean must grant explicit permission before a student can register at another college or university to ensure that the course will be transferable.

Transfer of Academic Credit for The Irwin S. Chanin School of Architecture: Approval of transfer credit will be made by the appropriate dean or faculty based on transcripts from other schools and additional materials, including a course description, a course syllabus with topics and course requirements, a reading list, and any quizzes, examinations, papers, or projects, etc. that demonstrate the level, content, and requirements of the course, as well as the student's proficiency with course topics. A proficiency/placement exam may be administered in certain subject areas if necessary. Transfer students must be prepared to present these and other requested materials for each course for which transfer credit is sought. Transfer credit evaluation must be completed by the end of the first semester of study.

Currently enrolled students who find it necessary to complete degree requirements at another institution for transfer credit to The Cooper Union must have appropriate advance approval.

Credit may be granted for work done at another institution by any student upon examination by the dean. This credit is to be recorded after satisfactory completion of one semester's work at The Cooper Union.

#### Information for Transfer Applicants from the Architecture Admissions Office:

To be eligible as a transfer applicant to The Irwin S. Chanin School of Architecture,

- Students must have completed at least one year of an accredited architecture program by June of the year for which they are applying;
- Or, by June, hold a bachelor's degree or the equivalent in a discipline other than architecture;
- Or submit a portfolio of their creative work if they have begun studies in an architecture-related discipline.

These policies are documented on our website at the following addresses:

https://cooper.edu/students/registrar/transfer-academic-credit

https://cooper.edu/architecture/curriculum/academic-standards-and-regulations#transfer

https://cooper.edu/admissions/applying-to-cu/transfer-architecture

**4.3.2** In the event a program relies on the preparatory education experience to ensure that admitted students have met certain accreditation criteria, the program must demonstrate it has established standards for ensuring these accreditation criteria are met and for determining whether any gaps exist.

As previously stated, the assessment of advanced standing, which grants students credits for courses meeting specific accreditation criteria, is conducted individually for each case. To be eligible, a course must have been completed with a grade of B or higher. If a student does not achieve a B grade or if the course proposed for



advanced standing at Cooper Union fails to meet our standards aligned with NAAB accreditation criteria, the student must enroll in the corresponding course at Cooper Union.

**4.3.3** A program must demonstrate that it has clearly articulated the evaluation of baccalaureate-degree or associate-degree content in the admissions process, and that a candidate understands the evaluation process and its implications for the length of a professional degree program before accepting an offer of admission.

Aligned with our mission of accessibility, The Cooper Union views the transfer student process as crucial to promoting access and equity. While our intake of transfer students is limited each year, we are dedicated to meticulously reviewing transfer credits and incorporating them into a rigorous admissions procedure.

Students engage directly with the admissions office, registrar's office, and School of Architecture, working in collaboration to oversee the evaluation process and outline each student's individual program of study.

The Cooper Union's course catalog and website provide detailed information on the evaluation process and its implications for the length of a professional degree program.

Please see 4.3.1 above for links to our website.

#### 5—Resources

#### 5.1 Structure and Governance

The program must describe the administrative and governance processes that provide for organizational continuity, clarity, and fairness and allow for improvement and change.

**5.1.1 Administrative Structure**: Describe the administrative structure and identify key personnel in the program and school, college, and institution.

The Cooper Union is comprised of three professional schools: The Irwin S. Chanin School of Architecture, the School of Art, and the Albert Nerken School of Engineering. The Faculty of Humanities and Social Sciences serves all students but does not grant degrees. Each of the Schools has its own governance, budget, administrative structure, and processes by which authority in academic matters is exercised. The Schools are of different sizes and, as distinct professional programs, have different pedagogies, teaching methods, and specific resource needs. The School of Architecture averages 145 undergraduate and 11 graduate students; the School of Art averages 260 undergraduate students; and the School of Engineering averages 500 undergraduate and graduate students. The differences in the enrollment of the three schools at times create issues in developing processes for accessing institutional/shared resources not under the direct supervision of the School of Architecture, but efforts at interschool cooperation in these matters are improving.

In addition to individual school governances, all faculty teaching in The Cooper Union are represented by labor unions: the full-time faculty of all schools and the librarians are represented by The Cooper Union Federation of College Teachers (CUFCT) and the part-time faculty (proportional and adjunct) represented by The Cooper Union Organization of Part-Time Faculty. The unions provide for common policies on hiring, salary increases, and processes for promotion and tenure across the institution. Union contracts are negotiated between the individual unions and the administration on three-year cycles, engaging faculty representatives for each school and input from the academic deans. The Chief Talent Officer represents the administration in these negotiations.

Since the previous site visit in 2016, there has been almost complete turnover of leadership positions at the institutional and program levels. The President and all appointments at the vice president level have been new since 2016, and all academic deans currently serving have been appointed since 2019. Additionally, the Board of



Trustees approved a new position, Vice President of Academic Affairs (VPAA), in spring 2023, and an inaugural appointment was made beginning July 1, 2023.

Please see Appendix C. Additional Documentation for the full Cooper Union Organization Chart.

The President of The Cooper Union reports to and is a member of the Board of Trustees. Following two years during which Vice President for Finance and Administration William Mea also served as Acting President, Laura Sparks assumed her role as president on January 4, 2017. She is the 13th president of the institution and the first woman to hold the position. President Laura Sparks is also an officer of The Cooper Union.

In November 2015, The Cooper Union Board of Trustees amended its bylaws to (among other things) broaden participation in The Cooper Union's Governance in accordance with a Consent Decree with The Committee to Save Cooper Union, Inc. and the New York Attorney General. Voting members of the Board have since included two elected student trustees and four elected alumni trustees; six elected faculty and staff members serve as non-voting representatives to the board. There are currently twenty-two trustees, including a chair, vice-chair and alumni vice-chair.

Two groups are convened by the President to foster communication and broad participation in decision making among leaders and administrators at the institutional and academic program levels.

The President's Cabinet is an advisory body comprised of the executive, administrative, and academic leadership of the Institution. This includes the President, the Vice President for Academic Affairs, the Special Advisor to the VPAA, the Administrative Vice Presidents, the Chief Talent Officer, the Deans and Associate Deans of the Schools and Faculties (about eighteen people). The cabinet meets monthly to discuss academic, administrative, strategic, and financial matters of consequence to the College, including new initiatives, interdisciplinary projects, disciplinary-specific and shared facilities, campus safety, faculty and student support, recruitment and enrollment, development, etc. Annual plans outlining accomplishments of the previous year and goals and objectives for the year ahead are shared among members of the cabinet during the summer months.

The Academic Affairs Council is an advisory group comprised of the Vice President of Academic Affairs as chair, the head of each School (Dean or Acting Dean, as currently appointed), the Dean of Students, the Chief Talent Officer, Vice President of Institutional Effectiveness, Vice President for Enrollment, and the Special Advisor to the VPAA. The council meets weekly, except during the week of the month that the cabinet meets. This group focuses on academic issues, such as program development and new academic initiatives, interdisciplinary opportunities, student and faculty support, credit issues, and student recruiting.

The Vice President for Academic Affairs (VPAA) is a new position at The Cooper Union; Dr. Demetrius L. Eudell is the inaugural VPAA and began his appointment in July 2023. The VPAA serves as the chief academic officer of The Cooper Union and, importantly, fosters and coordinates collaboration across academic programs. The Academic Deans now report to the VPAA rather than the president, and the VPAA chairs the Academic Affairs Council.

The Academic and Student Affairs Committee of the Board of Trustees provides a formal means for direct communication between the Board of Trustees and the academic deans. This committee is comprised of a chair, both student trustees, four alumni trustees, and two additional trustees, one of whom is also an alumnus of the School of Architecture. The deans are not voting members of the committee but are invited to the Committee's quarterly meetings. Deans, faculty, and students are invited to make presentations to the Board about new curricula, interdisciplinary projects, faculty research, and other academic matters.

The Cooper Union Faculty-Student Senate is a representative body that advises the President and the Board of Trustees and updates the faculty and students on issues related to the college's mission, resource use, and academic planning and development.



**5.1.2 Governance**: Describe the role of faculty, staff, and students in both program and institutional governance structures and how these structures relate to the governance structures of the academic unit and the institution.

The School of Architecture's leadership, as defined in the Governance, consists of a partnership between the dean and the associate dean. The dean is the chair of the Faculty Committee and the Administrative Committee; the associate dean is the chair of the Curriculum Committee and, in the dean's absence, acts as chair of the faculty. The leadership is formally linked to the faculty and students through the committee structure defined by the Governance.

The dean and associate dean are also teaching faculty: the dean is expected to hold a full-time faculty appointment with tenure and both deans hold active teaching assignments.

Nader Tehrani began his service as dean of the School of Architecture in July 2015; in fall 2021 President Sparks announced Dean Tehrani's decision to return focus to his teaching and practice effective 30 June 2022. In accordance with the Governance, the Dean Search Committee of 5 faculty and 2 student representatives was elected and began its search for the School's next dean in fall 2021. While four candidates were recommended to President Sparks in late spring 2022, this search did not result in the appointment of a dean. As provided by the governance, Associate Dean Hayley Eber was named acting dean for the 2022-2023 academic year. The position of Associate Dean has been vacant since July 2022. A search was launched again in the fall of 2022 with greater ongoing input from the president on developing a long list of potential candidates. Four applicants were agreed to as final candidates for the position. This second search also did not result in an appointment of a dean and as such, Hayley Eber continues as acting dean of the School of Architecture with the enthusiastic support of faculty and students alike. A new dean search is scheduled to commence in fall 2024, in the hope that a new dean will start in fall 2025.

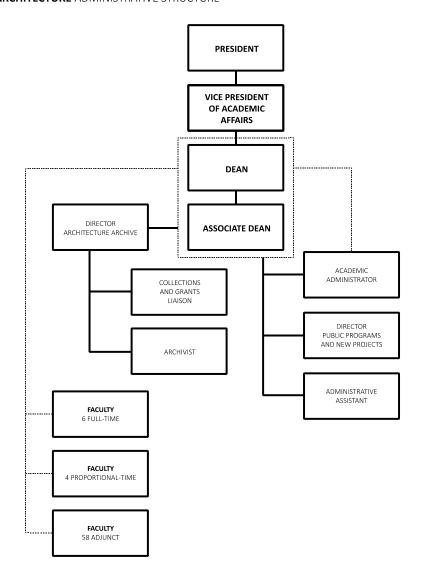
The leadership of the School, faculty committees, faculty, and students are very well supported by a long-serving and exceptionally capable staff, including the academic administrator, the administrative assistant, and public programs and new projects director (all full-time). Core staff leaders of the School include a full-time director of the School of Architecture Archive and the academic administrator. The School of Architecture Archive is staffed by a collections manager & grants liaison (full-time) as well as an archivist (currently vacant).

The full staff meets with the acting dean on a weekly basis. These meetings foster open communication between staff members and are opportunities for staff to advise the acting dean on all matters of concern to the smooth running of the School, including its academic and public programs. All members of the School community benefit from the experience, knowledge, skills, and intense commitment of the staff to the School and its students; their advice is highly valued.

The School of Architecture Administrative Structure is illustrated in the diagram below:

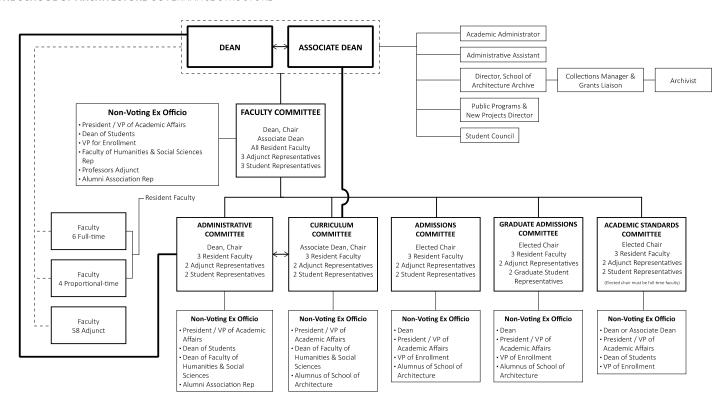
# MAB

#### THE SCHOOL OF ARCHITECTURE ADMINISTRATIVE STRUCTURE





#### THE SCHOOL OF ARCHITECTURE GOVERNANCE STRUCTURE



The Governance of the School of Architecture establishes the means by which faculty and students engage in the evolution of policies, procedures, and the curriculum of the School. The preamble states:

This document has been prepared in response to the Faculty and Administration's desires for a statement of Faculty rights, responsibilities, and authority that will establish the optimum conditions for teaching and learning at The Cooper Union. It defines the membership, functions, organization, rights, responsibilities, and authority of the Faculty of The Irwin S. Chanin School of Architecture.

The Governance was first adopted by the faculty in 1981 and last amended in 2009. The faculty and students hold it in high regard as a concise and effective social and legal document, providing a framework within which debate and change can be respectfully and inclusively ordered.

The voting faculty is comprised of the dean, the associate dean, all resident faculty, three elected members of the adjunct faculty, and three elected student representatives. All voting members have an equal vote.

The governance establishes five standing committees: the Administrative Committee, the Curriculum Committee, the Admissions Committee, the Graduate Admissions Committee, and the Committee on Academic Standards. Each standing committee includes voting representation from the resident faculty (full-time and proportional-time), the adjunct faculty, and students. Representatives of the Alumni Association and other administrative and academic deans serve as nonvoting, ex-officio members on certain committees. The faculty may establish additional ad hoc committees and work groups to address matters not specifically assigned to the standing committees. Committees report directly to the faculty via faculty meetings, which by the governance must be held at least once each semester. Since 2016, faculty meetings have been held monthly. Additional faculty meetings may be called by the dean or by the faculty in accordance with the provisions of the governance.



In fall 2016, at the initiative of Dean Tehrani, the faculty voted to expand the standing committee membership from (typically) four to six voting members. This provided for broader participation by adjunct faculty and student representatives. This resolution was forwarded to the Office of the President for ratification by the Board of Trustees as required by the governance. President Sparks has yet to bring this matter to the board for ratification, but the School has put the provisions of the resolution into informal practice.

The curriculum is developed on an ongoing basis by the Curriculum Committee. The Curriculum Committee consists of the associate dean (who is the chair), two resident faculty, one adjunct faculty representative (voting), one adjunct faculty representative (non-voting), one student representative (voting), and one student representative (non-voting), as well as ex-officio members: representative of the alumni association, the dean of admissions and records, and the president. The governance requires that certain recommendations from the Curriculum Committee be reviewed and approved by the Administrative Committee before being sent to the faculty for discussion and vote. This extends the review of proposed changes to the curriculum to four additional faculty and two additional student representatives prior to consideration by the full faculty. Minor curricular adjustments recommended by the Curriculum Committee can be implemented administratively. Further information can be found in **Section 5.3 Curricular Development.** 

The School of Architecture Student Council is comprised of three elected representatives from each class of the undergraduate program and one representative from each class of the graduate program. The student council is responsible for nominating student representatives to the standing faculty committees. The student council holds open meetings with their student constituencies at least twice each semester to share concerns and establish priorities for action. The student council meets with the dean and the associate dean at least twice each semester to address these concerns. The Student Council establishes the agenda for the meeting, and issues of institutional and school policies, curriculum, facilities, and procedures are discussed as needed. Student concerns and agreed action items are recorded in meeting notes. The deans also use these meetings to bring institutional developments and news to the students through their representatives.

Three senior members of the student council are elected by the council to serve as administrative chairs. The "ad chairs" from all schools meet with the president regularly each semester.

There are additional meetings with each class at the mid-term and end of each semester whereby student concerns can instigate policy change. The associate dean also has frequent meetings with student representatives. As necessary, student concerns can be brought to the appropriate faculty committee or directly to the faculty for consideration. Students have three representatives on the voting faculty.

The non-teaching administrative staff does not have formal roles on standing committees or at faculty meetings. However, the administrative assistant and director of the School of Architecture Archive attend the faculty meetings. Individual staff members participate in schoolwide administrative committees such as the Health and Safety Committee, the Commencement Committee, the Exhibitions Committee, the Anti-Bias / Anti-Discrimination Task Force, and the Diversity Task Force to develop institutional procedures, such as registration and scheduling. Staff can also affect institutional policy through their representation on the Board of Trustees and their bargaining unit: The Union @ Cooper Union, a member of the NYSUT/AFT.

The acting or associate dean discusses curriculum changes under consideration with the academic administrator, who can offer insight into the proposals' impact on accreditation requirements, the curriculum, credit loads, and potential implementation issues.

Please see <u>our website</u> for the full School of Architecture Governance.

Please see the Digital Team Room for the Architecture Student Council Constitution.



#### 5.2 Planning and Assessment

The program must demonstrate that it has a planning process for continuous improvement that identifies:

**5.2.1** The program's multiyear strategic objectives, including the requirement to meet the NAAB Conditions, as part of the larger institutional strategic planning and assessment efforts.

The term "free" has permeated The Cooper Union's founding documents and self-descriptions for over 160 years. Yet, determining the true essence of offering a free education has been a topic of ongoing discussion. This is especially pertinent in today's environment, where the escalating costs of higher education and The Cooper Union's financial constraints have challenged the institution's traditional mission. This challenge has ignited healthy internal debates, prompted leadership changes, led to Board reorganization, initiated a legal battle over the decision to introduce tuition fees, and, perhaps most significantly, spurred a renewed sense of purpose.

Since the School of Architecture's last accreditation visit in 2016, The Cooper Union has undergone significant leadership changes and restructuring. These eight years have been characterized by excitement and dynamism in institutional improvement, innovation, and renewal. Key transformations include:

- The transition from an interim president to Laura Sparks as permanent president in 2017.
- The board subsequently approved new and <u>revised mission and vision statements</u> formulated through community engagement.
- The initiation of revised strategic planning efforts.
- The establishment of a court-mandated Free Education Committee to assess the institution's financial state and develop recommendations for a return to full-tuition scholarships for all students.
- The appointment of a court-mandated financial monitor who has assessed the institution's progress toward returning to full-tuition scholarships through annual reports issued from 2017 to 2024.
- Substantial turnover among management personnel, with nearly three-quarters of all management positions filled by new hires, including critical roles in Institutional Assessment, Finance/Administration, Security, Talent, Student Affairs and other senior administrative positions.
- The formation of a Diversity Task Force in conjunction with a community planning collaborative.

Following President Laura Sparks' inauguration in 2017, initiatives were undertaken to refine the institution's Mission and Vision. Collaborating with a mission-statement subcommittee, extensive feedback was sought on the draft mission statement, encompassing input from individual community members to larger groups such as departments, faculties, and schools. The mission statement, inspired by the founding principles of The Cooper Union, serves as a guiding framework for institutional and financial planning, with the various academic units aligning with and capitalizing on the institution's mission.

#### Vision

The Cooper Union for the Advancement of Science and Art is dedicated to Peter Cooper's radical commitment to diversity and his founding vision that fair access to an inspiring free education and forums for courageous public discourse foster a just and thriving world.

#### Mission

Our mission is to sustain The Cooper Union as a free center of learning and civic discourse that inspires inventive, creative, and influential voices in architecture, art, and engineering to address the critical challenges and opportunities of our time.

The School of Architecture is committed to our mission statement, which reads as follows:

## MMB

The mission of The Irwin S. Chanin School of Architecture is to provide its students with the finest professional education available within an intellectual environment that fosters and expands their creative capacities and sensibilities and establishes the foundation for a creative professional life. The School is committed to the belief that one of society's prime responsibilities is toward learning and education in the deepest sense: that exercising individual creativity within a receptive community is a profoundly social act. Central to the School's mission is fostering an atmosphere where freedom of thought and exploration can flourish, allowing students to explore and utilize their strengths and individual talents, interests, and modes of working to their highest potential.

The curriculum offers a cultural and intellectual foundation in the liberal arts as they relate to the design of the environment at all scales. The discipline of architecture is interpreted in the widest possible sense. Students develop their knowledge and design skills within a framework of studios and courses that stimulate research and debate into the role of architecture as a cultural practice with broad social and environmental implications. As the nature, role, and scope of the architect rapidly assumes new directions and dimensions, the School emphasizes the principles of design and their underlying human values. The program seeks to engender a strong sense of the ethical responsibilities of service and leadership, teamwork, and individual creativity essential to the development of principled professionals dedicated to addressing the spatial needs of the community.

In 2022, to advance our mission, the departing Dean Nader Tehrani, in collaboration with then Associate Dean Hayley Eber—now serving as the acting dean—formulated six multi-year strategic objectives. These goals are a culmination of discussions held during Faculty meetings, dialogues with students, feedback from external critics and jury members, and insights gleaned from the profession, serving as our guiding framework for the next five years. Please see <u>Context and Mission Summary</u> for a list of these goals.

#### **5.2.2** Key performance indicators used by the unit and the institution

To evaluate our progress towards our multi-year strategic objectives, the School currently employs the following key performance indicators (KPIs):

- We assess our retention rates by monitoring the percentage of continuing students who return each fall.
   Additionally, we track our Graduation Rates, which are determined by the number of students who successfully completed their education and received their professional degree within the standard timeframe.
- We monitor and enhance student performance in critical curriculum areas as outlined in our multi-year strategic objectives, supported by shared values, program criteria, and student criteria established by NAAB.
- We evaluate student satisfaction by conducting Senior Exit Surveys. (The recent appointment of a Director for Institutional Research will enhance participation in this survey, which has been recently revamped by the Planning and Assessment Council). Additionally, we will introduce newly developed Student Entrance Surveys to be administered by the Office of Institutional Effectiveness. Alongside Alumni Affairs, we conduct a First Destination Survey six months post-graduation. Feedback is also gathered through end-of-semester course questionnaires, student council meetings with the dean, and student meetings with the dean, all held twice a semester.
- We track awards, publications, and speaking events of faculty, students, and alumni every week for inclusion in our weekly e-news broadcast. Faculty formally submit them annually as part of a required CV.
- We review monthly financial statements with the Business Office to monitor our budget. Additionally, during bi-weekly development meetings, we identify scholarship and fellowship opportunities, teaching and research assistantship funding, and new funding avenues for research or pedagogical initiatives.
- We monitor diversity among students and faculty and evaluate diverse content in coursework using our Anti-Racist Questionnaire. Meetings with admissions address admissions, retention, and strategic planning initiatives focused on diversity, including monitoring the quality of our community and satisfaction with creating a sense of belonging.

## NVB

- We track applications for degree programs, the Saturday Program, and Summer Program to better reach prospective students.
- We continuously assess our media presence, analyzing the effectiveness of our weekly e-news broadcasts, Google AdWords, E-Flux listings, and social media platforms to enhance our outreach to prospective students, faculty, stakeholders, practitioners, and competing programs.
- Lastly, we monitor and enhance our School's reputation and distinctiveness to ensure recognition for excellence nationwide.

### **5.2.3** How well the program is progressing toward its mission and stated multiyear objectives.

The strategic objectives of the School of Architecture, spanning multiple years and aimed for accomplishment within the next five years, are summarized in Section 5.2.1 above. We are fully committed to realizing all outlined goals, and significant groundwork has already been established. Our progress encompasses both qualitative and quantitative dimensions. Below, we present a summary of our ongoing efforts:

### 1. Broaden Traditional Formats of Knowledge Production and Dissemination: Curricular Transformation + Pedagogical Experimentation

CURRICULAR ACTIVITIES: We continuously assess and implement changes to the curriculum to advance the School's pedagogical project, strengthening its longstanding commitment to integrating history, theory, design, and architectural representation methods. This includes expanding the core representation sequence to include photography, animation, computation, and other digital tools. The formal analysis studio now occurs in the spring semester of the second year, allowing for the incorporation of a design synthesis studio in ARCH 131A-B Design III. Furthermore, elective courses have been expanded to encompass a wide array of histories, theories, cultures, and environments, along with advanced explorations in computational methods. Design IV has undergone restructuring to allow students to select option studios in both fall and spring semesters, empowering them to engage in design research in areas of their interest. Additionally, we introduced independent study at the elective level in spring 2021 and assigned individual Thesis advisors to all fifth-year students. We continuously experiment with alternate pedagogical formats, allowing different modes of critiques, reviews, and discussions across various platforms.

**CO-CURRICULAR ACTIVITIES:** Our extensive lecture series and public programming provide a valuable opportunity to amplify the School's vibrant intellectual culture and extend the discursive space of the studio and classrooms into various public formats. These forms of architectural discourse and platforms for exhibitions and discussions play a pivotal role in fostering meaningful debates and exchanging ideas.

#### 2. Enhance Interdisciplinary Approaches: Bridging Courses, Schools, and Disciplines

CURRICULAR ACTIVITIES: Three years ago, the School of Architecture introduced a "Convergence Project" to illuminate the interrelatedness of Building Technology, Construction Management, and Professional Practice. This collaborative effort highlights the content related to the three courses devoted to those subjects through the study of a single project. Across the Schools, we have sought to create more significant opportunities for experimentation at the intersections of our disciplines through elective courses such as Machine Learning, Generative Algorithms, Solar Decathlon, Material Ecologies, Printmaking (as a method for constructing architectural images), The Book as an Architectural Object, Public Art as Alimentary Infrastructure, Drawing Structures, amongst others. All these courses involve at least one School and are taught by at least one faculty member from each School. Some of these courses culminate in a public symposium or workshop, inviting experts in the field to engage with faculty, students, and members of the public.



**CO-CURRICULAR ACTIVITIES:** To promote interdisciplinary engagement, The Cooper Union has adopted an institutional approach by introducing block scheduling to facilitate cross-registration of courses. Furthermore, significant progress has been made through initiatives such as the establishment and success of shared facilities like the AACE Lab and Civic Projects Lab. Additionally, there has been a noticeable increase in the diversity of students participating in courses across Schools within the Humanities and Social Sciences (HSS) department. Internal grants have been promoted to support interdisciplinary project teams, further enhancing collaboration within the institution.

#### 3. Extend Engagement with New York City and Beyond: Amplifying Discursive Spaces

CURRICULAR ACTIVITIES: Our partnership with the University of Puerto Rico in the aftermath of Hurricane Maria, as well as our recent collaboration with HELP USA on housing projects in the Bronx and Brooklyn, exemplify initiatives that connect The Cooper Union with the pressing social issues of our time and foster a meaningful dialogue with our local communities. In a similar vein, our continuous involvement with the Museum of Modern Art has resulted in the creation of striking models for two recent exhibitions: Toward a Concrete Utopia: Architecture in Yugoslavia, 1948-1980 (2018-19), and The Project of Independence: Architectures of Decolonization in South Asia 1947-1985 (2022). Additionally, our students have constructed a substantial centerpiece model of the Stupa typology for The Metropolitan Museum of Art's Tree & Serpent: Early Buddhist Art in India, 200 BCE-400 CE exhibition (2023). Other current collaborations for the spring 2024 semester include an exhibition partnership with The Cooper Hewitt, Smithsonian Design Museum for their upcoming 2024 Architecture Triennale centered around the theme of home and a fabrication project in collaboration with Shigeru Ban Architects for their Paper Log House with the students of the Building Technologies course in third year.

Furthermore, the School of Architecture has actively participated in several exciting and successful off-site student work installations over recent years. These include two design-build projects with the students of Structures I: *IBEJI* at the dieFirma Gallery in New York and *The Festival des Architectures Vives 2019* in Montpellier, France. Our faculty-led student teams have also participated in significant global exhibitions, including The Shenzhen Biennale 2021, the Venice Architecture Biennale 2021, and the 2022 Tallinn Architecture Biennale.

These exhibitions and collaborations are developed through a pedagogical project, typically a design studio or elective seminar. The projects enable faculty and students to engage with museum curators and scholars, providing valuable context and direction throughout the creative process and exposing the work to a global audience.

**CO-CURRICULAR ACTIVITIES:** Beyond the curriculum, we have expanded our partnerships with institutions and non-profits through various public programs. Two notable examples include our collaboration with the Anyone Corporation, a New York-based nonprofit architecture think tank directed by Cynthia Davison. Together, we mounted an exhibition titled *Model Behavior*, accompanied by a series of public lectures exploring the broad theme of models. Additionally, the School of Architecture collaborated with the Royal Danish Academy in Copenhagen, facilitating exchanges where faculty from each institution participated in a symposium and showcased their work in a Third Floor Hallway Gallery exhibit. The School of Architecture also hosts students from the Royal Danish Academy to join the School for one to two semesters.

#### 4. Actively Work Towards a Just, Resilient, and Sustainable Future: Engaging All Scales and Inhabitants

**CURRICULAR ACTIVITIES:** The pressing and crucial matter of architecture's impact on climate change has prompted the introduction of a new mandatory course sequence, **ARCH 124A-B Environments** within the second-year curriculum. In the third year, the required **ARCH 134A-B Environmental Technologies** sequence has undergone restructuring, now consisting of three modules that delve into the principles, pedagogies, and processes of sustainable building technologies and systems through modeling, simulations, and project-based explorations.



The **ARCH 141 Design IV** Option Studio in the fourth year has recently included advanced studio topics such as "Models of Justice," "Coastal Urbanism," "The Geophysical City," and "Planetary Gardens," delving into concepts of resilience, ecologies, and justice. Elective courses offered include "Landscape Architecture," "Territories in Transition," "Climate Migration and the Future of New York," and "Architecture, Cities, and Nature." Additionally, the **VIP 38X Vertically Integrated Projects-Solar Decathlon** is an interdisciplinary course co-taught with the School of Engineering. In it, student teams design and construct highly efficient buildings powered by renewable energy sources. The emphasis is on optimizing various factors, including affordability, resilience, and occupant health. The Cooper Union won first place last year in our first year of competing.

**CO-CURRICULAR ACTIVITIES:** The theme of our lecture series for the 2022-2023 academic year, *Architectures of Transition*, curated by Professor Elisa Iturbe, catalyzed reevaluating how our discipline must evolve to confront the climate emergency. Through a series of thought-provoking lectures and discussions, architecture is engaged in dialogue with energy and power to reconceptualize our vocabulary of spatial and formal possibilities. The lecture series culminated in an exhibition titled *Confronting Carbon Form* and a symposium on the *Spatial Ideologies of Carbon Modernity*, with a renewed emphasis on fostering an equitable and responsible carbon-free future.

The Cooper Climate Coalition, an open body of students, faculty, and staff at The Cooper Union, facilitates conversations, events, and student projects within the institution that center the Climate Crisis and its intersections with races, classes, genders, sexualities, histories, economies, political structures, and more. Along with organizing The Cooper Union's Climate Week programs and events in the fall, the Climate Coalition fosters interdisciplinarity throughout The Cooper Union to support environmental action.

#### 5. Diversify the Field of Thinkers and Makers

CURRICULAR ACTIVITIES: Our commitment to an inclusive and diverse community permeates through our pedagogy and learning environments by diversifying our sources, references, and precedents and encouraging a broad range of initiatives that foster inclusivity in thinking and making. HTC courses have been broadened beyond Western canons by including scholarship and creative production by a wide variety of historians, theorists, designers, and artists. Updates to the curriculum guided by DEI values have benefited from hiring new full-time faculty, adjunct faculty, and visiting faculty. These include ARCH 115A-B History of Architecture I, ARCH 125A-B History of Architecture II, ARCH 133 Introduction to Urban History and Theories, as well as design studios: ARCH 131 B Design III Housing Studio, ARCH 141A-B Design IV Option Studio, and ARCH 151A-B Thesis. Some electives include "Construction and Slavery: The Architecture of The Black Atlantic," "Principles and Praxis of Design and Spatial Justice," "The Spatial Politics of The Social Turn," and "Public Art as Alimentary Infrastructure." For more information on curricular activities addressing diversity, please see PC.8 Social Equity and Inclusion.

**CO-CURRICULAR ACTIVITIES:** Examples of public programs addressing DEI values directly include the 2021-2022 lecture series, *Pluriversal, Bewildered and Otherwise,* focusing on architecture practices that are rooted in social movements for justice. In addition, a public symposium *What Black Is This, You Say?* (2023), was organized in partnership with the Storefront for Art and Architecture on public art and the plurality, complexity, and nuance of Black experience(s) through the work of Amanda Williams. The *Anti-Racism in Thesis* workshop (2021) was a daylong public program co-organized with **ARCH 151A-B Thesis** students on how decolonial and anti-racist pedagogy translates onto the Thesis curriculum, conversation formats, and advising models.

The School of Architecture continues to make the diversity of its enrollment a high-level strategic priority through our efforts to attract, retrain, and graduate an increasingly diverse student body that is focused and successful with growing numbers of students from underrepresented communities. Our current first-year class is the most diverse yet, and our retention is trending in the right direction. Although only 5% of our students identify as Black/African American (B/AA), this is an improvement, but it is still unacceptable. We aim to reflect the diversity of the city we live in, which is 24% B/AA by 2028/9.



#### 6. Foster Institutional Culture: Collaborative Practice, Advocacy, and Support

**CURRICULAR ACTIVITIES:** To build collaborative practices, students work in groups across many facets of the curriculum. Students work in teams for the second-year analysis studio, **ARCH 121B Design II**, and the **ARCH 135A Building Technology** building fragment mock-up project. **VIP 38X Solar Decathlon** comprises interdisciplinary teams, and **EID 364-1 Generative Machine Learning** builds collaborative groups across the three schools.

**CO-CURRICULAR ACTIVITIES:** We constantly work to develop structures within the rigorous academic program for student support and agency. In 2019, we introduced an academic advising program, where all students are now assigned an academic advisor in the first year who continues to support the student through into their fifth year. A dedicated Assistant Director of Admissions has helped the School to admit increasingly diverse classes. In 2019-2020, teaching assistantships were introduced for upper-year students to assist with select first-year and second-year courses.

To foster collaboration across the institution, The Cooper Union Grant Program is committed to providing funding for projects that enhance our students' learning experiences; our faculty's teaching, scholarship, and practice; new ideas for our future; and opportunities for our community to come together in addressing the critical societal issues of our time. Preference is given to proposals that involve at least two of our four areas of academic study (architecture, art, engineering, and humanities/social sciences) and involve a mix of students, faculty, and/or staff.

**5.2.4** Strengths, challenges, and opportunities faced by the program as it strives to continuously improve learning outcomes and opportunities.

**STRENGTHS:** The Irwin S. Chanin School of Architecture occupies an exceptional position, nationally and globally, as an intensive laboratory for pedagogy, design, and distinguished scholarship in architecture. Since its inception, the School has consistently been at the forefront of pedagogical invention in design and theory, with outstanding dedication and commitment from faculty, students, and staff alike. Rooted in the College's distinctive history and deep connection to its founding principles, our robust and impactful educational approach has earned recognition at both regional and national levels, evidenced by the achievements of our accomplished students and alumni.

The Cooper Union is a small college set within Manhattan—an expansive, culturally rich city with abundant cultural and financial resources. The School's small size enables the faculty to effectively interact, often on a close individual basis. The greater New York Metropolitan area is an extension of the College where students have direct and meaningful cultural experiences. New York's landmark buildings, world-class museums, cutting-edge galleries, research labs, and massive infrastructure projects extend the educational prospects from the studio and classrooms to the larger society. Students have frequent opportunities to interact with significant figures in architecture, art, engineering, and numerous other disciplines.

Our faculty are a source of strength, comprising practitioners representing every scale of practice, from individual proprietors to small studios to large corporate firms, alongside a substantial number who have pursued specialized or alternative models of practice. This diversity enriches the educational experience, exposing students to a wide array of contemporary perspectives throughout the program's five-year duration. Our faculty members have made significant contributions across various domains, including publishing influential books, designing nationally acclaimed buildings, and earning prestigious awards in teaching, pedagogy, research, and writing. They have also curated prominent exhibitions and disseminated their work extensively in peer-reviewed journals, both domestically and internationally. The exceptional quality of our faculty community is underscored by the breadth and depth of their achievements, as reflected in their CVs. Through our rigorous search processes, we consistently attract highly accomplished faculty candidates. Their achievements and their commitment to teaching are crucial to the ongoing academic life of the institution.

Our students' strength mirrors that of our faculty. We enjoy an incredibly diverse student body in terms of race, ethnicity, gender, economic, and geographic background. The School of Architecture consistently seeks to admit



highly motivated and talented students who demonstrate, through their Studio Tests and academic records, that they have the abilities and potential to engage and excel in our program successfully. Since its founding, The Cooper Union has been committed to providing equitable opportunity to students with merit and potential regardless of financial means. Although its financial model has undergone changes, The Cooper Union has nonetheless maintained its commitment to academic quality, reputation, and historic enrollment levels.

The School of Architecture has an incredible studio space that fosters a great sense of community; all undergraduate first-year through fourth-year and graduate architecture students are provided full-sized individual workspaces within a single 8,000-square-foot open studio, while fifth-year B.Arch thesis students work in smaller, adjacent spaces. This shared design studio layout promotes the creative dialogue and interactions between students, classes, and faculty that are essential to the School's approach to learning. We also have extensive maker spaces, such as the Sculpture Shop, the AACE LAB, the Paul Laux Digital Architecture Studio, and the new Civic Projects Lab. Students and faculty actively engage these facilities in curricular and co-curricular activities. *Please see* 5.6.2 *Physical Resources*.

The School boasts a vibrant public program featuring lectures, exhibitions, and symposia addressing issues of global and local significance to both The Cooper Union and the broader architectural community. Active, ongoing collaborations with cultural and professional institutions in New York City reaffirm The Cooper Union's pivotal role as a hub of intellectual inquiry into pressing environmental, technological, cultural, and civic concerns. These forms of architectural discourse and research platforms continue to make The Cooper Union a critical site of conversation, conjecture, and communication in New York City. *Please see <u>Appendix A. Selected Events and Exhibitions.</u>* 

**CHALLENGES:** The 2018 decision to return to full-tuition scholarships marked a historic moment for The Cooper Union, and the level of progress back to free since then has only been possible because of the commitment of the full Cooper Union community. Despite the positive strides, navigating this journey has demanded tough decisions and sacrifices necessitating a high level of fiscal discipline and unprecedented fundraising efforts, particularly for the School of Architecture. One aspect that has proven challenging to maintain is our travel studios, and we are actively seeking avenues to reintegrate this valuable component into our student experience.

While we stated above that our location and facilities are a strength, The Cooper Union is a small college located in one of the densest neighborhoods in one of the most expensive cities in the United States. It is also a college with three professional programs centered on creative production and making. As the tools of material investigation and making evolve, more space is necessary to accommodate experimentation with these new digitally driven tools alongside the traditional analog ones. Due to space constraints, scheduling classes and public programs has become increasingly difficult. The need for more space has become an impediment to developing new pedagogies and maintaining a dense schedule of public programs.

As reiterated throughout this report, we take pride in the growing diversity among our students. They hail from backgrounds typically underrepresented in architecture, spanning financial, geographic, racial, and ethnic spectrums. As we admit a diverse student body, we must equip them with essential resources and develop structures of support and agency. Even as we move towards full-tuition scholarships, studying in New York City is still challenging. It is one of the most expensive cities in the world, leading to financial strain for students covering tuition, rent, food, transportation, and other expenses. Finding affordable and suitable housing can be difficult due to limited availability and high demand. Many students struggle with finding affordable options close to their campuses and must face arduous commutes. To support students in the wake of health, housing, and financial emergencies, The Cooper Union offers The Carroll and Milton Petrie Student Emergency Grant Fund, awarding students a maximum of \$3,000 to mitigate their emergency. This grant is open for application throughout the fall and spring semesters, depending on the availability of funds.

Over the past few years, our student body has become more diverse, yet our faculty diversity has yet to keep pace with this growth. Although recent hires have contributed to enhancing diversity among our adjuncts, considerable



progress remains to be made. In terms of gender balance, our resident faculty is comprised of 60% women, and it is a diverse group in terms of ethnicity, but we do not have any Black or African Americans in this cohort.

**OPPORTUNITIES:** As we reach the midpoint of The Cooper Union's 10-year Plan to Return to Full-Tuition Scholarships, we are presented with an incredible opportunity. By committing to providing full-tuition scholarships for all undergraduate students, the institution is reclaiming its legacy as a free center of learning and addressing the pressing issue of student debt on a national scale. The collaborative effort to realize this plan stands out among other colleges and universities in the country. Not only are we restoring The Cooper Union's legacy as a tuition-free institution, but we are also actively contributing to alleviating the national crisis of overwhelming student debt. This initiative demonstrates that a different path forward is not only feasible but also essential.

We are currently in the final fundraising stages for two new endowments, which will significantly enhance our academic culture. Firstly, **The John Q. Hejduk Endowment for Architectural Research** aims to support outstanding architecture faculty members at the School of Architecture. The funds will be allocated to individuals engaged in practice, scholarship, teaching, or research that embodies a diverse range of voices, ethnicities, trajectories, and communities. The stipend for architectural research may lead to publications, exhibitions, lectures, or other forms of disseminating the faculty member's work. Additionally, we are launching the newly established **Zeke Endowment**, generously supported by Jesse Reiser AR'81 and Nanako Umemoto AR'83. This endowment seeks to foster academic initiatives in creative writing, philosophy, and music.

While we have made significant progress in promoting interdisciplinary learning, considerable untapped potential remains. With the recent appointment of our inaugural Vice President of Academic Affairs, Dr. Eudell, tasked with spearheading cross-disciplinary learning opportunities and pedagogical collaboration across faculties, we have initiated an institutional approach to scheduling to streamline cross-registration. This effort is complemented by establishing new shared facilities, such as the AACE Lab and the Benjamin Menschel Civic Projects Lab, laying the foundation for future interdisciplinary teaching, learning, and collaboration.

Under the direction of our new Special Advisor to the VPAA, architect Mokena Makeka, The Cooper Union is in the early stages of planning a new institute, FLOW, The Future of Living for One World. FLOW is an independent transdisciplinary institute focused on generating ideas about humanity's responsibility towards people and planets within the context of the fifth industrial revolution, the bioeconomy. Inspired by Peter Cooper's vision, the institute addresses global challenges by integrating technology, ethics, and creativity. It builds on The Cooper Union's history of interdisciplinary work and academic excellence, particularly the Institute of Sustainable Design. FLOW's research pathways include accelerating inequality, biodiversity decline, climate-smart urbanism, sociospatial justice, and bio-innovation, all aimed at advancing solutions for a sustainable world.

Opportunities remain to incorporate student travel as a fundamental component of our architectural curriculum. By integrating travel experiences into our advanced studio courses, students could embark on week-long trips to visit project sites and gain a contextual understanding of the key issues presented in their design briefs. By immersing our students in diverse cultural environments and complex contexts, we aim to expand their knowledge of the world and equip them with the skills needed to engage effectively as global citizens in the field of architecture.

#### **5.2.5** Ongoing outside input from others, including practitioners.

Regular feedback is received from practitioners from the community of professionals and academics from around the country who participate in course reviews and studio juries every semester. They offer feedback directly to students and faculty on what they see as the strengths and weaknesses of the School. This is an invaluable form of receiving input from key stakeholders and faculty members from peer and aspirational institutions. The new assessment plan launched in AY 2023-24 provides opportunities for assessment input from professionals outside of the School in the form of a jury survey in key courses such as **ARCH 131A-B Design IV** and **ARCH 151 Thesis**.



To further solicit input from practitioners, we rely on our faculty members, most of whom are active practitioners. As per our governance structure, they participate in faculty and across all our committee meetings, where they engage in strategic and operational conversations regarding the direction of the curriculum and School. We also solicit input from alumni serving as ex-officio on committees.

For the 2024-25 academic year, we are excited to inaugurate an advisory board to offer continuous guidance to the acting dean and the School of Architecture. Initially composed of three professionals, some of whom are esteemed alumni, this board will provide leadership and external counsel on school operations, initiatives, and community partnerships and foster connections across various fields and industries. Through intimate meetings and public discussions involving students, faculty, and staff, these sessions are designed to shape the vision of the School of Architecture by eliciting valuable feedback and advice.

The program must also demonstrate that it regularly uses the results of self-assessments to advise and encourage changes and adjustments that promote student and faculty success.

The Cooper Union consistently assesses its students' attainment of institutional, program-level, and course-level goals. The administration, faculties, and student affairs personnel then use this information to evaluate the educational and student development offerings, making changes as needed to potentially enhance our students' learning outcomes.

The assessment process is integral to the quality of the curriculum, student development and support, and the effectiveness of the educational model at The Cooper Union. Assessment of student learning and achievement provides evidence of the extent to which The Cooper Union students have accomplished educational goals and learning outcomes consistent with their programs of study and the institution's mission and strategic priorities. This practice facilitates using "evidence of learning" and reflection among faculty and co-curricular entities to focus on pedagogies that support continuous improvement.

On an institutional level, cabinet meetings, led by President Laura Sparks, include all deans, associate deans, and officers, and occur every month. Academic Affairs Council meetings, led by the Vice President of Academic Affairs every week, aim to address and advance institution-wide academic concerns among the diversity of issues covered. Annually, each of the three degree-granting schools and the Faculty of Humanities and Social Sciences outlines its pedagogical objectives through their respective mission statements, strategic planning, and course offerings.

Within the School of Architecture, the dean and associate dean (whenever applicable) foster these core principles under the framework of governance, committee structure, and faculty meetings. Assessments and adjustments to the curriculum are made through recommendations via the Curriculum Committee structure and confirmed through votes at larger monthly faculty meetings. Additional sub-committees are formed as new challenges and opportunities emerge. The architecture school relies heavily on this committee structure to propose and evaluate new initiatives.

Assessment of student outcomes and experiences provides a potent perspective on the program's impact. The assessment practices in architecture programs vary, including outcome assessment of student work, focused discussions with students about their experience, and first-destination placements.

The most significant type of academic evaluation is in the form of critiques, held roughly twice per semester. In these critiques, faculty from the architecture school and invited guests from outside the School critique all of the students' work and offer valuable feedback on the School's performance. Additionally, there is a large End-of-Year Show, where work from the entire school is presented, open to the public. This allows for a critical examination of cohort outcomes with a view of how student work evolves over the entire curriculum, showing the linkage between the curriculum and student progression. The End-of-Year Show is also critical as it is a very well-attended event and substantially contributes to maintaining the School's reputation.



The dean and associate dean meet at the end of each class year to discuss the entire year's results. This is a formal process, and the results are recorded and distributed to the Architecture School's faculty.

Collectively, these mechanisms constitute a robust system of checks and balances, crucial for sustaining significant progress within the School.

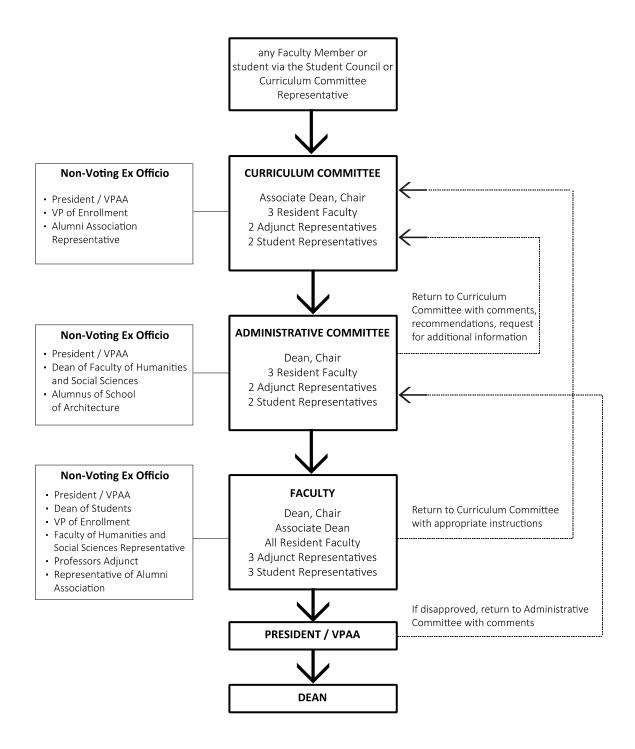
#### 5.3 Curricular Development

The program must demonstrate a well-reasoned process for assessing its curriculum and making adjustments based on the outcome of the assessment. *Programs must also identify the frequency for assessing all or part of its curriculum.* 

Assessment and development of the curriculum are ongoing processes piloted by the Curriculum Committee and led by the Chair of the Faculty (see section 5.3.2). Governance requires that certain recommendations from the Curriculum Committee be reviewed and voted on by the Administrative Committee before being sent to the faculty for discussion and vote. Minor curricular adjustments recommended by the Curriculum Committee can be implemented administratively. The Curricular Review Diagram below illustrates this process:



#### THE SCHOOL OF ARCHITECTURE CURRICULAR REVIEW PROCESS

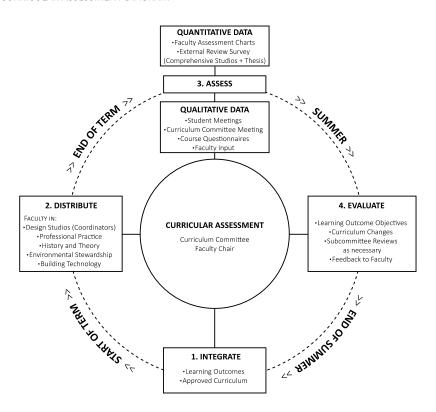




Historically, the assessment of the curriculum has been an evolving and collective process in the School of Architecture, based on regular meetings between the students, the faculty, and the main administrators, which are planned at least three times every semester. On a regular basis, both students and faculty evaluate courses, and moreover, the collected feedback is brought to the attention of the Curriculum Committee and the faculty to act and make necessary amendments. Rethinking and reframing the curriculum to address contemporary developments in pedagogical circles for inclusion, equity, and current crises has also largely impacted the formation and evolution of the curriculum. In recent years, the topics of decolonization, global history, and the urgent need to address climate change are substantial pivotal points that have shaped and driven the growth of the B. Arch. program. Nevertheless, this process has been qualitative for the most part and with the initiative of the NAAB assessment process, the School has moved towards expanding the scope and methods of assessment, encompassing in addition quantitative data and evidence-based objectives.

In particular, the assessment of the curriculum has recently begun to be regulated by the newly instituted **Curricular Assessment Cycle**, an annual process by which we assess all required courses. At the end of the semester, the Curriculum Committee holds a review of courses and student work by faculty members. Faculty assess their courses and student work, quantitatively and qualitatively. We gather quantitative data using a design studio rubric, as well as peer-reviewed external evaluation forms in both Thesis and the comprehensive design studio courses, which bring together architectural design with environmental technology, building technology, and structures. We gather qualitative data from the ongoing conversations about the value and efficacy of all courses with the student body in regular meetings administered by the acting dean and with all faculty during faculty meetings (See the Curricular Assessment Cycle Diagram below).

#### THE SCHOOL OF ARCHITECTURE CURRICULAR ASSESSMENT DIAGRAM





The assessment process intends to improve teaching and the alignment of course content to the existing curriculum. Moreover, it assesses and adjusts the curriculum to respond to changing pedagogical, logistical, and societal challenges, to emerging trends in research, culture, and practice, and to NAAB's Conditions. The following phases comprise our assessment cycle:

- 1. **Integrate:** The Curriculum Committee and the Chair of the Faculty identify, enumerate, and operationalize the learning outcomes from the curriculum, as well as the suggestions from previous course evaluations.
- 2. **Distribute:** (Beginning fall and spring) Learning outcomes inform syllabi and course content, which are distributed to course instructors.
- 3. **Assess:** Faculty collect quantitative and qualitative data for their courses and make assessments on the course content and teaching format.
- 4. **Evaluate:** The Curriculum Committee and the chair of the faculty evaluate the evidence collected from the courses during an end-of-semester curriculum retreat meeting.

**5.3.1** The relationship between course assessment and curricular development, including NAAB program and student criteria.

As a result of assessment processes, initiatives of the Curriculum Committee since our last accreditation have included:

- a) The required curriculum was restructured in the first and second years to extend the investigation of how architecture is analyzed and represented to include photography, animation, computation, and other digital tools.
- b) The introduction of the **ARCH 124A-B Environments** course sequence in the second-year curriculum to address environmental issues at the urban and building scales and to shape the architect's agency in the age of the climate crisis.
- c) Elective course offerings have been expanded to include a diversity of histories, theories, cultures, and environments as well as advanced explorations in computational methods.
- d) Expanding inter-disciplinary courses in collaboration with other schools (EID 364-1 Generative Machine Learning, VIP 38X Solar Decathlon, among others)
- e) Convergence Course: This embedded course of study illuminates the interrelatedness of building technology, construction management, and professional practice by highlighting the related content of the three courses devoted to those subjects through the study of a single project.
- f) In 2020-2021, the Curriculum Committee also defined and approved a new elective class, **ARCH 199**Independent Study. This class strengthens the school's learning and teaching culture by offering students additional opportunities for agency in their education, to work one-on-one with faculty, craft a course proposal, and develop independent research skills.
- g) **History, Theory, and Criticism (HTC)** courses have been broadened beyond Western canons by including scholarship and creative production by a wide variety of historians, theorists, designers, and artists with the hiring of new full-time faculty, adjunct faculty, and visiting faculty.

An overview of the process that implemented the amendment of the History-Theory-Criticism course sequence (5 courses):

During the 2020-2021 academic year, the Curriculum Committee's work largely focused on a comprehensive assessment of the five-course HTC sequence ARCH 115A-B Architecture History I, ARCH 125A-125B Architecture History II, and ARCH 133 Introduction to Urban History and Theories.

During the summer of 2020, a subcommittee on **HTC**, composed of the associate dean, full-time, part-time, and adjunct faculty members, was convened to critically review the existing HTC required courses. Their objective was



to address Diversity, Equity, and Inclusion (DEI) concerns and introduce a more diverse, inclusive, and global perspective on the discipline's history. The Curriculum Committee, in collaboration with members of the subcommittee, further advanced this initiative, extending through spring 2022.

During a Faculty Meeting in March 2022, the Curriculum Committee presented the proposal for the revised **HTC** sequence. Faculty members provided valuable input and feedback, primarily focusing on the sequence and chronology, and suggesting the specificity of content and terminology. Subsequently, the Curriculum Committee incorporated these suggestions and presented the revised proposal to the faculty for voting during a meeting in April 2022.

The faculty notably and overwhelmingly supported the new curriculum, with plans to implement it gradually over two years. This updated curriculum enables history and theory faculty to offer students an enriched, non-Western perspective on architectural history, encompassing regions such as India, China, Africa, South America, and other global areas with non-Western traditions. This significant change aligns with the NAAB Shared Values, particularly DEI, as well as its **Program Criteria PC.4 History and Theory** and **PC.8**.

**5.3.2** The roles and responsibilities of the personnel and committees involved in setting curricular agendas and initiatives, including the curriculum committee, program coordinators, and department chairs or directors.

The (Acting) Dean: As the academic leader of the School, the dean provides intellectual and pedagogical leadership. The Associate Dean is the chair of the Curriculum Committee. In tandem, their efforts include curriculum development, support for disciplinary and interdisciplinary exploration by students and faculty, and cultivating a supportive scholarly environment. The dean works with students, faculty, and staff to provide an exceptional architectural education rooted in history, advanced through critical thinking, and fueled by imagination, social responsibility, and excellence in design. As the administrative leader of the School, the dean works directly with the Vice President of Academic Affairs in providing strategic leadership, working within the larger context of The Cooper Union in articulating a long-term vision. The dean works with the VPAA to develop and implement an aligned strategy and budget consistent with The Cooper Union's vision, mission, institutional goals, and strategic priorities in accordance with the School of Architecture Governance. The dean fosters a climate of collaboration within the School and across The Cooper Union through positive and productive relationships with its faculty, staff, and students and with The Cooper Union's other deans to both fortify its rigorous professional schools and create opportunities for experimentation at the intersection of disciplines.

The Curriculum Committee: The Curriculum Committee consists of the associate dean (the chair), three resident faculty, two adjunct faculty representatives, and two student representatives. Ex-officio members include one alumni representative, the dean of admissions and records, and the president. The currently elected committee includes representation from the faculty teaching design, history/theory, and technologies courses.

The Curriculum Committee is responsible for the pedagogic coherence of the program's course offerings and sequence, monitoring the effectiveness of that structure, and studying, discussing, and proposing changes to it. The committee reviews recommendations from the dean, as well as formal motions from the students and faculty. It regularly establishes curriculum subcommittees that look carefully at the practices of other architecture schools (both individually and through communications and literature published by organizations such as the ACSA), at emerging trends in the profession as reflected in contacts with various professional associations (such as AIA), and at the professional literature.

**Administrative Committee:** The Administrative Committee consists of the dean (who is the chair), three resident faculty, two adjunct faculty representatives, and two student representatives. Ex-officio members include one alumni representative, the dean of HSS, and the president. As per the governance, the Administrative Committee is responsible for ensuring fair and consistent treatment of faculty members and advocates for faculty interests. It



evaluates committee reports, curricular changes, and modifications, and makes recommendations to the faculty for action. Additionally, the committee nominates members for standing committees and fills vacancies in certain positions through faculty elections.

**Studio Coordinators:** A "team teaching" model is used for design studio assignments: **ARCH 111 A-B Architectonics**, **ARCH 121A-B Design II**, **ARCH 131A-B Design III**, and **ARCH 151A-B Thesis**. All students of a given year (currently averaging twenty-eight students) work on the same design project with a team of three to four resident and adjunct faculty. The studio coordinator works with the teaching team. Together, they define the project program, set the schedule and requirements, discuss student progress, and determine the final grade. The studio coordinator's role varies depending on the studio type they coordinate. Still, in all instances, their primary role is to disseminate the NAAB program and student criteria, and curricular learning outcomes associated with their studio level to the faculty on their teaching team.

Faculty: The faculty vote to adjust, amend, and approve any changes to the curriculum as necessary. During faculty meetings and the annual assessment process, discussions are held to determine curriculum adjustments. Faculty members guide the curriculum agenda by identifying deficiencies concerning NAAB program and student criteria, as well as desired learning outcomes not currently covered in the curriculum. As described above, identifying these deficiencies or desires initiates a process where they are sent to the Curriculum Committee, which then develops a proposal to address them. The faculty then engage in further discussion, amending, and either approving or rejecting the proposal. Approved proposals are either sent to the Curriculum Committee and studio coordinators for implementation or returned to the Curriculum Committee for reconsideration and adjustment based on faculty feedback.

**Planning and Assessment Council:** The PAC, created in April 2011, reviews assessment processes at The Cooper Union and aids the Office of the President to monitor the effectiveness of planning efforts. Its mission is to identify and use a systematic set of planning and assessment guidelines and metrics to strengthen planning and decision making.

Some of its key functions are:

- To review a campus-wide assessment plan that conforms to the expected assessment standards, namely
  that activities are "useful, cost-effective, reasonably accurate and truthful, carefully planned, and
  organized, systematic and sustained."
- 2. To better align assessment measures with stated student learning outcomes and loop-closing activities.
- 3. To identify standardized surveys that produce helpful comparative data, to explore the systematic use of standard instruments, and to recommend further types of external benchmarking.
- 4. To monitor accountability for assessment activities and to produce a brief annual interpretative review that accompanies "scorecards" or dashboard reports of key performance indicators on the strategic plan. (To help in the identification of key performance indicators).
- 5. To create an annual assessment summary of the reports from each academic unit identifying aspects of a faculty's assessment performance.
- 6. To recommend the adoption of new technologies or software to lower the overhead costs of assessment and accreditation efforts.

#### 5.4 Human Resources and Human Resource Development

The program must demonstrate that it has appropriate and adequately funded human resources to support student learning and achievement. Human resources include full- and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. The program must:



### **5.4.1** Demonstrate that it balances the workloads of all faculty in a way that promotes student and faculty achievement.

The full-time, part-time, and non-confidential administrative staff of The Cooper Union are each represented by collective bargaining agents. Contracts define the terms and conditions of employment for these groups of employees. Union representatives and the Chief Talent Officer negotiate contracts on a one-to-three-year cycle in consultation with the deans.

The full-time faculty is represented by The Cooper Union Federation of College Teachers. Its current contract is in effect through August 31st, 2024. Negotiations will begin again in the Fall Semester of 2024.

The part-time faculty, both proportional and adjunct, are represented by The Cooper Union Organization of Part Timers. Its current contract is in effect through August 31st, 2023. This was extended with modifications until August 31, 2024 via a Memorandum of Agreement and is currently under negotiation.

Full-time and part-time staff, clerical, administrative, technical, and maintenance staff are represented by the Union @ Cooper Union; its current contract is in effect through August 31st, 2024.

#### Please see Appendix B. Faculty Resumés.

The faculty of the School includes six full-time faculty, four of whom are tenured. There are five proportional-time faculty at the assistant and associate professor levels. A proportional time appointment is a 2/3 full-time teaching load with proportional committee, service, and research expectations with full benefits. The full-time and proportional-time faculty together comprise the "Resident Faculty," who constitute, by governance and practice, the core, continuing faculty of the School. Many of the resident faculty have taught at the School for over twenty years. There are currently approximately fifty-eight adjunct faculty members of all ranks, including adjunct instructors and visiting professors. These adjunct faculty are both young teachers recently completing advanced study as well as senior academics and practitioners of considerable professional experience and expertise who each year assure that critical requirements of the professional degree program are met while bringing exceptional breadth to both required and elective course offerings.

Faculty teach across the undergraduate and the graduate programs: The School has a long tradition of 'team teaching' in the design studio in which recently appointed faculty, at early stages of their careers as well as those with unique professional expertise, work with faculty colleagues of greater seniority in the School as a "team" that teaches a year of students as a "studio of the whole." This system has several proven advantages: first, it gives students access to a broad spectrum of experience and background among the faculty in any given subject; second, it serves to foster a dynamic mentoring system in which senior faculty share a mastery of material and teaching experience with younger colleagues who bring contemporary positions toward theory, modes of representation, fabrication, and practice; and finally, by creating a mix of approaches and points of view, team-taught studios become a laboratory in which new exercises and methodologies can be introduced and evaluated as a shared, critical endeavor among the diverse groups of faculty.

Many adjunct faculty have taught at the School of Architecture for ten years or more. The School of Architecture Governance provides for elected representation of adjunct faculty to all standing committees and to the voting Faculty, giving adjunct faculty a critical role in the Governance of the School.

Balance of Faculty Workload to support tutorial exchange between students and teachers that promotes student achievement: A "team teaching" model is used for design studio assignments (except for ARCH 141A-B Design IV Option Studios): ARCH 111A-B Architectonics, ARCH 121A-B Design II, ARCH131A-B Design III and ARCH 151A-B Thesis. All students of a given year work on the same design project with a team of 3 to 4 resident and adjunct faculty who together define the program of the project, set the schedule and requirements, discuss student progress, and determine the final grade. ARCH 111A-B Architectonics meets eight hours per week, Design



If through **Design IV** and Thesis each meet 12 hours per week. The faculty assigned to teach **Architectonics** together provide 18 contact hours per week. The faculty assigned to teach **Design II**, **Design III**, and **Thesis** provide an average of 22 contact hours per week in each studio. The high ratio of faculty to students in studio typically guarantees that each student sees at least two studio faculty in individual desk crits each week. Most studios involve some work in groups for at least part of the semester. The distribution of lecturing, resource development, and tutoring among faculty members ensures studio faculty are available for intensive work with groups and individual students. It is also not unusual for studio faculty to meet with students outside of class hours.

For all these reasons, the Digital Team Room includes the resumés of all faculty engaged in teaching courses that are integral to meeting the requirements of the professional degree program, both resident and adjunct.

**5.4.2** Demonstrate that it has an Architect Licensing Advisor who is actively performing the duties defined in the NCARB position description. These duties include attending the biannual NCARB Licensing Advisor Summit and/or other training opportunities to stay up-to-date on the requirements for licensure and ensure that students have resources to make informed decisions on their path to licensure.

Assistant Professor Adjunct Anik Pearson AIA, LEED AP and Certified WBE business owner, is the architectural licensing advisor and, in this capacity, has taught the yearlong ARCH 154A-B Professional Practice course from the 2020-2021 academic year to the present. Professor Pearson is the founder and Principal of Anik Pearson Architect, one of only a handful of woman-owned architecture offices in the country, operating in New York City since 2001. The course is composed of two parts, "The Architect in Society," which focuses on issues and institutions in society or the community at large that architects must engage in the conception, design, and realization of a project, and "The Architect in the Office," which outlines the issues and professional structures that architects address in practice. Within the framework of the yearlong course, students are required to attend a public hearing of the New York City Landmarks Preservation Commission or a meeting of a local Community Board to research the Intern Development Program, the Americans with Disabilities Act, and New York City building codes, and to complete case studies focusing on architecture and the law. Professor Pearson also meets regularly with graduating students to offer personal and practical advice as they begin their search for postgraduate employment. She also schedules an annual lunchtime panel/workshop at which a representative of NCARB and the New York State Office of the Professions present in detail the current paths toward a New York State license and NCARB certification, with emphasis on the IDP. All students and faculty, especially those who are preparing for licensure, are invited to attend.

As a board member of the NYS Office of the Professions for Architecture since 2017, Anik Pearson has collaborated with the board to modernize the NYS Regulatory Amendments recently implemented to address the inherent bias in the licensure process that disproportionately favors the privileged. Together with the board, NCARB, and AIANYS, Anik has spearheaded initiatives to promote equitable access to Architecture Licensure for all individuals, especially those from disadvantaged and underrepresented backgrounds. These efforts include advocating for earlier ARE eligibility and recognizing summer work experience towards the AXP requirements. The board, which convenes four times a year under Professor Pearson's leadership, regularly assesses the current state of licensure and licensure requirements within NCARB and New York State. Discussions are currently underway within the board to reevaluate the existing NYS licensure criteria, encompassing aspects such as education and professional experience. Professor Pearson is currently serving a second term as the board chair.

In December 2023, Professor Pearson participated in the NCARB licensing advisor seminar titled "What Is it Worth to You? Getting Licensed and the NCARB Certificate." Most recently, in March, Professor Pearson attended the 2024 NCARB Regional Summit in Savannah, Georgia, where members deliberated on the future of licensure and ARE exams. At the summit, Professor Pearson engaged in presentations and discussions regarding diverse pathways to licensure and the potential inclusion of Competency testing for candidates in the future.



### **5.4.3** Demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement

Faculty and staff opportunities to pursue professional development that contributes to program Improvement:

#### A) Professional and Educational Faculty Development

The faculty consists of highly accomplished architects and engineers in active practice as well as emerging professionals, historians, theorists, writers, and visual artists. The professional faculty is required to meet the requirements of their registration boards for continuing education, including a minimum number of hours in coursework outside of teaching and a minimum number of hours specifically devoted to issues of health, safety, and welfare of building users. The faculty are members of a wide variety of professional organizations, including AIA, AICP, APA, ACSA, SAH, and LEED, all of which provide sources for professional development and enrichment. Professional faculty are required to present their professional work frequently to users, community boards, the NYC Landmarks Preservation Commission, the New York City Department of City Planning, the Department of Buildings, etc., as part of practice.

#### B) Resources Available to Faculty

The School of Architecture actively encourages and supports faculty in their efforts to maintain scholarly, creative, and professional research and activities, including participation in conferences and symposia. Many faculty members are invited to speak at symposia or participate in colloquia, academic conferences, and professional meetings at the local, national, and international levels. Faculty members participate as members of international design juries and in peer review processes at other institutions, and they sit on editorial and advisory boards. Faculty regularly participate in design reviews of student work at other schools of architecture.

All full-time faculty have at least two unscheduled days per week to pursue their professional and creative work. Within budget limitations, the School has supported coursework/study by faculty to develop skills for new teaching strategies. In accordance with the CUFCT contract, for any six-year period, a faculty member has the following options: (1) a full academic year sabbatical leave at 2/3 salary; (2) a one-semester sabbatical leave at full salary; or (3) two nonconsecutive one-semester sabbatical leaves at 2/3 salary. A policy allowing a one-semester leave after three years was developed in part to aid younger faculty in preparing for tenure. The Cooper Union also offers full-time faculty the opportunity to apply for unpaid leave. An initial unpaid leave of two semesters may be extended for up to a total of four years.

The following full-time faculty have taken sabbaticals or leaves since 2016:

Fall 2022: Professor Nader Tehrani

Spring 2020: Assistant Professor Nora Akawi

Spring 2017, Spring 2020: The Irwin S. Chanin Distinguished Professor Diana Agrest

Spring 2019, Spring 2021-present: Assistant Professor Lorena Del Rio

Spring 2017, Spring 2018, Spring 2019: Professor Anthony Vidler

Fall 2019, Spring 2020: Associate Professor Michael Young

Proportional-time faculty have been granted course release for special projects, such as exhibitions or special administrative responsibilities, and are provided paid medical leave when necessary.

It is the School's policy to support all faculty members in extracurricular pursuits that contribute to their effectiveness as scholars and teachers. This includes financial support (to a maximum amount depending on the dean's discretionary budget and demand) for travel to conferences at which the faculty member is presenting if such costs are not paid by others. Additionally, faculty can receive extensive, skilled support from the School of Architecture Archive in developing books to be published by the School or co-published with or by others.



Faculty can be assisted in research and in support of publication projects through student help paid by the School. This provides assistance to faculty, an invaluable experience for the student, and a means by which students can earn additional money to help offset the very high cost of living and study in New York.

Faculty, staff, and students can also apply for grant funding annually (up to \$10k) through The Cooper Union Grant Program, which is committed to providing funding for projects that enhance our students' learning experiences; our faculty's teaching, scholarship, and practice; new ideas for our future; and opportunities for our community to come together in addressing the critical societal issues of our time.

Recent 2023 Cooper Union Grants for Architecture include:

- Exploration of 'Fashioning' Different Digital Fabrication Methodologies
   Assistant Adjunct Professor Lauren Kogod with students. Amount Awarded: \$9,000
- Interdisciplinary Robotic Fabrication Course Development
   Assistant Adjunct Professor Zach Cohen and AACE Lab Director Harrison Tyler. Amount Awarded:
   \$7,500
- Interdisciplinary Symposium on Generative Methods for Architecture and Art
   Professor Sam Keene (EE) and Assistant Professor Ben Aranda. Amount Awarded: \$10,000
- Public Art as Alimentary Infrastructure
   Assistant Professor Nora Akawi and Assistant Professor Ninad Pandit (HSS) Amount Awarded:
   \$10,000
- The Cooper Union Multidisciplinary Housing Initiative
  Assistant Adjunct Professor Daisy Ames, Distinguished Adjunct Professor Guido Zuliani, Assistant
  Professor Ninad Pandit (HSS) and students. Amount Awarded: \$10,000
- Fine Lines and Shadows Drawing Group
  Assistant Adjunct Mauricio Higuera and student Asialy Bracey-Gardella. Amount Awarded: \$4,000

#### C) Research, Scholarship, and Creative Activities by Faculty Since Last Accreditation:

The School of Architecture tracks and publishes the academic and professional activities of its faculty in its weekly e-bulletin, which is broadcast to a listserv of about 25,000 people. In addition, faculty work and accomplishments are often highlighted in designated blog posts on the School's website. Faculty are also asked each year to update their dedicated page on the School of Architecture website. These means of dissemination provide evidence of our faculty's extensive ongoing research, scholarship, and professional activities.

Faculty research, exhibition, and publication projects supported by the School since 2015 include: Since the last accreditation, the School has facilitated twenty exhibitions by faculty members, published four works, and organized over 70 lectures and events featuring our esteemed faculty. For a comprehensive list, please see Appendix A Selected Events and Exhibitions

The School provides financial and administrative support for faculty to present student research and design work at design festivals, workshops, and in collaborations with other arts institutions; recent examples include:

- 2023 <u>Cooper Students</u> Build Model for <u>Tree & Serpent: Early Buddhist Art in India 200 BCE-400 BCE</u> with faculty James Lowder
- 2023 Bridging the Megacity: Cooper at the <u>Seoul Biennale</u> with faculty Nima Javidi
- 2022 Everything's on the Table <u>Tallinn Architecture Biennale</u> with Acting Dean Hayley Eber and faculty Mae-Ling Lokko
- 2022 <u>Cooper Students</u> Build Models for <u>The Project of Independence: Architectures of Decolonization in South Asia, 1947–1985 with faculty James Lowder</u>
- 2021 <u>Venice Biennale</u>: *Microcosms and Schisms of New York City* with faculty Nora Akawi, Hayley Eber, Lydia Kallipoliti, Lauren Kogod and Ife Vanable
- 2019 Shenzhen Biennale Features Cooper Students' Work with faculty Ben Aranda



- 2019 CU Architecture Graduates Exhibit Instant Lounge at the <u>Shenzhen Biennale</u> with faculty Nader Tehrani
- 2019 <u>Cooper Students</u> Build Models for <u>Toward a Concrete Utopia: Architecture in Yugoslavia, 1948–1980</u> with faculty James Lowder
- 2019 Manifold/Corps et Cadre Festival des Architectures Vives with faculty Julian Palacio
- 2019 Ibeji dieFirma, https://cooper.edu/architecture/news/material-matters with faculty Julian Palacio
- 2019 *House of Poetics*, Governor's Island <a href="https://cooper.edu/architecture/news/architecture-seminar-presents-house-poetics-governors-island">https://cooper.edu/architecture/news/architecture-seminar-presents-house-poetics-governors-island</a> with faculty Ceren Bingol

The School of Architecture also supports faculty research through the purchase of computers and making software supported by the Information Technology Department available to faculty for use on personal laptops (for noncommercial use). The School of Architecture provides full-time and proportional-time faculty with a new laptop or desktop computer on an approximately six-year rotation. Since 2016, the School has provided a total of 56 computers: 28 laptops, 28 desktop computers, and 1 tablet for faculty and staff use. Additionally, faculty and staff can use the resources of The Cooper Union Computer Center for academic and non-commercial work.

#### D) Center for Writing and Learning

The Center for Writing and Learning offers support and feedback on all types of written and spoken communication for the students, staff, and faculty at The Cooper Union. The Center facilitates new ways for faculty to learn from one another both within and across the disciplines: organizing workshops and discussions, hosting guest experts from other learning communities, and offering new forms of professional support. The Center hosts faculty development events as well as one-on-one faculty support.

**5.4.4** Describe the support services available to students in the program, including but not limited to academic and personal advising, mental well-being, career guidance, internship, and job placement.

The following support services are available to all students:

#### A) Academic Advising

Each student in the School of Architecture is assigned an academic advisor from the faculty who provides ongoing guidance throughout their time at Cooper. Advising encompasses academic or curricular matters, assistance with internships or grant applications, and guidance regarding post-graduation pursuits.

At the program level, academic advising is managed by the associate dean with the assistance of the academic administrator. Since there is only one undergraduate program, credit audit summaries showing required courses completed and overall progress are prepared for every student each semester by the academic administrator, who also follows each student's progress through the program and assures that overall course load and the specific course selections reflect an appropriate balance that will move the student forward to graduation in five years. Our advising model needs some refining, and that work is planned for the Fall 2024 semester through the drafting of an advising guideline. Currently, each advisor gets 9-10 advisees, and the associate dean meets with students to discuss unusual circumstances or the need for special considerations. Advisors in the Faculty of Humanities and Social Sciences also provide thoughtful advice to all students regarding both their required and elective course opportunities. Special attention is paid in the first-semester class **HSS 1**; HSS faculty closely monitor students' writing skills and progress and refer students to the Center for Writing and Learning as necessary should students need the one-on-one assistance with writing that the Center provides. Students are also assigned an HSS advisor if they declare an interest in meeting the requirements of an HSS minor.

Formal consideration of academic difficulties in individual courses occurs during the fifth week of classes with faculty flagging students of concern and again during the seventh week of classes with the distribution of "midsemester reports" to students. This report (of difficulties) is for notification and advice only and is not a part of the student's permanent academic record. At the end of each semester, a student whose grade point average falls



below 2.0 and/or whose grade in **Architectonics** or **Design** falls below "C" is placed on automatic academic probation; the student's record will be reviewed at a meeting of the Academic Standards Committee. Individual students could attend the meeting of the Academic Standards Committee or provide a written explanation of any relevant circumstances. The Academic Standards Committee may rescind academic probation, keep a student on academic probation, place a student on final probation, or dismiss a student. Due to the small size of the School, it is possible to give individual attention to the progress and records of all students, and information gained through informal faculty conferences aids greatly in the overall evaluation process and retention.

The dean and associate dean have open-door policies and regularly consult with students who may have questions about their academic load or difficulties in a particular course. Individual faculty members also regularly advise students on coursework and academic enrichment and support student initiatives for travel and applications for fellowships.

#### **B) Personal Advising**

The dean, the associate dean, and the faculty are available to students on an informal basis and by appointment to discuss any matters of concern, academic or personal, that students choose to bring to them. Because of the small size of the Program, the School of Architecture is a community in which students know the entire faculty, staff, and administration, and conversation comes easily.

All incoming students receive extensive academic and student life orientation through the Office of Student Affairs. The Cooper Union has limited (10 sessions per week) but effective and greatly appreciated on-campus counseling sessions that are available to all students free of charge through the Office of Student Affairs. The office also offers off-campus counseling referrals for general mental health issues as well as specific referrals for substance abuse/addiction and intimate partner violence issues. The dean of students assists students with personal, medical, emotional, or other nonacademic issues.

#### C) The Office of Student Affairs

Cooper Union offers an extensive array of student care and support resources, which can be found <u>here</u>. These are reviewed with students during orientation, and students are provided with regular reminders.

The Office of Student Affairs comprises a team of professionals who support and advocate for students at The Cooper Union. It encompasses many different services that assist and counsel students as individuals participating in a rigorous academic program. These services include career development, residence life, athletics, campus life, health and medical records, counseling referrals, student support and advocacy, student judiciary, student clubs and organizations, orientation programs, and commencement. The indispensable role that the Office of Student Affairs plays in the life of the students at The Cooper Union is addressed throughout this report.

#### D) The Center for Writing and Learning

The Center for Writing and Learning offers support and feedback on all types of written and spoken communication for the students, staff, and faculty at The Cooper Union. Writing associates are experienced classroom instructors with advanced degrees and a special interest in reading and writing pedagogy. Individual tutoring and small group workshops are offered to assist students in their writing and presentation assignments at all levels of work. The center's mission is to improve student learning across the curriculum and to support faculty in the teaching of reading and writing.

As part of orientation, all new students are required to attend workshops directed by the Center for Writing on college-level research and writing, including standards for academic integrity and what constitutes plagiarism. An essay is assigned at the end of the two-hour program, and each essay is reviewed and ranked by a team of writing associates from the center. This diagnostic essay identifies students likely to have difficulty with the writing intensive HSS core sequence. Students with a low diagnostic score are then assigned to specific sections of **HSS 1** (required of all students), where faculty provide support in coordination with the center. The Center for Writing also informs the appropriate academic dean of each student who needs support in reading and writing work.



Students for whom English is their second language (ESL), with deficiencies in reading and writing, are assigned to ongoing sessions with tutors who have expertise in this area. Identifying students with ESL is part of the diagnostic writing assignment given during orientation. Students who participate in ESL support at the Center for Writing ideally meet with their tutors three times per week. Those students identified with development and writing issues are also assigned to regular, ongoing sessions with the Center for Writing senior associates meeting three times per week. These students are tracked through grades and regular reports prepared by writing associates sent to the individual students, their appropriate faculty, and their dean, if necessary. Students who cannot meet the demands of the rigorous, college-level HSS core will sometimes be referred to external English language instruction.

The Center for Writing and Learning also assists students in writing grant and fellowship applications, including the Benjamin Menschel Fellowship Program (administered by the Faculty of Humanities and Social Sciences) and the Fulbright U.S. Scholar Program. With the extraordinary help of the Center for Writing, twenty-nine School of Architecture students have been awarded Benjamin Menschel Fellowships.

#### E) Internship and Job Placement:

Beyond the two-semester Professional Practice course that each student in the program takes in fifth-year, The Cooper Union maintains a <u>Center for Career Development</u>, which has tailored programs that assist the School's students and graduates with job search basics, internet resources, licensure, grants and fellowships, and options for graduate study. The Center for Career Development, in coordination with the Architecture Office, also actively maintains contacts with the School's alumni to alert students to internship and employment opportunities on a part-time and full-time basis. See <u>Section 6.3 Access to Career Development Information</u> for additional information.

#### E) General

The Cooper Union is located in downtown Manhattan, one of the city's most dynamic neighborhoods, where students can take advantage of galleries, theaters, movie houses, museums, cafes, and two other universities, all within walking distance of the School. The nearby stations of two major subway lines provide easy access to all of New York City, offering students access to some of the finest collections of architecture and art in the world, unparalleled opportunities to view traveling and special exhibitions, and to fully experience citizenship in an extraordinarily diverse and vibrant world city. Students witness architecture and urban policy in the making and benefit tremendously from the rich mix of cultures, ideas, and issues always in play in New York City. Students make constant use of the cultural institutions of the city, both large (students are offered free admission to the Museum of Modern Art, discounts to most other museums, and can pay what they wish for entrance to the Metropolitan Museum of Art) and small, public and private, mainstream and on the edge. After graduation, the city offers excellent professional internship opportunities in firms that vary widely in size, focus, structure, and philosophy.

In the broader context of the students' general development as scholars, young professionals, and well-rounded individuals, the School of Architecture is a full member of the ACSA and pays the annual dues for any registered student who wishes to become a member of the AIAS to assure that all students have access to the extensive benefits of these organizations without regard to financial means. The School also respects the rights of our students to individually determine their level of involvement in these organizations.

Because of the active relationship between the School and the Architectural League of New York, the Architectural League offers memberships to our students free of charge. The Architectural League has had a prominent role in New York's artistic and civic life for more than 100 years, with programs to enhance the profession and a broader understanding of the purposes and importance of architecture in culture and civic life. Membership allows students to be free to attend the many events, lectures, and exhibitions sponsored by the League, including their Annual Student Program. The daylong Student Program includes panel discussions by a diverse group of young design professionals and two studio visits to leading firms throughout the city, followed by a reception.



The Joint Activities Committee web server handles the budget requests and accounts of the student clubs supported by funds from the committee. Currently, almost eighty clubs can apply for Joint Activities Committee funds. School of Architecture students recently secured funding through the JAC to purchase equipment and periodicals for the School of Architecture Study Collection, cover drawing supplies and costs for the Drawing Club, and host receptions following some of the student-organized lectures. Despite lacking its own athletic facilities, The Cooper Union provides students with the chance to join a year-round co-ed soccer team.

The demands of the academic programs, the fact that the institution-wide schedule leaves only a single two-hour block on Tuesday free for campus-wide student activities, the lack of adequate space for athletic activities or club meetings, the limited amount of funds available, and the small size of professional staff to help with such activities all make it remarkable that The Cooper Union has so many students who develop and participate in school-sponsored activities outside the classroom.

#### 5.5 Social Equity, Diversity, and Inclusion

The program must demonstrate its commitment to diversity and inclusion among current and prospective faculty, staff, and students. The program must:

**5.5.1** Describe how this commitment is reflected in the distribution of its human, physical, and financial resources.

Social Equity, Diversity, and Inclusion issues hold a paramount position on our agenda. This is reflected in previous sections of our report, particularly <u>Section 2: Shared Values of the Discipline</u> and Profession and <u>PC.8 Social Equity and Inclusion</u>. This discussion now centers on data and resource allocation supporting Social Equity, Diversity, and Inclusion.

Our efforts over the past five years have predominantly addressed inequities within the academic realm and the architectural discipline. We are committed to fostering a culture of equity and inclusion among our students, faculty, and staff, both within our physical spaces and in our financial allocations. We advocate for a transformation in the culture of the architectural profession and an expansion of the communities we engage with. This commitment is ingrained in our daily operations, policies, practices, communication strategies, learning methodologies, and teaching approaches. We reviewed relevant data over the past five years to determine where we have improved social equity, diversity, and inclusion through the distribution of resources and what areas we need to address as we continue to move forward in our efforts.

#### **Distribution of Human Resources**

**Students:** While the School of Architecture is committed to enhancing diversity among its students, faculty, and staff, progress has been uneven since the last accreditation report. Our recruiting and admissions policies have shown success in attracting local students from diverse backgrounds and experiences within our community, particularly those who have been historically marginalized based on race, religion, gender, sexual orientation, and disability. Consequently, our student body is now more diverse compared to the previous accreditation period, largely due to these initiatives.

We tracked the following key indicators for social equity, diversity and inclusion: gender distribution; international versus U.S. resident distribution; the percent of low-income undergraduates (Pell Grant Recipients); the percent of undergraduates who are underrepresented minority (identified as Hispanic or one or more of the following races: Black/African American, Native Hawaiian or other Pacific Islander, or American Indian or Alaska Native); and the percent of undergraduates who are New York residents in 2019, 2021 and 2023. All this data is represented in the chart below. We observed the following outcomes:

- Over the five years in review, the undergraduate enrollment averaged 129 students. Enrollment was 121 in 2019, 136 in 2021, and 129 in 2023.
- Gender distribution changed over the five years:

## NAB

- Male enrollment decreased by 17 percentage points from a high of 52% to the current 35% of undergraduate enrollment.
- Female enrollment increased by 15 percentage points from a low of 48% to the current 63% of undergraduate enrollment.
- Nonbinary enrollment increased from 0% to the current 2% of undergraduate enrollment.
- While we increased female and nonbinary enrollment, male enrollment dropped more than expected.
- For International versus U.S. resident enrollment, we were concerned with the over-enrollment of international students, which at its largest was 38% of the undergraduate population and has decreased to the current 28%. Overall, The Cooper Union averages 14% International student enrollment which the School of Architecture is considering as to whether it is a relevant benchmark. With the decrease in international student enrollment, the U.S. resident enrollment increased from 62% to 72%. This increase created opportunities associated with increases in the enrollment of underrepresented minorities and New York residents.
- Underrepresented minority enrollment (URM) increased from its lowest at 13% to its current highest at 22%. This increase is due to the increase in Hispanic enrollment from 9% to 14% and to an increase from 4% to 8% of students who identified as Black/African American or as "Black/African American and another race" (two or more races in which one race is Black/African American).
- New York residents increased by 5 percentage points from 34% to the current 39%. Overall, The Cooper Union maintains approximately 50% New York resident enrollment.
- Low-income students were steadily averaging 20% over the five years with a range from 18% to 21%.

School of Architecture	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Total Undergraduate Enrollment	121	141	136	139	129
New Students					
First-time College	17	33	26	22	25
Transfer	3	4	1	2	3
% of Enrollment by Gender					
Female	48%	52%	56%	59%	65%
Male	52%	48%	44%	41%	35%
% of Enrollment by Residency					
International	38%	32%	35%	33%	28%
U.S. Residents	62%	68%	65%	67%	72%
% of Enrollment by Ethnicity/Race					
Nonresidents (International)	38%	32%	35%	33%	28%
Hispanic/Latino	10%	10%	9%	11%	14%
Asian	19%	18%	18%	20%	22%
Black/African American	3%	3%	3%	5%	6%
White	22%	28%	26%	23%	20%
Two or more races	3%	3%	3%	4%	6%
Unknown	5%	6%	6%	4%	4%
% of Enrollment for Specific Populations					
Underrepresented Minorities (URM)(U.S. Residents)	14%	14%	13%	17%	22%
Percent of new students entering in the fall term that are <b>Low Income</b> (U.S. Residents)	15%	24%	15%	21%	18%
New York State Residents	34%	41%	38%	38%	38%



#### **Faculty and Staff:**

There is ongoing work regarding faculty diversity, but progress has been made since our last accreditation. In the past six years, we have hired four new full-time faculty members, bringing the current total to six. Three of these new hires are women [67% of tenured and tenure track faculty are now women], and all are originally from outside the United States, hailing from Greece, Spain, and Palestine. By hiring two additional faculty members in the next two years, including a new dean, we aim to enhance the diversity of our full-time faculty during this period.

We are attentive to the need for faculty demographics that reflect our student body, including international, gender, and historically under-represented populations. Student-faculty "matching" supports recruitment, mentoring, and pedagogic capacity, all of which can contribute to greater engagement and persistence. Thus student-faculty demographic "matching" is tracked to identify priorities for recruitment and hiring among Tenure/Tenure Track, Proportional and Adjunct faculty lines. We tracked key indicators for social equity, diversity, and inclusion similar to those for students. For the faculty and staff, we tracked gender distribution, international versus U.S. resident distribution, and the percentage of faculty and staff who are racially diverse and among underrepresented minorities (URM). The data below is separated by our three faculty groups: Full-Time (Tenure/Tenure Track); Proportional-Time (Full-Time Equivalent) and Adjuncts (Part-Time).

The data reported herein reflects census data pulled from the Cooper Union's Human Resources database. It is important to note that small number effects are often at play in observed trends. Please refer to the table on <a href="mailto:page">page</a> while reviewing the data below.

Of all employees, 78%, have faculty status. However, only 11% are FT, and the remainder of 67% are Proportional-Time and Adjuncts.

#### **Full Time Faculty**

Typically, primary full-time teaching assignments are designated as nine teacher credit hours per week
per semester. New full-time faculty members receive a release of 3 credits in their first term and 9 credits
over their first six semesters. This is outlined in the Collective Bargaining Agreement between Cooper
Union for the Advancement of Science and Art and the Cooper Union Federation of College Teachers
(CUFCT), covering the period from August 2019 to 2023 (pg. 24). The CUFCT also defines teacher credit
hours according to pedagogical format.

We observed diversity indicators over the five years from 2019 – 2023.

- In general, full-time Tenure/Tenure Track faculty data changes slowly given that the number of FT Tenure /Tenure Track appointments are fixed. Unlike the student data, and with the exception of 2021, the FT faculty data have been relatively stable with 6 FT faculty year to year until fall 2022 (7 FT faculty). The increase in the number of FT faculty reflects the return of the dean from administration to the faculty.
- The gender distribution of women has remained relatively stable, comprising 67% of FT Tenure/Tenure-Track faculty with the exception of Fall 2022.
- In 2022 the number of FT Tenure/Tenure Track women faculty remained the same (4) however the number of male faculty increased by 1 (3) yielding an increase in total FT faculty, from 6 to 7. Because of this increase in FT faculty a shift in gender rates is noted, from 67% to 57% women and 33% to 43% men.
- In Fall 2023 FT Tenure/Tenure Track faculty fell to 6 due to the passing of an esteemed full time male faculty member. Thus, the composition of the faculty returned to 67% women and 33% men. We are currently seeking to fill this position. New Tenure/Tenure Track recruitment and hire will have bearing on the gender balance of FT faculty.
- Notably in Fall 2022, Dean Tehrani stepped down and returned to the full-time faculty from a classification of "Administration." This contributes to the observed increase in FT male faculty by one, and accompanying shifts in percentage of male FT faculty.
- The percentage of underrepresented minority FT Tenure/Tenure Track faculty has remained 0%. Changing this data will only happen gradually due to openings in this line.



#### **Proportional Faculty**

Proportional faculty are non-tenured and full-time equivalent, although their teaching load is 2 courses per semester. A proportional-time appointment is a 2/3 full time teaching load with proportional committee, service and research expectations. Proportional-time faculty may have appointments from one to five years and receive full benefits. They bring unique skills and experience to the school but because their appointments are variable, may introduce slight shifts in demographics. (Of note, The Cooper Union is slowly phasing out the Proportional Faculty classification).

- Proportional faculty remained constant from 2019 2023, although in 2019 and 2020 there were 3 women and 1 man among the proportional faculty, so 67% female to 33% male. In 2021 one white male left the institution and was replaced by one Hispanic male and one male faculty of two or more races. This resulted in a composition of 50% women to 50% men which persists in 2021, 2022, and 2023.
- The change in the composition of the proportional faculty in 2021 was accompanied by a change in demographic composition 50% Hispanic/Latino and 50% two or more races.
- This change resulted in a diversity gain.

#### **Adjunct Faculty**

Thus, to explore gains in the diversity of race and ethnicity, we are particularly attentive to the Adjunct faculty who are appointed annually. The School of Architecture *averaged* 43 total faculty, FT (Full-Time and Proportional-Time) and Adjuncts, each year over the five-year period. It should be noted that fall 2021 was an anomalous year due to the pedagogical shifts and demands associated with the Covid pandemic. Thus, figures reported for Adjunct faculty in 2021 seem to be outliers when viewed against five-year trend patterns in the 2019-2023 period. Overall, the following data are observed:

- Increases in gender diversity are largely among Adjunct faculty. Among Adjunct faculty the percentage of men decreased from 68% to the current 45% in the five-year period (2019-2023); and the percentage of women increased from 32% to the current 55% in the same period.
- Overall, the average distribution among Adjunct faculty over the five-year period was 55% men to 45% women.
- Among Adjuncts, we observe a decrease in the percentage of international faculty, from 14% in 2019 and 2020, to an average of 6% in 2021 and 2022. This reflects a loss of 3 international faculty in that time period, also a period in which the pandemic was in effect. Recovery in the proportion of international faculty to prior levels is observed in 2023 (15%).

#### Under-represented Minority Faculty (URM) among Adjunct Faculty

URM faculty include race and ethnicity categories among U.S. Residents/Citizens who are Black/African American; Hispanic/Latino; American Indian/ Alaska Native; Native Hawaiian/Pacific Islander; or two or more races one of which is among the aforementioned groups.

- The diversity of the faculty is determined on the basis of self-report data. The percent of minority Adjunct faculty was determined by the percentage of persons identifying as U.S. Citizens/Residents and as Black/African American or Hispanic/Latino (there were no American Indian/Alaska Native or Native Hawaiian/Pacific Islander among the faculty). There was no breakdown of race/ethnicity among the "two or more" races category.
- The Percent of Black /African American PT faculty fluctuated in the period 2019, 2020, and 2021 from 4% (2019) to 3% (2020) to 5% (2021). Black/African American PT faculty are not indicated in 2022 and 2023.
- The percentage of Hispanic/Latino part-time faculty remained fairly constant between 2019 2022 (7%, 6%, 7%, and 7%). Notably, in 2023 the percentage of Hispanic/Latino part-time faculty increased to 9%.
- Over the five years, the percentage of URM part-time faculty averaged 9%.
- Notably, in fall 2021 and fall 2023 reporting of race and ethnicity as "unknown" was higher than in 2019, 2020, and 2022.



As of this reporting (after Census), there is interest in addressing "blanks" in race/ethnicity self-report data by ensuring that data is collected and once collected, entered into the Human Resources data system. This will address "blanks" regarding race and ethnicity that are currently in the data system.

For instance, in 2023-2024 there were four faculty believed to be African American/Black U.S. residents for whom race/ethnicity were either not indicated or indicated as "unknown" at the time of Census. At the time of this writing, because of the drop in representation in 2022-2023 and 2023-2024 we revisited the demographic status of the four faculty with the Human Resources office. In reviewing their files, three faculty were identified with **Self Report ID Forms** indicating "Black/African American."; The status of two of them was confirmed as a US Citizen (we are pending the other two). We double checked this data against the Census file and found their status' were not indicated (and in once case indicated as "unknown").

- Had the confirmed data for the two faculty been appropriately entered, the percentage of African
  American/Black faculty in 2023 would have been 6% and comparable to that reported in 2021 (5%). Had
  the race and ethnicity of all three-faculty been verified and entered in 2023 a gain from 5% to 10% would
  have been observed. This latter data finding would reflect the gain of an additional African
  American/Black faculty (from 2 in 2021 to 3 in 2023) in a smaller PT faculty pool (from 43 in 2021 to 33 in
  2023).
- Small gains are suggested in light of this data, from 1 African American/Black PT faculty being reported in 2019, 2020; 2 African American/Black PT faculty in 2021; and potentially 3 African American/Black PT faculty counted in 2023.

Additionally, there is need to specify race and ethnicity among faculty of "two or more races." Although faculty of "two or more races" cannot be counted in a racial/ethnic category by Federal standards, should one race be an underrepresented population they can be counted among "URM," a social construct.

Diversity of perspective, experience, and viewpoint is enhanced by international faculty. They bring global diversity adding to the vibrancy of discourse in the School of Architecture. As mentioned, international faculty hail from Greece, Spain, Palestine, Mexico, South Africa, Colombia, Iran, Argentina, Ghana, and Canada amongst other countries.

#### **Administration and Staff**

- On average, among FT administration and staff, women comprise 55% of FT administration and staff and on average, men comprise 45% of FT administration and staff. Aside from 2021, the number of women administration and staff has been steady, and there are currently 3 FT women among administration and staff, comprising 50% of the total.
- The full-time Administration and non-faculty staff numbers and demographics are largely consistent, averaging 7 FT staff, 14% Hispanic, and 86% White.
- There was a slight increase in FT staff from 0% to the current 2%, also identifying as Hispanic/Latino.
- The distribution of international staff to U.S. residents was stable in the five-year period.

The table below reflects the demographics of the School of Architecture Faculty and Staff from 2019-2023.

# MAB

	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Full-Time Faculty	6	6	6	7	6
% by Gender					
Female	67%	67%	67%	57%	67%
Male	33%	33%	33%	43%	33%
% by Residency					
International	33%	33%	33%	29%	17%
U.S. Residents	67%	67%	67%	71%	83%
% by Ethnicity/Race					
Nonresidents (International)	33%	33%	33%	29%	17%
White	67%	67%	67%	71%	83%
Proportional Faculty	4	4	4	4	4
% by Gender					
Female	67%	67%	50%	50%	50%
Male	33%	33%	50%	50%	50%
% by Residency					
U.S. Residents	100%	100%	100%	100%	100%
% by Ethnicity/Race					
Hispanic/Latino	34%	34%	50%	50%	50%
White	33%	33%			
Two or more races	33%	33%	50%	50%	50%
Adjunct Faculty	28	35	43	29	33
% by Gender					
Female	32%	34%	53%	48%	55%
Male	68%	66%	47%	52%	45%
% by Residency					
International	14%	14%	5%	7%	15%
U.S. Residents	86%	86%	95%	93%	85%
% by Ethnicity/Race					
Nonresidents (International)	14%	14%	5%	7%	15%
Hispanic/Latino	7%	6%	7%	7%	9%
Asian	7%	6%	5%	3%	9%
Black/African American	4%	3%	5%	0%	0%
				See explanation for the	nese data in URM Tex
White	57%	60%	58%	55%	52%
Two or more races	4%	3%	9%	3%	3%
Unknown	7%	9%	12%	7%	12%
Full-Time Administration	7	8	7	7	6
and Non-Faculty Staff			-	-	
% by Gender					
Female	57%	50%	43%	57%	50%
Male	43%	50%	57%	43%	50%
% by Residency					
International					
U.S. Residents	100%	100%	100%	100%	100%
Nonresidents (International)					
Hispanic/Latino		12%	14%	14%	17%
Black/African American				14%	
White	100%	88%	86%	71%	83%
Part-Time Administration	3	1	1	1	0
and Non-Faculty Staff			_		,
% by Gender					
Female	67%	100%	100%	100%	
Male	33%				
% by Residency					
U.S. Residents	100%	100%	100%	100%	
% by Ethnicity/Race					
Hispanic/Latino	33%				
White	67%	100%	100%	100%	



**Physical Resources:** The Cooper Union is dedicated to fostering an inclusive environment where all students are prepared to live, learn, and work among people who experience the world in fundamentally different ways. The College is committed to providing a supportive environment for students with disabilities as well as complying with all applicable provisions of the Americans with Disabilities Act (ADA), as amended, and Section 504 of the Rehabilitation Act of 1973. The College ensures reasonable accommodations and adjustments to policies, practices, and procedures to meet the needs of students with disabilities on campus and support their success. The School of Architecture works closely with the Office of Disability Services.

The commitment to accessibility has been part of The Cooper Union's mission since its founding. Since its inception, Cooper Union was made free for the working classes and opened its doors to women as well as men. Mindful of gender identity and equity, The Cooper Union made national news in the spring of 2016 when it became the first college in the country to remove gendered signs from all its bathrooms. The Cooper Union has always been ahead of our time and is a leader on social justice issues.

Additionally, since our last accreditation, we have implemented several additions and modifications to the Foundation Building to enhance accessibility. These include:

- Relocating the Paul Laux Digital Architecture Studio on the 7<sup>th</sup> floor, which included a room with steps, to space all on one level.
- Making the Great Hall ADA Accessible by adding a compliant access ramp at the entry on the lower level and in the Great Hall to access the Green Room.
- Raising the floor of the Green Room and ensuring the bathroom is now ADA compliant.
- Installing a power assist door at the main entrance to the Foundation Building on the ground level, meeting both ADA and NYC Landmarks Preservation Commission requirements.
- Installing a new ADA bathroom in the library on the ground floor.
- Retrofitting an existing lavatory on the third floor with ADA fixtures, fittings, and accessories.

**Financial Resources:** As discussed in **Section 5.7 Financial Resources**, in 2018, The Cooper Union's Board of Trustees approved The Cooper Union Plan to Return to Full-Tuition Scholarships for all undergraduate students by 2028. Since then, the focus has been on implementing and monitoring the plan's progress, financial priorities, and timeline. Halfway through the plan period, we are positive and on track, having met the plan's cumulative financial targets. The Cooper Union's tuition-free model showcases that eliminating financial barriers to education can foster access, retention, and persistence to graduation and cultivate intellectual rigor, drive, curiosity, innovation, and talent among diverse students. By removing financial barriers, The Cooper Union can enroll students with a range of educational and social experiences to enrich discourse and pedagogy within The Cooper Union's School of Architecture.

In addition to the plan outlined above, The Cooper Union has committed significant resources to addressing equity, diversity, and inclusion. The Cooper Union Grant Program is an annual opportunity that offers funding support for student and faculty initiatives, prioritizing certain foci, including social justice issues. Students are afforded the opportunity to translate their understanding and skills to explore critical societal issues that have resonance for people of different backgrounds, resources, and abilities. In addition, architecture-specific and interdisciplinary student groups address DEI values through their programming, exhibitions, and social events. Student groups include the Black Student Union, the Cooper Climate Coalition, and The Cooper Union Architecture Lobby Chapter. The Cooper Union's Saturday Program, the Intersectional Justice Program, and the Race and Climate Reading Group are institutional initiatives with DEI values as part of their core mission. The Saturday Program is of particular note as an early access initiative making art and architecture precollege education available at no cost to participants.

**5.5.2** Describe its plan for maintaining or increasing the diversity of its faculty and staff since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program's faculty and staff



demographics with that of the program's students and other benchmarks the program deems relevant.

The School of Architecture acknowledges the ongoing need for greater diversity among its faculty members. While women are well represented, comprising 66% of our full-time faculty and approximately 57% of our adjuncts, there remains a disparity in the representation of domestic diversity (considered by the College to be Black, Latino, or Indigenous faculty members) on our full-time faculty. Currently, our faculty embodies diversity in various aspects, with nearly 60% of the total being women and with faculty originating from diverse countries such as Iran, Italy, South Africa, Argentina, Palestine, Mexico, Bosnia, Colombia, Spain, Greece, Germany, Canada, China, Taiwan and across the U.S. Our faculty members bring a wide array of skills and expertise reflecting a broad range of perspectives, scholarships, and diversity of lived experiences.

As the School expands its full-time faculty positions, significant transformation is anticipated within the full-time faculty. In pursuit of this goal, the School will conduct two full-time faculty searches—one in AY 2024-2025 and another in AY 2025-2026—alongside the initiation of a search for a new dean in fall 2024. The dean makes the Proportional Time appointments, and one vacant Proportional Time position will be filled this upcoming academic year. These endeavors aim to proactively recruit individuals to address and rectify the School's diversity shortcomings. A "matching study" conducted in 2022 identified three smart goals. These goals provide important considerations for the upcoming hiring processes. The "matching study" is described below.

- **G1.** Increase the ethnic and racial diversity composition of The Cooper Union's faculty from 14% to 28% by increasing the hire of diverse faculty from under-represented groups in tenure/tenure-track proportional time and adjunct lines. This is a multi-year goal with progress assessed over three years. To accomplish this goal, the ethnic and racial diversity of targeted groups in the School of Architecture would need to increase from 15% to 27% assuming no changes in the composition of the tenure and tenure-track and adjunct faculty pools [that is, all diverse faculty are retained]. This increase would reflect 4 new diverse hires in the School of Architecture.
- **G2**. Offset the attrition of diverse faculty with a commensurate increase in diversity hiring targets such that, in steady state 28% of all faculty will be diverse.
- **G3.** Each slate of faculty candidates advanced for consideration in hiring will be comprised of 30% diverse, ethnically, and racially under-represented candidates.

In addition, we are in the process of building the funds for The John Q. Hejduk Endowment. This endowment is dedicated to establishing an annual faculty stipend, awarded to support an individual engaged in practice, scholarship, teaching, or research that reflects a diversity of voices, ethnicities, trajectories, and communities. Using the stipend for architectural research may result in a publication, exhibition, lecture, or other means of disseminating faculty members' work.

**5.5.3** Describe its plan for maintaining or increasing the diversity of its students since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program's student demographics with that of the institution and other benchmarks the program deems relevant.

We seek a world beyond the narrow confines of racism, but one which celebrates our diversity as critical ingredients for the social imaginary of a progressive world.<sup>1</sup> The diversity of the incoming class, in which the perspectives and experiences that students bring with them foster a vibrant, dynamic, and high-quality learning experience, is essential in preparing students to engage in complex social challenges, a mission priority in the School of

<sup>&</sup>lt;sup>1</sup> Preamble, Diversity, Equity, Inclusion + Belonging, except from *A Manifesto and Call to Action to Build A Cooper Union Free of Racial and Social Injustice*, by the Antiracist Task Force of the Irwin S. Chanin School of Architecture.



Architecture. The School of Architecture uses the Studio Test as an admission requirement to assess visual work and identify high-quality candidates for the program while mitigating over-reliance on test scores.

In 2022 when the federal Integrated Post-Secondary Data Collection System (IPEDS) clarified a more rigorous treatment of "application" such that "a complete application is one in which all required materials for admission consideration" are provided, we began to track Studio Test completion in the data system. The role of the Studio Test and its impact on selectivity and applications from diverse applicants was subsequently explored. Although an "authentic assessment" of an applicant's visual work, spatial skills, and format assures that candidates have the core competencies needed to successfully engage in the program curriculum, evidence is that the Studio Test requirement impacted the complete application pool.

Analysis would uncover that the Studio Test requirement decreased the number of applications that can be considered for admission from target groups more profoundly than among traditional college applicants. For the School of Architecture

- In 2022, 70% of URM applications were incomplete compared to 54% of non-URM incomplete. This dropped the URM distribution in the viable applicant pool from 32% URM 68% non-URM to 23% URM 77% non-URM. The yield on URM admitted was 70%.
- In 2023, 73% of URM applications were incomplete compared to 52% of non-URM incomplete. This dropped the URM distribution in the viable applicant pool from 33% URM 67% non-URM to 22% URM 78% non-URM. The yield on URM admitted was 71%.

Although the Studio Test authentically assesses an applicant's creativity and design sensibilities, it may be perceived as a high-stakes assessment, much like the SAT, among marginalized groups. The decrease in the eligible application pool is especially poignant when viewed against the small number of Common Applications from these groups to begin with.

- There are more diverse applications than admission numbers belie; and
- The Studio Test may present an unanticipated barrier to achieving greater diversity; and
- Nonetheless, yield data for minorities admitted to the School of Architecture [78% in 2023] suggests that
  The Cooper Union may be a school of choice. The question is whether the same interest prevails among
  non-test submitters.
- The Saturday Program and Summer Architecture Program prepare potential School of Architecture applicants for the rigor expected in the Studio Test.

Our Fall '24 admitted class demonstrates significant increases in underrepresented minorities (URM) by 100%, Black or African American students by 200%, and First-Generation students by 125%. Please see the table below for a detailed comparison of admitted students from 2021 to 2024. We take pride in the positive trend we are seeing in our admissions demographics.



	Architecture						
Metric	2021	2022	2023	2024	Change	2022	2023
Total Deposits	27	24	28	27	-1	13%	-4%
By Decision							
Early Decision	13	8	13	14	1	75%	8%
Regualr Decision	14	15	14	13	-1	-13%	-7%
By Gender							
Female	16	20	21	15	-6	-25%	-29%
Male	11	4	7	12	5	200%	71%
% Female	59%	83%	75%	56%			
% Male	41%	17%	25%	44%			
URM							
URM	4	8	5	10	5	25%	100%
% URM	15%	33%	18%	37%			
By Race (Students can identi	ty as more than o	one race in t	neir application	on)			
Hispanic	4	6	4	4		-33%	
Black or African American	3	5	3	9	6	80%	200%
Asian	14	11	14	9	-5	-18%	-36%
White	9	9	14	6	-8	-33%	-57%
First Generation							
First Generation	4	6	4	9	5	50%	125%
% First Generation	15%	25%	14%	33%			
International							
International	7	7	9	7	-2		-22%
%International	26%	29%	32%	26%			
New York							
NYC	7	7	7	9	2	29%	29%
% NYC	26%	29%	25%	33%			

**5.5.4** Document what institutional, college, or program policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other social equity, diversity, and inclusion initiatives at the program, college, or institutional level.

#### Next Steps to Grow Diversity of Thought, Experience, Perspective, and Approach:

There are three priorities to achieve the envisioned diversity and social justice in the School and practice of architecture that emerge from the data review and discussion:

- Increase applications from URM, Black and Hispanic students while maintaining our global and national footprint.
- Address Studio Test completion rates.
- Increase student retention, particularly in first year.

**5.5.5** Describe the resources and procedures in place to provide adaptive environments and effective strategies to support faculty, staff, and students with different physical and/or mental abilities

In addition to our Student Care and Support resources, Cooper Union offers accommodation support for all students with documented medical conditions that warrant academic accommodations. Faculty and staff are provided with detailed information on how to support students and students are provided with on-going support. Additional details can be found here.

#### 5.6 Physical Resources

The program must describe its physical resources and demonstrate how they safely and equitably support the program's pedagogical approach and student and faculty achievement. Physical resources include but are not limited to the following:



**Introduction to our spaces:** The academic campus of The Cooper Union comprises two architecturally significant buildings: the Foundation Building and 41 Cooper Square, directly across Third Avenue. The entrances of the two buildings face each other and Peter Cooper Park, which is contiguous to the Foundation Building's entrance. The Cooper Union Residence Hall at 29 Third Avenue (at Stuyvesant Street) houses approximately 180 students; all new undergraduate students can lease housing in the Residence Hall. The Office of Student Affairs is also located in the Residence Hall. The Admissions and Financial Aid offices are located at 41 Cooper Square. In addition, The Cooper Union leases one floor of an office building located two blocks away from the Foundation Building and 41 Cooper Square, at 30 Cooper Square; the Communications, Business, and Alumni Affairs & Development Offices are located here.

There are numerous resources available to The Cooper Union students within each of the School's two academic buildings. They include studio and classroom spaces as well as shop and lab spaces for making two- and three-dimensional work. The Foundation Building, conceived by Peter Cooper and designed by Frederick A. Peterson, first opened in 1859 and is a National Historic Landmark. It houses the academic programs of the Schools of Architecture and Art, The Great Hall, The Cooper Union Library, and the Office of the President. The interior of the Foundation Building, completed in 1974, is one of a small number of built projects by John Q. Hejduk, the first dean of the School. 41 Cooper Square, completed in 2010, is a LEED Platinum building designed by the Los Angeles based architecture firm Morphosis. It houses the entire program for the School of Engineering and studios for the School of Art as well as facilities for the institution as a whole: state of the art research and teaching laboratories, lecture, seminar, and studio classrooms, the Benjamin Menschel Civic Projects Lab, the Jeanette and Louis Brooks Computer Center, the Media Lab, a lecture/conference room with video-conferencing capabilities, and important public spaces such as the 41 Cooper Gallery and the Rose Auditorium. These facilities and meeting rooms are used extensively by the School of Architecture on a scheduled basis. The School also has two faculty offices in this building.

The main spaces of the School of Architecture are housed primarily on the second, third, and seventh floors of the Foundation Building. Students have access to numerous collections held in the Architecture Archive. Exhibition spaces in the School of Architecture include the Arthur A. Houghton Jr. Gallery and the Third Floor Hallway Gallery. Although the 41 Cooper Gallery is administered by the School of Art, exhibitions produced by the School of Architecture have been mounted there as well. The School of Architecture also has a large active storage space in 41 Cooper Square. The library, located on the first floor of the Foundation Building, provides broad access to its diverse collections to students, faculty, and staff of The Cooper Union. The Center for Writing and Learning, located within the library, offers support to both students and faculty. The Architecture Study Collection houses a selection of non-circulating books not available in the library.

#### **5.6.1** Space to support and encourage studio-based learning.

**Design Studios:** All students in the School of Architecture are provided with an individual workspace on the third floor of the Foundation Building. First-year through fourth-year B.Arch students share a single 8,000 sq. ft. open studio; the fifth-year B.Arch thesis class and Master of Science in Architecture students share smaller studio spaces adjacent to the main studio. This arrangement fosters a unique environment for open dialog and interaction among individual students, classes, and faculty. Each School of Architecture student is provided a full-size, adjustable table for drawing, drafting, and laptop computing, as well as individual shelving. The operable worktables, which were implemented in Spring 2019, foster movement throughout the workday, and are accompanied by ergonometric seating. Shared worktables and cutting surfaces are also located throughout the studio. The spirit of the design studio informs and permeates the entire School, and students value its communal atmosphere.

Wireless access to the internet is available in all studios. Shared PC workstations and Apple desktop computers are located on countertops along the west wall of the large studio. A printer is also available for letter and tabloid size printing.



The School does not support the practice of continuous twenty-four-hour studio access. Studios are generally open Monday – Friday, 7:30 am – 12 am; Saturday, 9 am – 9 pm; and Sunday, 9 am – midnight. Extended studio access is available during the last two weeks of the semester.

**5.6.2** Space to support and encourage didactic and interactive learning, including lecture halls, seminar spaces, small group study rooms, labs, shops, and equipment.

The Great Hall: The School of Architecture sponsors or co-sponsors lectures of professional, academic, and public importance each year in The Great Hall, a site of great historic and social significance. These lectures are free of charge to all students and faculty of The Cooper Union; most are free to the public at large. Many students, alumni, and members of the greater New York architecture community attend them. The Great Hall can accommodate an audience of 960. Recent events there include a panel discussion on the American Museum of Natural History's Richard Gilder Center for Science, Education, and Innovation (fall 2023), co-sponsored with The Architectural League of New York as well as the symposium *What Black is This, You Say?* (spring 2023), presented with Storefront for Art and Architecture.

**Frederick P. Rose Auditorium:** This is an auditorium space in 41 Cooper Square that can accommodate 200 people for public lectures of a more focused interest, special symposia, film screenings, etc. The School of Architecture has access to this space to program both public and internal events when it is not being used in coordination with the other academic divisions of the School.

Classrooms: The School of Architecture has priority scheduling over two classrooms in the Foundation Building: 315F, a tiered lecture room for 60 on the third floor, and 712F, a seventh-floor seminar classroom that also houses the Architecture Study Collection. These rooms are in constant use and are equipped with ceiling-mounted digital projectors, speakers, projection screens, and wall interfaces that allow for easy hook-up and the capacity to switch between output options. When 312F is not being used as studio space for fifth-year thesis or Master of Science in Architecture students, the space, also outfitted with the technical capacities indicated above, is used flexibly for seminars, special projects, and design studio pin-ups. A high-quality digital video camera is available for lectures to be recorded. 315F serves all lecture-style classes and the many special lectures that occur at the School (including lunchtime lectures, the student lecture series, and lectures by guests invited by the dean or curated by faculty). These lectures frequently attract several students and faculty from throughout The Cooper Union.

Classrooms for Digital Instruction: Four classrooms at 41 Cooper Square are available for scheduling by the School of Architecture: rooms 802 and 803, which are part of the Brooks Computer Center, as well as rooms 804 and 806, which are part of the Media Lab. The Brooks Computer Center houses both Dell and Apple iMac desktop computers that are installed with the latest software for video, animation, 3D design, and simulations. The Media Lab provides Apple desktop computers running macOS and Windows platforms, each featuring a full array of software for work in graphic design, video and animation, coding and programing, 3D design, and more. When not being used as classrooms, these spaces are open to students, faculty, and staff from all three schools and support the curricular and media production needs of students, faculty, and staff campus wide.

Having access to these classrooms allows the School of Architecture to develop The Paul Laux Digital Architecture Studio (description below) more effectively for design studio-related use, although the Digital Architecture Studio can serve as a demonstration classroom as well.

**The Cooper Union Library:** For over 160 years, The Cooper Union Library has served the creative, intellectual, scientific, and technical work of The Cooper Union community and beyond. The library's collections and services, which focus on the visual arts, architecture, and engineering as well as the humanities and social sciences, are designed to inform and enrich the College's teaching, learning, research, and professional practice. *Please see an extensive description of the library under section 5.8 – Information Resources*.



**Architecture Study Collection:** The School of Architecture has fostered the growth of a non-circulating Study Collection of books and periodicals that are not otherwise accessible through The Cooper Union library system. Students use the room for quiet reading and study when it is not being used for seminar classes and meetings. The Study Collection is sometimes administered by students for use in the after-class hours.

The Art and Architecture Sculpture Shop: The outstanding all-college sculpture shop is located on the fourth floor of the Foundation Building. Integral to the School of Architecture's program and pedagogy, the shop supports opportunities to create a wide range of three-dimensional work at all scales. The shop includes machinery for wood and metalworking, mold-making, bronze casting, and projects using wax, clay, plaster, and some plastics. Whenever the shop is open, professional staff are available for technical and creative consultation with students.

**AACE Lab:** The IDC Foundation Art, Architecture, Construction, and Engineering (AACE) Lab, which opened in 2021 and is located on the fourth floor of the Foundation Building, is an advanced fabrication resource offering a wide variety of new digital fabrication tools to all current students at The Cooper Union. The AACE Lab is open for inperson student use and is a self-service resource, meaning that students operate all equipment themselves. In addition to offering a variety of both stand-alone and in-class workshops, the lab serves as a collaborative space for developing initiatives between schools, which engage emerging technologies from a cross-disciplinary perspective. The lab also has a robust staff of professional and student technicians.

IT Lab – The Paul Laux Digital Architecture Studio: The Digital Architecture Studio, located on the seventh floor of the Foundation Building, is a full-service computer lab and classroom space open to all Cooper students, faculty, and staff. The program of the space is specifically intended to support a design studio curriculum that recognizes the use of computing as an instrument of both theory and practice and which urges students to explore its formal and cultural implications. The lab provides standard PC workstations and render stations, as well as Apple desktop computers running macOS and Windows platforms. All computers feature a full array of software for work in 3D design, graphic design, video, animation, photogrammetry, programming, and more. The Digital Architecture Studio also offers scanning, large-format printing, and 3D printing tools for student research and projects. Students from the School of Architecture can check out a digital camera, light kit, and black backdrop for 24-hour periods. The lab is staffed by a dedicated team of professional and student workers.

Software downloads are available for student laptops and computers for use with a cooper.edu e-mail address. This allows students to use the software on their own laptops wherever they choose to work. All software used by the students is continuously upgraded to the latest version as necessary in coordination with the Department of Information Technology, which maintains all workstations on a regular upgrade or replacement cycle.

IT Lab – The Media Lab: In addition to the Media Lab's role as a classroom for digital instruction, it is also a full-service computer lab open to all The Cooper Union students, faculty, and staff. The space, which is located on the eighth floor at 41 Cooper Square, provides Apple desktop computers running macOS and Windows platforms, each featuring a full array of software for work in graphic design, video and animation, coding and programming, 3D design, and more. The Media Lab also offers scanning, printing, and 3D tools to further student research and projects. The lab is staffed by a dedicated team of professional and student workers.

**IT Lab – Brooks Computer Center:** In addition to the Computer Center's role as a classroom for digital instruction, a portion of the space, located on the eighth floor at 41 Cooper Square, houses PC and Mac desktop computers that are installed with the latest software for video, animation, 3D design, and simulations. The space is managed by The Cooper Union staff and a team of dedicated student workers, who provide a first line of IT helpdesk support for all students, faculty, and staff in all three schools.

The Benjamin Menschel Civic Projects Lab: In 2022, after space in 41 Cooper Square formerly rented by a private preschool became available, Cooper established the Benjamin Menschel Civic Projects Lab, along with a new student information and admissions center called the Hub. Funded by the generosity of the Menschel family—longtime supporters of interdisciplinary work at Cooper—the Civic Projects Lab is an all-in-one classroom,



workspace, and public showcase for interdisciplinary projects aimed at civic-focused issues. The lab was designed to facilitate engagement with the surrounding New York City community and can be viewed and entered from Third Avenue where it anchors one corner of 41 Cooper Square.

The lab was constructed around three "zones." The most public of these, just inside the large, street-level windows, acts primarily as meeting space, with seating and tables of different shapes that, if desired, can be fit together to form one unit. The zone furthest from the windows has standing workbenches for collaborative production. The two zones are separated by the third presentation area, which is made up of a sectioned pinup wall. The sections can pivot to allow traffic between the front and back. Additional presentation space is provided via an undulating surface hanging from the ceiling, where images can be projected. To date, the space has been used for projects that partner with local nonprofits as part of the popular "Data Science and Design Projects for Social Good" taught by Professor Sam Keene from the School of Engineering, "Generative Machine Learning," taught by School of Architecture Professor Benjamin Aranda and Professor Keene, and numerous discussions and workshops centered on expanding interdisciplinary thinking at The Cooper Union. The lab is also used for design studio and seminar reviews when space within the School of Architecture is unavailable.

**School of Art:** The School of Art has programs in animation, drawing, film, graphic design, painting, photography (film and digital), print-making, typography, and new media. The School maintains outstanding workshops and facilities for instruction and advanced work in this full range of techniques and media. Classes in the School of Art are open to School of Architecture students as space allows, which gives our students access to the renowned faculty and exceptional facilities of the School of Art. Many of our students take full advantage of this opportunity.

Arthur A. Houghton Jr. Gallery: Named for Arthur A. Houghton Jr., a former trustee and chairman of The Cooper Union, this 1,800 sq ft gallery supports the School of Architecture's pedagogy through public exhibitions and events. For over 40 years, architects, photographers, painters, builders, and the School's faculty and students have exhibited their work here, drawing viewers from schools of architecture, professional design communities, and the public. The Architecture Archive curates, designs, and installs original exhibitions in Houghton and works with collegial institutions to present jointly sponsored exhibitions. Recent Houghton Gallery exhibitions presented by the School include *Sue Ferguson Gussow: Retrospective* (2023); *Confronting Carbon Form* (2023); and *Nivola in New York: Figure in Field* (2020).

**The 41 Cooper Gallery:** An exhibition venue which primarily supports the pedagogy of the School of Art and serves as a highly visible site of artistic activity for The Cooper Union community, neighborhood, and city at large. The gallery at 41 Cooper has previously been made available to the School of Architecture for special exhibitions that might require its additional space and specific configuration. A recent School of Architecture exhibition held in this space was *Torkwase Dyson: I Can Drink the Distance* (2019).

Third-Floor Hallway Gallery: For over three decades, the School of Architecture has held exhibitions in the third-floor hallway of the Foundation Building. The hallway is roughly 115 feet long and includes six large panels on its west wall. It runs along a heavily used hallway between the School's shared design studios, classrooms, and faculty offices. The School has developed a robust hallway exhibition program, and three to four exhibitions are held in the Hallway Gallery each semester. These shows typically feature new work by faculty, invited guests, students, and material selected from the Architecture Archive's Collections. Recent hallway exhibitions have included Exhibitions Collection: 1971-1999 (2023); Beyond the Frame—SITU Research (2022); and Lyrical Urbanism: The Taipei Music Center (2022).

Please see APPENDIX E. Foundation Building Plans and Site Plan.

**5.6.3** Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.



Full-time faculty and the acting dean have private offices that support their class preparation, research, and advising needs. Proportional-time and adjunct faculty have shared office spaces, which are available to them both during the hours they teach and at other times for course preparation and research. These shared spaces can be very busy and lack significant storage space. Room 338F, formerly the office of the associate dean, is currently used for smaller meetings between faculty and students, as well as committee meetings of the School, but even with this room, there is not enough space for faculty to prepare for class or meet with students. Room 712F is also used for faculty and student meetings when not in use for seminar purposes.

All faculty have access to the facilities of the Department of Information Technology, the Paul Laux Digital Architecture Studio, the Sculpture Shop, the AACE Lab, and The Cooper Union Library for research and creative, non-commercial work. Additionally, The Cooper Union will provide software it purchases in bulk for use by faculty on personal desktop or laptop computers for non-commercial research and creative work. Faculty also have access to Office 365 for email, Teams, and the entire Microsoft Suite. All faculty have borrowing privileges at libraries that are part of Research Library Association of South Manhattan.

#### **5.6.4** Resources to support all learning formats and pedagogies in use by the program.

As outlined above, resources found within the School of Architecture and The Cooper Union have provided the School's students with the tools to engage with and utilize a myriad of technologies and ways of making. The recent completion of the AACE Lab, along with the Sculpture Shop, offers the best of the digital and analog realms, giving students the freedom to pursue their work in numerous directions. As new digital technologies and software become increasingly available, the School has ensured that students have access to them. Likewise, as presentation formats have evolved, in part, from traditional pinups to digital displays, the Department of Information Technology has provided two mobile smart boards that allow students to present their work on screens when appropriate.

An important learning format in the School of Architecture centers on large-scale construction. In each fall semester of the third-year **ARCH 135A-B Building Technology** course, led by Professor Samuel Anderson, students work in groups to analyze and assemble full-size "mock-ups" of building details for class study that are related to their design studio projects. This is an invaluable moment in a student's understanding of how buildings are constructed through hands-on experience of working with rebar, making formwork, and pouring concrete. The School has also fostered other large-scale constructions that have expanded its pedagogical objectives through outside partnerships.

The Irwin S. Chanin School of Architecture Archive: A major component supporting the pedagogical objectives of the School is the Architecture Archive. The mission of the Archive is to record the School of Architecture's pedagogy by documenting student work, to provide students with resources that augment and enhance their architectural education, and to produce informative design exhibitions, publications, events, and digital collections that enrich The Cooper Union as well as audiences in New York City and beyond.

**Documenting Student Work**: At the end of each semester, the Archive documents models and drawings selected by faculty from The Cooper Union's annual End-of-Year Exhibition, which showcases student work produced in all undergraduate and graduate design studios. This documentation is used for publications, for presenting student work to the NAAB, and for augmenting the Student Work Collection, the largest of the Archive's holdings. In 2016, the Archive initiated its Student Work Collection Digital Access Project, a five-year project supported by federal and private funding. Once completed, this project will provide free, online access to over 4,800 student projects spanning more than eight decades of The Cooper Union's architectural pedagogy. The project has been divided into two phases: phase I (2016 – 2019) addressed the collection's 30,000 analog records dating from 1930 – 2000; phase II (2019 – present) focuses on more than 32,000 of the collection's born-digital images and text collected from 2001 – 2023. As a whole, the collection documents the School's evolving and influential approach to architectural education, and online access to its material promises to enrich public understanding of American culture, history, and the democratic ideals that shape our built environment.



**Resources:** In addition to its student work documentation, the Archive maintains several collections as resources for students and faculty. As a complement to the Architecture Study Collection located on the 7th floor, the Archive also houses films, rare books, magazines, and limited-edition portfolios for student and faculty use. School of Architecture publications—many of which are coveted documents of academic significance—can be purchased through the Archive. Students receive a 10% discount on all books, and funds from book sales support ongoing publication projects. The Archive also maintains audio-visual equipment, including several digital cameras, tripods, and digital audio recording tools that are available to students for course-related work.

**Exhibitions & Publications:** The Archive coordinates, designs, curates, and installs exhibitions presented by the School of Architecture. These exhibitions are thematically tied to the School's educational objectives, bridging pedagogy and public service by enriching Cooper Union's curriculum and serving New York City's local and regional design community.

The exhibition program is extensive and diverse, featuring the work of celebrated and emerging architects, designers, photographers, painters, builders, and sculptors, as well as faculty and students. Major exhibitions are typically held twice a year, either in the School's Arthur A. Houghton Jr. Gallery or the 41 Cooper Gallery. The School's Third Floor Hallway Gallery hosts shorter, rotating shows—three to four each semester—focusing on work by new faculty, invited guests, and students, as well as material from the Archive's collections. Exhibitions span a broad range of subjects and disciplines, from emerging technologies in digital fabrication to a photographic survey of ancestral cemeteries in Kyrgyzstan. Annual End-of-Year Exhibitions, curated by faculty and students from the Architecture and Art Schools, occupy much of the Foundation Building for three weeks each May and June, drawing hundreds of alumni as well as students and faculty from local architecture schools.

The Archive also develops and produces publications affiliated with the School's pedagogy, including exhibition catalogs and an annual Thesis book assembled and edited by each graduating Bachelor of Architecture class.

**Collections:** The Archive's collections have grown organically in keeping with its evolving program. In addition to its core collection of student work, the Archive maintains a collection of photographs and records documenting the School's history of making exhibitions and related publications, which is currently being translated into an online database; an extensive blueprint collection of major works of architecture; a collection of thousands of 4 x 5 glass lantern slides formerly used by Cooper Union faculty to teach History of Architecture and Town Planning; and an assortment of photographs and negatives relating to the history of New York City's waterfront. More recent acquisitions include a collection of New York City postcards donated by Joseph Covino (1999 – 2003) and a collection of travel photos taken by architect Stanley Prowler (2006).

**Accreditation:** The Archive assembles material for NAAB accreditation reviews. This includes presenting student design projects documented by the Archive as well as sample material for selected coursework leading to a Bachelor of Architecture degree.

**Student Staff:**\_Assistance from work-study and part-time students is essential to the Archive's daily activities, which include handling archival records, documenting student work, and scanning material for exhibitions, publications, and digital collections. Students also help to construct and install the Archive's exhibitions, which is an important component of the Archive's mission and emblematic of the School's design studio culture and commitment to "learning by doing."

**Software Platforms:** The following software is available on campus in our IT Labs on computers running Windows OS:

- Adobe CC suite (all applications installed)
- Acrobat DC

## NAB

- After Effects
- Animate
- Audition
- Bridge
- Character Animator
- Dreamweaver
- Illustrator
- InCopy
- InDesign
- Lightroom & Lightroom Classic
- Media Encoder
- Photoshop
- Prelude
- Premiere Pro
- Premiere Rush
- Altair Hyperworks
- ArcGIS
- Ansys
- Aspentech
- Autodesk:
- Autocad
- 3DS Max
- Fusion 360
- Inventor
- Maya
- Recap (photogrammetry)
- Revit
- ROBOT Structural Analysis
- Blender 3D
- COMSOL 6.1
- Etabs
- HEC-RAS/HMS
- Matlab
- Microsoft Office Suite
- Rhino 7.0 + V-ray
- SAP2000
- Solidworks
- Spartan (Student and Parallel versions)
- Stata
- SuperPro
- Unity (Architecture Lab)
- Unreal Engine (Architecture Lab)

**Off-Campus Software:** If Cooper Union must return to remote learning, faculty and students will have access to software that IT normally provides on-site. Please fill out the Classroom Technology Request Form (currently closed) to request software, webcams, headsets, laptops, or additional hardware required to work remotely. If there are students in your class who will need similar hardware resources to complete their coursework, please have them email ITSupport@cooper.edu for assistance.



Faculty and Students can also directly download the following software through Cooper IT or our vendors:

- Microsoft Office 365 (including Outlook, Teams, Word, Excel, OneDrive, and more)
- Adobe Creative Cloud (School of Art Only)

To request a license: email ITSupport and cc: artschool@cooper.edu

- Altair Hyperworks
- Ansys Ansys 2021R1 is available for students to download here.
- Autodesk sign-up here with your Cooper e-mail address to download and install Autodesk apps.
- Autodesk ReCap Photogrammetry (directions for installation and licensing)
- Bentley (directions for installing and licensing)
- ETABS (Instructions for Downloading and Installing)
- Matlab sign-up here with your Cooper e-mail address to download and install Matlab.
- Rhino for Windows
- Rhino for Mac
- SAP2000 (directions for installing and licensing)
- Mirc
- Solidworks Please note: The free SDK version has been discontinued. We are working with Solidworks on an alternative to the SDK. Availability TBD. Please email ITSupport@cooper.edu with any questions.
- Zoom

#### What's AWS AppStream?

Cooper Union AWS AppStream is a fully managed application streaming service that provides students, staff, and faculty access to a full Windows desktop experience remotely via a web browser either on Windows, Mac OSX, Linux, or even a ChromeOS.

#### How do I access AWS AppStream?

You will need a valid Office365 email address for access. Not everyone has access to the platform, please ask your professor or IT if AWS AppStream is available for your class.

- The <a href="http://awscad.cooper.edu">http://awscad.cooper.edu</a> fleet is open to everyone at Cooper.
- The <a href="http://awschem.cooper.edu">http://awschem.cooper.edu</a> fleet is open to ChemE and students taking Chemistry courses who need access to the AWS software.
- You will need to be granted access to <a href="http://awssim.cooper.edu">http://awssim.cooper.edu</a> (email <a href="mailto:itsupport@cooper.edu">itsupport@cooper.edu</a> for inquiries).

#### What software is available on AWS AppStream?

The following computer resources (Fleets) are currently available. Cooper Union's Fleets are grouped according to major.

- Chemistry/ChemEng (<a href="http://awschem.cooper.edu">http://awschem.cooper.edu</a>) Control Station, COMSOL, Spartan '20, Spartan Student V8, SuperPro Designer, Parallel, Aspentech, Matlab
- Architecture/Civil Engineering/Mechanical Engineering (<a href="http://awscad.cooper.edu">http://awscad.cooper.edu</a>) Autocad, Maya, Blender, ArcGIS, Revit, Robot, Rhino 7.0 +Vray, Solidworks, Matlab, Recap, Robot Structural Analysis
- Simulation work for ME students (<a href="http://awssim.cooper.edu">http://awssim.cooper.edu</a>) Altair Hyperworks, Ansys, Solidworks, Matlab



If the program's pedagogy does not require some or all of the above physical resources, the program must describe the effect (if any) that online, off-site, or hybrid formats have on digital and physical resources.

Program Response: N/A

#### 5.7 Financial Resources

The program must demonstrate that it has the appropriate institutional support and financial resources to support student learning and achievement during the next term of accreditation.

**Overview:** In 2018, Cooper Union's Board of Trustees approved The Cooper Union Plan to Return to Full-Tuition Scholarships for all undergraduate students (the "plan"). Since its adoption, The Cooper Union has focused on the implementation and execution of the plan, monitoring its progress versus the original timeline established and the delivery of the various financial priorities established. The plan includes built-in mechanics for fiscal discipline, which enables us to sustain operations of the School with greater reliability, make ongoing investments in our academic programs, pay down our debt, adequately maintain our buildings, and withstand unexpected losses. The Cooper Union's model demonstrates that a different path, one unencumbered by tuition, can create an environment that enables intellectual rigor and develops the kind of drive, curiosity, innovation, and talent among ambitious and highly capable students, regardless of background or capacity to pay, that move society forward. It illustrates that it is possible when high-potential students come together on the same plane, without financial barriers or distinctions, to push each other to advance new thinking, new ideas, and new solutions to address the critical challenges of our time.

The plan set a goal to generate \$250 million over the 10-year plan period, promote financial resilience, invest in academic programs, and hit key financial metrics along the way. The successful delivery of these goals allows us to build the financial reserves necessary to enable the College to withstand unexpected expenses, losses, or cash flow shortages. Halfway through the plan period, we are positive and on track, having met the plan's cumulative financial targets. We are achieving steady financial gains, despite the challenges of the pandemic and the economic uncertainties that followed, increasing scholarship levels according to the plan, investing in and advancing our academic programs, and making capital improvements to our facilities, including the opening of new, interdisciplinary student spaces and critical maintenance on our historic campus buildings. The critical work against the Plan has enabled us to achieve 60% of our goal to date and nearly double our endowment by achieving structural operating surpluses for six consecutive years, laying the groundwork for achieving operating surpluses that can be sustained in the future to continue to provide appropriate institutional support and financial resources to support student learning and achievement.

In June 2024, The Board of Trustees, the members of the Free Education Committee (FEC), and The Cooper Union's leadership team published an important update on The Plan to Return to Full-Tuition Scholarships. The report, *The Plan at Five Years: Returning to Full-Tuition Scholarships*, can be found here.

Even as we work towards the return to full-tuition scholarships, the School of Architecture's operating budget increases at 2% increments annually, while salary adjustments are set at 2.5% based on union contracts for full-time faculty, part-time faculty, and staff. Each year, the School receives temporary restricted grants that fluctuate. The table below displays the budget trend over the past five years. The FY'25 budget is slightly lower due to vacancies in the Dean and one Full-Time Faculty position; these searches will convene in Fall '25, and these salaries will be reflected in the FY'26 budget.



Architecture Budget Trend											
In 000's											
	FY25		FY24		FY23		FY22		FY21		FY21
	В	udget	В	udget	В	udget	Budget			Budget	
Salaries	\$	3,130	\$	3,562	\$	3,419	\$	3,256		\$	3,111
Benefits/Taxes		1,226		1,192		1,164		1,083			980
Exhibitions		40		40		39		39			24
Instructional Materials Supplies		12		14		13		9			6
Memberships and Subcriptions		17		23		18		21			16
Professional Development		25		27		29		44			35
Student Prizes		93		73		34		21			25
Visting Lecturers		61		60		59		52			40
Other		334		252		260		334			470
	\$	4,938	\$	5,243	\$	5,035	\$	4,859		\$	4,707
Annual Increase		(5.8%)		4.1%		3.6%		3.2%			

Description of the institutional process for allocating financial resources to the professional degree program: The fiscal year spans from July 1<sup>st</sup> through June 30<sup>th</sup>, during which the program possesses full autonomy to shape its budget within an allocated total. Despite employing various budgeting models, the budgeting process remains consistent year after year.

- February: The Budget Office sends budget packages to the dean and associate dean, encompassing the
  approved budget for the current year, forecasts for actual spending, guidelines for preparing the
  subsequent fiscal year's budget, as well as institutional priorities and directives.
- March: Budget packages are returned to the budget director. A comprehensive narrative accompanying
  the proposed budget must justify all line items in alignment with articulated program objectives and
  Institutional priorities and mandates.
- March-April: All budgets are compiled to create a preliminary aggregate budget to discuss with the
  president and Board of Trustees. The dean and associate dean meet with the budget director, who in turn
  meets with the VP of finance and administration to review and discuss the proposed budget. Requests for
  new funding for new programs are discussed in detail.
- April: A finalization meeting for the budget is convened with the president, vice president for finance and administration, and budget director.
- May: The budget is ratified by the Vice President for Finance and Administration, contingent upon approval by the Board of Trustees for the aggregate budget, typically finalized at the June Board of Trustees meeting.

#### Descriptions of the expense and revenue categories over which the program has either control or

**influence:** Included within the primary School of Architecture budget are all faculty salaries (full-time, proportional time, and adjunct), administrative salaries for a dean, associate dean, director of the School of Architecture Archive, salaries for a full-time academic administrator, administrative associate, public programs and new projects director, collections manager & grants liaison, and salaries for student assistants. There are categories for instructional expenses, including field trips, honoraria for guest lecturers, the End-of-Year Show, and instructional supplies. Non-instructional expenses include travel costs, modest budgets for exhibitions and publications, non-instructional supplies, special events, advertising and publicity, recruitment (in addition to the recruitment activities of the Office of Admissions), dues for professional memberships (ACSA and AIAS), on-campus meetings and hospitality, a small annual capital budget. The School of Architecture Archive budget is included in the School of Architecture budget.

The School of Architecture has joint budget oversight with the School of Art for the Sculpture Shop. While administered by the School of Art, The Sculpture Shop has a distinct budget that can only be shifted to another



budget category in consultation with the School of Architecture. All academic divisions have some influence over how the IT Department allocates its budget through discussions of necessary software and needed upgrades or replacements of desktop computers, printers, and plotters. The program now operates two summer programs, which have allocations in the budget for expenses; however, these programs are revenue-positive.

**Description of revenue categories over which the Program has control or influence:** Currently, The Cooper Union charges 50% tuition for the School of Architecture's undergraduate professional program, 70% tuition for the graduate post-professional program, and full tuition for the preprofessional summer program, "Introduction to Architecture" for both high school (noncredit) and college (for credit) students.

Merit and need-based financial aid, in addition to the 50% tuition scholarship, is distributed through the Office of Admissions. The School of Architecture does not determine the amount nor identify the students who will be offered additional merit aid. Admission is completely need-blind. Need-based aid, besides the 50% scholarship, is determined through an analysis of the student's FAFSA form, where possible. The Cooper Union meets the full demonstrated and determined financial need of all admitted students. The School works with the Office of Admissions to recruit and fully enroll an entering undergraduate professional class of 25-29 students.

Description of the scholarship, fellowship, and grant funds available for students and faculty: Many alumni and non-alumni have supported The Cooper Union students by establishing named scholarships and fellowships. The income generated by these special funds offers vital support to deserving students.

General Financial Aid Scholarships: Arlene and Irving Tashlick, Samuel & Sally Gilman, The Laudy, William H. Okun, Arthur Loewe, Schweinberg, Alice Keteltas, Joseph N. Golding, Louis Roeth, Charles Ruby, John Marion Liptay, Benedict A. Joffe, Rudolph H. Schultz, Abraham Drabkin, Bert Weinstein, Peter Kabaskalian, Kathleen Gerla, Charles Lowry Robertson, Charles Stumpp, Estelle G. Maggin, Jaffe Family, Irwin and Lillian Appel, Michael A. Rampino, The Starr Foundation, Robert C. Bosch, Frances & Max Birnbaum, Leonard E. Trentin, Leonard W Beck, Celkupa Scholarship, Weiss '45 Scholarship, Julius Dingenthal, Clifford Warren, The Chubb Scholarship, Bank of N.Y. Minority Scholarship, Michael F. Roberti, Tina and Salvatore Guzzardi, Clyde Walker Family, Jane & Donald Deed, Myron Coe, Marvin A. Schwam, Robert Hawks, Leonard E. Trentin, David Ackerman, Anonymous Architecture Scholarship Fund, Abhiraj Bhoyar Fund, Ismar David Scholarship, John Q. Hejduk Scholarship, Maurice Kanbar Scholarship, Alice Keteltas Scholarship Fund, Beth and Arthur Kramberg Endowed Scholarship Fund, Jack and Lewis Rudin Scholarship, Parvaneh Tehrani Scholarship Endowment.

Endowments specific to The Irwin S. Chanin School of Architecture: The Irwin S. Chanin Chair, Diane Lewis (AR'76) Memorial, Manuel and Floral Fernandez, Allen Goldfischer, Architecture Future Campaign, Eleanore Pettersen Memorial Fund, Helmut Riehl, Fariba Tehrani, Situ Studio, NADAAA.

#### **Fellowships:**

- The William Cooper Mack Thesis Fellowship program was established in 2008 by John and Harriet Mack at The Irwin S. Chanin School of Architecture in memory of their son William Cooper Mack, class of 2006. William Cooper Mack Thesis Fellowships are awarded each year to support primary research and inquiry in the development of significant and original thesis projects. Ninety-four William Cooper Mack Fellowship awards have been distributed to students since 2010. Individual grants can range from \$500 to \$2,500, as the project requires. In Academic Year 2023-2024, a total of \$10,000 was awarded to four students.
- The Palmer Hayden Travel Fellowship supports travel abroad for African American students in Art and Architecture. The fund provides an average of \$2,800 annually.
- The <u>Benjamin Menschel Fellowship Program</u> to support creative inquiry was endowed by a grant from the Horace W. Goldsmith Foundation in 1994 to support work in the fields of art, architecture, design, and engineering. The program is intended to provide funding to exceptional students who propose scholarly, independent projects that will, in some way, culminate their educational endeavors at The Cooper Union and inspire and illuminate the whole community.

## NVB

- Parvaneh Tehrani Scholarship for students in The Irwin S. Chanin School of Architecture who are passionate about furthering women's participation in architecture.
- The Diane Lewis AR'76 Memorial Architecture Travel Fellowship: In Search of Civic Space is awarded to Cooper Union architecture students for summer travel between their fourth and fifth year of study. Students focus on a major recurring architectural theme of great importance to Professor Lewis—defining and designing 'civic space.'
- The <u>Art Thomson Thesis Fellowship</u> was established in 2022 to support the development of thesis projects that seek positive social and environmental change by shaping the built and natural environment in the US and around the world. The Fellowship supports informed, original, and critical student thesis propositions that extend beyond graduation to make a significant impact in the field and partake in extended discursive arenas that shape architectural discourse.
- The <u>IDC Foundation Innovation Fellowship</u> for engineering and architecture students entering their last two semesters before graduation provides a full tuition scholarship plus a \$1,000 stipend. The Fellowship is merit-based for students who demonstrate exceptional academic performance and career potential to develop innovative, interdisciplinary solutions to pressing societal needs.

Commencement awards and prizes: There are several Prizes awarded to merit students, including The Toni and David Yarnell Merit Award of Excellence in Architecture, The American Institute of Architects Medal for Academic Excellence, Alpha Rho Chi (National Professional Architectural Fraternity) Medal, The Cooper Union Alumni Association Annual Award, The Abraham E. Kazan Award, The George Ledlie Prize, The Peter W. Bruder Memorial Prize, and The Allen N. Goldfischer Memorial Award. The Irma Giustino Weiss and Snarkitecture Commencement awards are rotated annually with the School of Art.

Scholarship and fellowship opportunities from outside the School: The academic administrator alerts students to scholarships and fellowships available from professional organizations and foundations. The academic administrator advises the dean on eligibility requirements for scholarships and fellowships, works with the financial aid office in identifying students with financial needs (if applicable), assists students in preparing their applications, tracks, and formats letters of recommendation, and ensures that applications are submitted on time. This year, through the efforts of the academic administrator, 7 students received awards totaling \$30,500 from the Brooklyn AIA, Center for Architecture Foundation, Concrete Industry Foundation, KPF Traveling Fellowship program, and Professional Women in Architecture/New York Chapter.

Faculty development grants and awards (Institutional): The School of Architecture has a faculty development budget, with funds dedicated to supporting research, travel, and scholarship or full-time, proportional-time, and adjunct-faculty. In addition, the President's Office administers faculty development grants made possible by investment returns on restricted endowment accounts. All faculty are eligible to apply for grants and fellowships. Faculty, staff, and students can apply for grant funding annually (up to \$10k) through The Cooper Union Grant Program, which is committed to providing funding for projects that enhance our students' learning experiences; our faculty's teaching, scholarship, and practice; new ideas for our future; and opportunities for our community to come together in addressing the critical societal issues of our time.

Summary of any pending reductions or increases in enrollment and plans for addressing these changes: There are no plans to reduce or increase the enrollment of 150 students in the Bachelor of Architecture degree program. A class of 28-32 students is ideally suited to the team-teaching design studio model.

Summary of any pending reductions or increases in funding and plans for addressing these changes: N/A

Summary of any changes in funding models for faculty compensation, instruction, overhead, or facilities since the last visit and plans for addressing these changes: The School of Architecture is set to initiate a dean search process in fall 2024. The anticipated appointment will likely include an additional full-time faculty member and a dean's salary to the budget, likely commencing in fall 2025. Furthermore, the School has secured approval for two



full-time faculty hires to fill existing positions within two years. Raises for staff, full-time and part-time faculty mandated by union contracts will also be provided for FY 2025, but in all other respects, the budget allocated for FY 2025 is projected to see a 2-2.5% annual increase relative to the FY 2024 budget.

Summary of any planned or in-progress institutional development campaigns that include designations for the program (e.g., capital projects or endowments):

- Please see the <u>description and progress</u> for the John Q. Hejduk Endowment for Architectural Research and the Zeke Endowment.
- Capital improvement: An extensive upgrade to the Houghton Gallery is planned for the summer of 2025. This will include a new HVAC system, exhibition lighting, flooring, partitions, and A/V.

#### 5.8 Information Resources

The program must demonstrate that all students, faculty, and staff have convenient and equitable access to architecture literature and information, as well as appropriate visual and digital resources that support professional education in architecture.

The Cooper Union Library: The Cooper Union Library serves the creative, intellectual, scientific and technical work of The Cooper Union community and beyond. Our collections and services are designed to inform and enrich the College's teaching, learning, research, and professional practice, and our librarians are subject specialists who lead the Cooper community in the critical, ethical, and engaged use of information and ideas.

The library spans most of the 20,000 square foot ground floor of the School's landmarked Foundation Building. In 1972, dean of architecture, John Hejduk, designed a full interior renovation of the Foundation Building that relocated the library to the ground floor in recognition of the unifying role of the library for the academic programs of the School. While honoring Hejduk's vision, a phased renovation has begun to ensure that the library better meets the demands of the 21<sup>st</sup> century academic community it serves. In 2022, approximately 400 linear feet of shelving were removed to create four new group study areas, each with its own table, chairs, and power outlets. More space was also created in the library's atrium to provide a unique condition where the academic community could come together to interact, collaborate, and share knowledge. Modular furniture allows the atrium to transform from an individual study space into an event space where book talks, panel discussions, and archival exhibitions co-mingle with students quietly reading, studying, or just relaxing between classes. The library's atrium has played host to several School of Architecture events, including *Drawing Conversations*, a panel discussion led by with Professor Michael Young; the launch of Jose Araguez's new book *Spatial Infrastructure*, a book talk by Rachely Rotem and Phu Hoang of MODU and the launch of School of Architecture Professor Emerita Sue Ferguson Gussow's updated and reprinted book, *Architects Draw*. These events are often open to the public and attract Cooper Union alumni and architects from across New York City.

The library has become an increasingly popular destination for students of Architecture, Art, and Engineering. Since 2019 (pre-COVID closure), the number of individuals entering the library has increased by 300%. The evolving program of the library has significantly elevated its role as a critical institutional resource.

Beyond sharing physical space, the School of Architecture and The Cooper Union Library have found novel ways to collaborate. In 2023, the director of the library and the Art and Architecture Librarian worked closely with faculty member Elisa Iturbe to curate a bibliography for the exhibition *Confronting Carbon Form*. The librarians acquired and then loaned a significant number of books for the exhibition's "library." Professor Iturbe developed a unique classification system with guidance from the librarians to organize the exhibit collection, which included a total of 179 books from the library. When the exhibit travels to other locales, Cooper librarians will reach out and work with local librarians to reconstitute the exhibit library.



#### **Library Online Resources for Students:**

CU Library <a href="https://library.cooper.edu/home">https://library.cooper.edu/home</a>

CU Library links to online library databases: <a href="https://library.cooper.edu/az/databases">https://library.cooper.edu/az/databases</a>

CU Library links to online library databases specific to Architecture: <a href="https://library.cooper.edu/az/databases?s=132058">https://library.cooper.edu/az/databases?s=132058</a>

CU Library links to online journals:

https://search.library.cooper.edu/discovery/jsearch?query=contains,dbcategory,&tab=jsearch\_slot&sortby=title&vid=01NYU\_CU:CU&offset=0&journals=category,Arts\_Architecture\_Applied\_Arts%E2%94%80Architecture\_

CU Library guide to architecture research: <a href="https://library.cooper.edu/c.php?g=1062099&p=9227718">https://library.cooper.edu/c.php?g=1062099&p=9227718</a>

Further, the program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resource professionals who provide discipline-relevant information services that support teaching and research.

Since her arrival in 2022, Art and Architecture Librarian Mackenzie Williams has been working closely with the School of Architecture faculty and students to ensure that the architectural collections support the School's curriculum and independent research needs in all formats, including print, online, and visual media.

The physical book collection's greatest strength is in 20th-century architecture, theory, and criticism and includes a series of catalogues raisonnés from architects such as Louis I. Kahn, Le Corbusier, and Alvar Alto. Currently, the library is working to develop greater depth in architectural design, landscape architecture, and urban planning, with an emphasis on sustainability. Architectural collections are complemented by the library's extensive collections in art, art history, and engineering. The library also maintains a focused collection of resources that support the humanities and social science core curriculum.

The print journal collection is available for browsing and is frequently used by the School's students and faculty. Each year, an assignment is given by School of Architecture Associate Professor Adjunct Lauren Kogod in her seminar course, introducing her students to the Avery Index of Architectural Periodicals with guidance on how to track citations to print as well as online journals. While The Cooper Union Library is actively collecting and making accessible e-journals and other online information resources, it remains committed to maintaining and preserving its current collection of print architecture journals.

As mentioned, the library subscribes to several interdisciplinary and subject-specific online databases, e-journal and e-book collections, and streaming media platforms. In addition to databases such as the Avery Index, ArtStor, and the Art & Architecture ePortal, the Architecture Librarian has curated a list of high-quality open-source and publicly accessible resources for students and faculty to use—from ARCHNET to Asian Historical Architecture. ProQuest's Academic Video Online, Kanopy, and the Electronic Arts Intermix provide students and faculty with a wide array of streaming media options, in addition to extensive DVD and VHS collections.

The architecture librarian also works closely with Steven Hillyer, the Director of The Irwin S. Chanin School of Architecture Archive, to assist students with the School's "Study Collection" located in the seventh-floor seminar room. During the summer of 2023, as part of an ongoing effort, Art and Architecture Librarian Mackenzie Williams



provided insights on collection development and cataloging, including introducing the School to TinyCat, a small library management system used to maintain the collection's inventory.

The library's Archives & Special Collections has also collaborated with the School of Architecture Archive in numerous ways, as both collections continue efforts to extend their content into the public realm. Archives Librarian Mary Mann played a crucial role in adding finding aids for the Architecture Archive's Student Work Collection and Exhibitions Collection through both The Cooper Union's website and a consortium of local college libraries. The Library Archives and the School of Architecture Archive also have mounted exhibitions highlighting their collections in the library's atrium space and the Third Floor Hallway Gallery, respectively. These presentations allow increasing exposure to the archival materials available to The Cooper Union community and demonstrate the value of historical materials on an individual school and institutional level.

The Cooper Union Library is a member of the Research Library Association of South Manhattan (RLASM), a local consortium that includes the nearby libraries of New York University, The New School University, and the New York School of Interior Design. Students and faculty can check out books and access online resources on-site with their Cooper Union ID. This partnership grants The Cooper Union community entry to over 2,000 databases and a collection exceeding seven million volumes alongside outstanding film and audio libraries, all of which are remarkable resources for a college of our scale.

The library is also a member of a regional consortium called the Partnership for Academic Library Collaboration & Innovation (PALCI). PALCI membership offers an expedited interlibrary loan (ILL) service called EZBorrow. Through PALCI, Cooper Union students and faculty can access the collections of over 70 academic and research libraries.

#### 6—Public Information

The NAAB expects accredited degree programs to provide information to the public about accreditation activities and the relationship between the program and the NAAB, admissions and advising, and career information, as well as accurate public information about accredited and non-accredited architecture programs. The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the public. As a result, all NAAB-accredited programs are required to ensure that the following information is posted online and is easily available to the public.

Please see our website: https://cooper.edu/architecture/curriculum/professional-accreditation

#### 6.1 Statement on NAAB-Accredited Degrees

All institutions offering a NAAB-accredited degree program or any candidacy program must include the exact language found in the NAAB Conditions for Accreditation, 2020 Edition, Appendix 2, in catalogs and promotional media, including the program's website.

Please see our website: <a href="https://cooper.edu/architecture/curriculum/professional-accreditation">https://cooper.edu/architecture/curriculum/professional-accreditation</a>

#### 6.2 Access to NAAB Conditions and Procedures

The program must make the following documents available to all students, faculty, and the public, via the program's website:

- a) Conditions for Accreditation, 2020 Edition
- b) Conditions for Accreditation in effect at the time of the last visit (2009 or 2014, depending on the date of the last visit)
- c) Procedures for Accreditation, 2020 Edition
- d) Procedures for Accreditation in effect at the time of the last visit (2012 or 2015, depending on the date of the last visit)



Please see our website: https://cooper.edu/architecture/curriculum/professional-accreditation

#### 6.3 Access to Career Development Information

The program must demonstrate that students and graduates have access to career development and placement services that help them develop, evaluate, and implement career, education, and employment plans.

Please see our website: <a href="https://cooper.edu/architecture/curriculum/professional-accreditation">https://cooper.edu/architecture/curriculum/professional-accreditation</a>
Item 6.3 on the above webpage includes this link: <a href="https://cooper.edu/students/student-affairs/careers">https://cooper.edu/students/student-affairs/careers</a> to the Center for Career Development.

The Center for Career Development supports students in their personal, educational, and professional growth. For the students in the School of Architecture, the Center for Career Development provides one-on-one career counseling, tailored workshops and presentations, access to job opportunities, funding for professional development activities, and an Architecture Portfolio Review with professionals in the field.

One-on-one counseling is available with multiple staff members and covers a wide range of topics including, but not limited to, the following: career exploration and guidance related to helping students figure out what professional trajectories excite them the most; self-assessment; material creation and editing (resume, cover letter, portfolio); job, internship, and opportunity search strategies; documentation and more in depth review of portfolios; professional networking; interview preparation; compensation and salary negotiation; graduate school advising; etc.

In coordination with the School of Architecture, The Center for Career Development offers workshops on a variety of topics such as alternative career pathways and personal budgeting. The Center for Career Development helps to coordinate the Alumni Career Development Presentation Series, CU @ Lunch with Cooper Union Alumni. Begun in 1997, CU@Lunch with Cooper Union alumni focuses on the work of recent graduates who can speak about the vital issues they face following graduation. The program's objectives are to provide career development programming for architecture and art students by drawing on alumni expertise; facilitate the development of alumni and student learning and relationships; provide independent and faculty alumni with a professional development opportunity by offering a public platform to present their work; and create a unique intellectual forum for students, faculty and staff that focuses on topics of interest to the Cooper community. In addition to these specific workshops for the School of Architecture, The Center for Career Development runs a variety of larger events that are open to all three schools. The most notable and recent example of this would be our Pathways to Robotics Career Panel. Featuring twelve robotics professionals across various disciplines, several participants spoke about how they utilized robotics to facilitate their architectural practices.

A significant component of The Center for Career Development's mission is to provide ample access to professional and internship opportunities to students. For The School of Architecture, the Center for Career Development regularly post jobs and other opportunities internally through the student portal. The Center for Career Development also approves a wide range of relevant employers and jobs on our job board, Handshake. The Center for Career Development runs a twice-yearly Job and Internship Career Fair, where we host approximately 40-60 employers, some of which hire architecture students. In spring 2024, we launched our inaugural Architecture Career Fair Night, for students in the School of Architecture only. To further supplement the Center for Career Development's commitment to supporting students, the center manages and runs the Professional Development Fund, which awards students up to \$2,000 to pursue an endeavor that might beneficially affect their career development and trajectory. Students can apply multiple times a year, year after year. The Professional Development Fund gives students the opportunity to receive supplementary financial support for career development throughout their time at The Cooper Union. Lastly, the Center for Career Development also hosts an annual Careers in Climate Panel, allowing students to hear Cooper alumni discuss their careers as they are impacting the climate crisis.



To promote networking and mentorship, the Center for Career Development runs The Architecture Portfolio review twice a year. Students are matched with an architecture professional in the field that correlates to their interests. Each student and professional then partake in a one-on-one, one hour Zoom meeting. The professional is asked to critique the students' portfolios from a non-academic perspective, respond to questions related to the industry and their career trajectory, and serve as a mentor for the student. So far over fifty professionals, many of which are alumni, have participated.

Lastly, the Center for Career Development provides an abundance of auxiliary online resources accessible to students in The School of Architecture. Customized content is regularly updated and posted internally. Topics covered include the following: integrity and professionalism, finding and applying to jobs, resumes, cover letters, portfolios, job interviews, compensation, and licensure. A list of over eighty links to external Architecture resources is posted internally for students to see. To track and report where students in The School of Architecture end up working, the Center for Career Development manages and sends out the First Destination Survey to all graduates six months after graduation. Once the Center for Career Development collects this data, the data is then recorded, analyzed, and then reported on to not only consistently improve how The Center supports students but also to shed light on where graduates from The School of Architecture land opportunities.

#### 6.4 Public Access to Accreditation Reports and Related Documents

To promote transparency in the process of accreditation in architecture education, the program must make the following documents available to all students, faculty, and the public, via the program's website:

- a) All Interim Progress Reports and narratives of Program Annual Reports submitted since the last team visit
- b) All NAAB responses to any Plan to Correct and any NAAB responses to the Program Annual Reports since the last team visit
- c) The most recent decision letter from the NAAB
- d) The Architecture Program Report submitted for the last visit
- e) The final edition of the most recent Visiting Team Report, including attachments and addenda
- f) The program's optional response to the Visiting Team Report
- g) Plan to Correct (if applicable)
- h) NCARB ARE pass rates
- i) Statements and/or policies on learning and teaching culture
- i) Statements and/or policies on diversity, equity, and inclusion

Please see our website: <a href="https://cooper.edu/architecture/curriculum/professional-accreditation">https://cooper.edu/architecture/curriculum/professional-accreditation</a> Item 6.4 via the above link provides the listed documents. Items f. and g. are not applicable.

#### 6.5 Admissions and Advising

The program must publicly document all policies and procedures that govern the evaluation of applicants for admission to the accredited program. These procedures must include first-time, first-year students as well as transfers from within and outside the institution. This documentation must include the following:

- a) Application forms and instructions
- Admissions requirements; admissions-decisions procedures, including policies and processes for evaluation of transcripts and portfolios (when required); and decisions regarding remediation and advanced standing
- Forms and a description of the process for evaluating the content of a non-accredited degrees
- d) Requirements and forms for applying for financial aid and scholarships



# e) Explanation of how student diversity goals affect admission procedures

Please see our website: <a href="https://cooper.edu/architecture/curriculum/professional-accreditation">https://cooper.edu/architecture/curriculum/professional-accreditation</a>. Item 6.5 via the above link provides the listed documents.

- a) Application forms and instructions:
  - a. The application and admissions procedure for all first-time, first-year, and transfer applicants can be found on the apply page of the admissions section of the enrollment services website. Additional instructions specific to the Studio Test supplemental requirement can be found in the applicant portal once the test is released. All first-year applicants will submit their application through the Common App and all transfer students will apply using an application from the website. *Please see Appendix C. Additional Documentation for the Studio Test*.
- Admissions requirements; admissions-decisions procedures, including policies and processes for evaluation of transcripts and portfolios (when required); and decisions regarding remediation and advanced standing:
  - a. The required criteria for admissions to The Irwin S. Chanin School of Architecture are as follows: a completed application, \$75 application fee, letter of recommendation (1 for first-year, 2 for transfer), official high school transcript or GED certificate, official college transcripts (transfer only), SAT/ACT scores (optional), English proficiency test scores (if applicable), completed Studio Test. A portfolio is also required for all transfer applicants.
  - b. Students are admitted by the School of Architecture Admissions committee, with the administrative support of the Office of Admissions. Numerous School of Architecture faculty are involved in the admissions review process, evaluating each applicant through a holistic review process in which all components of the completed application are reviewed and considered carefully. This is done through the preliminary review round in which three faculty are assigned a group of 30+/- applicants each to review in which they will assign a numeric score to their final assessment as well as comments. After all scores have been tallied, the Admissions Committee will convene to assess, review, and discuss all components of the submission, including the addition of faculty comments and scores, before assigning a final committee score to the submission. The Admissions Committee will then make the recommendation of granting admission, denying, or waitlisting each candidate for admission. The Director of Admission for Art and Architecture manages communication with candidates.
  - c. Transfer student portfolios of admitted students are reviewed by the chair of the Admissions Committee in consultation with other members of the faculty to determine which of our curriculum requirements have been fulfilled and will decide on placement within the School of Architecture's sequence.
- c) Forms and a description of the process for evaluating the content of non-accredited degrees:
  - a. The Cooper Union does not consider transfer of credit for non-accredited programs.
- d) Requirements and forms for applying for financial aid and scholarships:
  - a. All domestic students are encouraged to submit the FAFSA to be considered for need-based aid. Additional merit-based scholarships are also available and awarded at the discretion of the director of admissions. There is no additional application process for these awards they are based on the overall merit of the applicant's submission.
- e) Explanation of how student diversity goals affect admission procedures:
  - a. The School of Architecture has many procedures in place to attract and maintain a broadly diverse student body. The Office of Admissions implements a comprehensive set of programs designed to attract students from across the globe. This includes on-campus open house events, virtual information sessions, off-campus recruitment (architecture-related college fairs, general college fairs, high school visits), and individual meetings both on and off campus with students. Special attention is paid to schools that are socioeconomically diverse and tend to educate high-achieving students. Some of these schools are art/design magnets and STEM-focused. The Admissions Office



- also works with a wide range of CBO (Community-Based Organizations) to reach out to traditionally underserved communities.
- b. In addition, The Cooper Union Saturday Program is a free program open to all New York City high school students. Classes in architecture, sculpture, painting, and graphic design are taught by The Cooper Union students, giving our students an opportunity to develop a curriculum and mentor high school students. Many students enrolled in the Saturday Program are from extremely disadvantaged backgrounds, and the program has been very successful in helping students gain admission to art and architecture schools locally and nationally. 2-3 students from our Saturday program are part of our entering first-year class, which amounts to roughly 10% of the freshmen cohort.
- c. The School of Architecture offers a five-week summer intensive "Introduction to Architecture" program for college and high school students, exposing a wide range of potential applicants to our school and pedagogy. While this program is tuition-based, scholarships are available to 10% of the total students from disadvantaged backgrounds, which usually amounts to about 9-10 per 90 enrolled students.

#### 6.6 Student Financial Information

**6.6.1** The program must demonstrate that students have access to current resources and advice for making decisions about financial aid.

The Financial Aid Office, in conjunction with the Admissions staff, assists admitted students and their families to understand the financial resources necessary for a Cooper Union education, providing assistance with all aspects of the financial aid application process and helping individual students and their families to financially plan their academic careers at the institution. Through a package of grants, loans, and self-help, The Cooper Union typically meets students' demonstrated financial need. More information about our resources can be found on our <u>financial</u> <u>aid page</u>.

Honoring Peter Cooper's belief that education should be accessible to all, our mission is to ensure that no student is deterred from attending The Cooper Union based on their financial circumstances.

- We meet 100% of demonstrated and determined financial need.
- Every admitted undergraduate student receives a half-tuition scholarship valued at \$22,275 per year, as well as need-based aid.
- For the sixth consecutive year, we are not raising undergraduate tuition.
- 2023 2024 academic year aid for undergraduate students included:
  - 100% tuition was covered by scholarship or grant aid for 47% of students
  - 85% of tuition was the average scholarship amount or grant aid received
  - 100% of students received a minimum of 50% scholarship or grant aid

**6.6.2** The program must demonstrate that students have access to an initial estimate for all tuition, fees, books, general supplies, and specialized materials that may be required during the full course of study for completing the NAAB-accredited degree program.

All admitted students receive a financial award letter and shopping sheet that summarizes all scholarships, grants, and loans. It also outlines the students' out-of-pocket contribution based on whether they will be living on/off campus. In addition, we offer a net price calculator on our <u>financial aid webpage</u> to help students determine their eligibility for aid. Significant outreach from both admissions and financial aid staff occurs post-admission to ensure students are aware of the array of options. Future anticipated cost of attendance is available for incoming students on our website <u>here</u>, and the below chart can be found <u>here</u>.

**Undergraduate Student Housing and Cost of Attendance for Architecture Students:** 



	Living With Your Family /Commuter	On-Campus Living /Residence Hall	Off-Campus Living
Tuition	\$44,550	\$44,550	\$44,550
Registration Fee	\$2,270	\$2,270	\$2,270
Books & Supplies	\$1,800	\$1,800	\$1,800
Room & Board	\$1,600	\$19,090	\$15,910
Personal	\$1,576	\$1,576	\$1,576
Transportation	\$1,040	\$700	\$1,040
Sub-total	\$52,836	\$69,986	\$67,146
*Less Half-Tuition Scholarship	(\$22,275)	(\$22,275)	(\$22,275)
Total	\$30,561	\$47,711	\$44,871

<sup>\*</sup>All students receive a half-tuition scholarship. Please visit <u>here</u> for eligibility and Satisfactory Academic Progress policy.

The Architecture Student Council introduces incoming first-year students to local art and craft supply stores in the East Village and distributes a suggested supply list during these neighborhood tours. *Please see Appendix C. Additional Documentation for an example financial award letter as well as documentation of the anticipated costs of attendance in years two, three, four, and five.* Below is the schedule of tuition and fees from the 2023–2024 Academic Year, found on our website.

# **Undergraduate Tuition:**

- The cost of tuition at The Cooper Union for the 2023–2024 academic year is \$44,550. Each admitted student receives a half-tuition scholarship valued at \$22,275 per year.
- The part-time tuition per credit is \$1,310 for the 2023-2024 academic year. Part-time students will not receive any institutional aid including half-merit scholarships, tuition assistance, institutional grants, the Innovator Scholarship, and other scholarships.

# Fees

- A mandatory student registration fee of \$1,135 per semester will be charged to each student's account for the 2023-2024 academic year. This fee is payable on acceptance of admission or registration and is nonrefundable.
- International Student Fee: International students (those who are not citizens or who are not permanent residents) are responsible for an additional nonrefundable fee of \$1,005 per semester.
- **Health Insurance Fees**: The annual cost of health insurance for the 2023- 2024 academic year is \$2,795. Students may waive this fee if they provide documentation of personal insurance.
- **Graduation Fee**: A graduation fee of \$250 is required for all students entering their first semester of their undergraduate/graduate senior year at The Cooper Union. This fee is payable upon registration for the senior year and is refundable if a student fails to meet graduation requirements that year.

#### **Special Fees**

- A \$100 late fee will be charged for past due payment each month.
- A \$25 will be charged per occasion involving a change of section or registration program.
- A fee of \$100 shall be incurred for late registration.
- A \$50 fee will be charged for returned payment, canceled checks, and insufficient funds.



# **APPENDICES**

Appendix A. Lectures and Events
Appendix B. Faculty Resumes
Appendix C. Additional Documentation
Appendix D. Program and Student Criteria Matrix



# **APPENDIX A. Selected Events and Exhibitions.**

A selection of recent events and exhibitions. Additional information about each event can be found at the associated link. All events and exhibitions can be found on <u>our website</u>.

# **Selected Exhibitions with Student Participation:**

2023 Cooper Students Build Model for Tree & Serpent: Early Buddhist Art in India 200 BCE-400 BCE

2023 Bridging the Megacity: Cooper at the Seoul Biennale

2022 Everything's on the Table Tallinn Architecture Biennale

2022 <u>Cooper Students</u> Build Models for <u>The Project of Independence: Architectures of Decolonization in South Asia,</u> 1947–1985

2021 Venice Biennale: Microcosms and Schisms of New York City

2019 Shenzhen Biennale Features Cooper Students' Work

2019 CU Architecture Graduates Exhibit Instant Lounge at the Shenzhen Biennale

2019 Cooper Students Build Models for Toward a Concrete Utopia: Architecture in Yugoslavia, 1948–1980

2019 Manifold/Corps et Cadre — Festival des Architectures Vives

2019 *Ibeji — dieFirma*, <a href="https://cooper.edu/architecture/news/material-matters">https://cooper.edu/architecture/news/material-matters</a>

# Research, Scholarship, and Creative Activities by Faculty Since Last Accreditation:

#### **Exhibitions**

#### **Kevin Bone**

Lessons From Modernism: Environmental Design Strategies in Architecture, 1925–1970 September 12 – November 29, 2015 | Arthur A. Houghton Jr. Gallery

# Débora Mesa

Ensamble Studio Inside Out March 6 – 26, 2016 | Third Floor Hallway Gallery

# Linda Pollak

Atlas of (In)Visible Spaces
October 4 – 22, 2017 | Third Floor Hallway Gallery

# **Diana Agrest**

The Making of an Avant-Garde: The Institute for Architecture and Urban Studies, 1967–1984 November 16 – December 20, 2017 | Third Floor Hallway Gallery

#### **Yasmin Vobis**

Color Space

March 15 - 30, 2018 | Third Floor Hallway Gallery

#### Ana Paula Ruiz Galindo & Mecky Reuss

Pigs, Pots and Philodendrons: Pedro y Juana April 3 – 17, 2018 | Third Floor Hallway Gallery

# Farzin Lotfi-Jam

Recent Work

September 20 – October 7, 2018 | Third Floor Hallway Gallery

# **Thorsten Helbig**

form: frei



October 16 - November 2, 2018 | Third Floor Hallway Gallery

# **Torkwase Dyson**

I Can Drink the Distance
March 26 – April 25, 2019 | 41 Cooper Gallery

# **Natalie Fizer**

Tailoring Form: A Brief History of the Template
November 19 – December 8, 2019 | Third Floor Hallway Gallery

#### Nima Javidi

One to One | 1:1 February 24 – March 13, 2020 | Third Floor Hallway Gallery

# Joshua Ramus

REX: 8,100 Tons

November 9 – December 5, 2020 | Third Floor Hallway Gallery

#### Gauri Bahuguna, Brad Samuels

Beyond the Frame – SITU Research
October 27 – November 13, 2022 | Third Floor Hallway Gallery

# **Dominic Leong**

Flow State

November 29 - December 9, 2022 | Third Floor Hallway Gallery

# Elisa Iturbe

Confronting Carbon Form

March 21 – April 16, 2023 | Arthur A. Houghton Jr. Gallery

#### **Anna Bokov**

Vkhutemas: Laboratory of Modernism, 1920–1930 April 25 – May 5, 2023 | Arthur A. Houghton Jr. Gallery

#### **Michael Young**

The Turned Room

September 6 – September 24, 2023 | Third Floor Hallway Gallery

# **Sue Ferguson Gussow**

Sue Ferguson Gussow: Retrospective
October 12 – November 17, 2024 | Arthur A. Houghton Jr. Gallery

# Jimenez Lai

Hall of Monsters

March 6 - 28, 2024 | Third Floor Hallway Gallery

# Lydia Kallipoliti

Histories of Ecological Design: An Unfinished Cyclopedia April 4 – 28, 2024 | Third Floor Hallway Gallery



#### **Publications:**

**Kevin Bone**, et al. 2014. *Lessons from Modernism: Environmental Design Strategies in Architecture, 1925–1970*. New York: The Monacelli Press.

Diana Agrest. 2018. Architecture of Nature/Nature of Architecture. San Francisco: AR+D

Susannah Drake. 2023. Coastal Urbanism and the Geophysical City. New York: The Cooper Union

Sue Ferguson Gussow. 2024. Architects Draw. Copenhagen

# **Lectures and Events:**

#### **Diana Agrest**

Architecture as a Transdiscursive Field: Theory Practice Continuum

Master of Architecture II Lecture Series | September 25, 2014 | Frederick P. Rose Auditorium

# Will Shapiro

When n>3: Visualizing Hyper-Dimensional Spaces and Objects
Guest Lecture: Computer Graphics, Image Processing & Vision | February 11, 2015 | Room 806

#### **Elizabeth O'Donnell**

Elizabeth O'Donnell
Faculty Talk | March 27, 2015 | Room 315F

#### James Lowder

2 1/2 Projects
Faculty Talk | April 10, 2015 | Room 315F

#### **Oliver Kruse**

Art and Architecture Parallel to Nature

Class Lecture: Intersections within Art, Architecture & Landscape | April 23, 2015 | Room 315F

#### **Tülay Atak** & Teddy Kofman (organizers)

Stan Allen, Alexander D'Hooghe, Susannah Drake, Kenneth Frampton & Dietmar Offenhube In the Shadow of the Megacity: Urbanization and Beyond

Symposium | September 26, 2015 | Frederick P. Rose Auditorium

# **Tamar Zinguer**

Architecture in Play: Intimations of Modernism in Architectural Toys Book Signing & Reception | February 5, 2016 | Third Floor Lobby

# Diana Agrest, Elizabeth O'Donnell, Nader Tehrani & Anthony Vidler

1968: A Frame of Reference
Discussion | November 22, 2016 | Third Floor Lobby

# Robert Levit, Débora Mesa & Dan Wood;

Design IV Roundtable: Three Platforms of Inquiry Moderated by Nader Tehrani Roundtable | March 2, 2017 | Room 714F

#### **Dan Wood**

We'll Get There When We Cross the Bridge Visiting Lecture | March 2, 2017 | Room 315F



#### Débora Mesa

Ensamble Studio Inside Out
Benjamin Menschel Professor of Architecture Lecture | March 8, 2017 | Room 315F

#### **Robert Levit**

Mass Individualism: The Form of the Multitude Visiting Lecture | March 30, 2017 | Room 315F

#### **Nader Tehrani**

Schools of Thought

Introduced by Anthony Vidler; Moderated by Florian Idenburg

Current Work | April 5, 2017 | The Great Hall

Co-sponsored with The Architectural League of New York

## **David Gersten**

Two Talks on John Hejduk, Part One: Hejduk Hamlet and the Ghost Promise – 'A Material Imagination of the Social Contract'

Faculty Lecture | April 18, 2017 | Room 315F

#### **David Gersten**

Two Talks on John Hejduk, Part Two: John Hejduk: Through the Wall – 'Zoetrope Sun' Faculty Lecture | April 20, 2017 | Room 315F

# **Benjamin Aranda**

**Trace Elements** 

Lunchtime Lecture | September 19, 2017 | Room 315F

# **Brad Cloepfil**

Case Work

The Feltman Lecture | October 18, 2017 | Frederick P. Rose Auditorium

# Diana Agrest, John McMorrough & Timothy Hyde

The Making of an Avant-Garde: The Institute for Architecture and Urban Studies 1967–1984

Moderated by Nader Tehrani

Screening and Panel Discussion | November 16, 2017 | Frederick P. Rose Auditorium

# **Andrés Jaque**

Sex and the So-Called City
Lecture | March 6, 2018 | Room 315F
Co-sponsored by Storefront for Art & Architecture

# Ana Paula Ruiz Galindo & Mecky Reuss

Pigs, Pots and Philodendrons: Pedro y Juana Visiting Lecture | March 29, 2018 | Room 315F

**Diana Agrest**, **Lorena del Rio**, Michael Marrella, Jonathan Marvel, Catherine Seavitt Nordenson & **Mersiha Veledar** *Architecture Between Environmental Change and Planning Resilience* Exhibition Roundtable | April 24, 2018 | Arthur A. Houghton Jr. Gallery

#### **Anna Bokov**

Lessons from the Social Condensers: Workers Clubs and Other Prototypes for the Mass Society



Master of Architecture II Summer Lecture Series | July 10, 2018 | Room 712F

#### **Yasmin Vobis**

*Towards a Blurry Poché*Master of Architecture II Summer Lecture Series | August 21, 2018 | Room 315F

# Ben Aranda, James Lowder & Austin Wade Smith

**Fabrication** 

In Conversation | October 2, 2018 | Room 315F

# **Diana Agrest & Michael Young**

Representation and Architectural Discourse
In Conversation | October 16, 2018 | Room 315F

# Nader Tehrani & Anthony Vidler

History as Predicament

In Conversation | November 13, 2018 | Room 315F

#### Michael Young & Igor Bragado (organizers)

Thesis Now

Symposium | December 1, 2018 | Frederick P. Rose Auditorium

Session 2 | Research Arindam Dutta, Jimenez Lai, **Farzin Lotfi-Jam** & Bryony Roberts Moderated by Nader Tehrani

Session 3 | Pedagogy Stan Allen, Scott Colman, **Cristina Goberna**, Andrew Holder & **Joan Ockman** Moderated by Eva Franch i Gilabert

Henry N. Cobb, Preston Scott Cohen, Joseph Connors, Elizabeth Diller, **Nader Tehrani** & Marion Weiss *The Predicament of Architecture*Panel Discussion | December 4, 2018 | The Great Hall
Co-sponsored with The Architectural League of New York

# **Anna Bokov & Tamar Zinguer**

The New Studio Template
In Conversation | February 5, 2019 | Room 315F

# Farzin Lotfi-Jam & Michael Young

Para-Fictions and Myths
In Conversation | March 5, 2019 | Room 315F

# Elizabeth O'Donnell & Mersiha Veledar

Female Catalysts in Architecture

Moderated by Cyrus Henry & Kevin Chow
In Conversation | March 19, 2019 | Room 315F

Mario Gooden, Samia Henni, Mpho Matsipa & Anooradha Iyer Siddiqi (Anti/Post/De)-Colonialism

Roundtable | March 29, 2019 | 41 Cooper Square Gallery



# Torkwase Dyson & Françoise Vergès

An Evening with Torkwase Dyson and Françoise Vergès
Followed by a conversation with moderators Mario Gooden & Omar Berrada
Exhibition Lecture and Reception | April 2, 2019 | The Great Hall
Co-sponsored with The Architectural League of New York

#### **Samuel Anderson & Nader Tehrani**

The Pedagogical Engagement between the Studio and the Office Moderated by Mireya Fabregas & Isaac Islas-Cox In Conversation | April 16, 2019 | Room 315F

#### **Alessandra Cianchetta**

Recent Work

Visiting Lecture | September 13, 2019 | Room 315F

# Nora Akawi, Peter Bertram, Lorena del Rio, David Gersten, Sue Ferguson Gussow, Arne Høi, Joan Ockman, Anne Romme, & Mersiha Veledar

KADK in Conversation with The Cooper Union: Pedagogies of Risk Panel Discussion | September 26, 2019 | Third Floor Lobby

**Diana Agrest**, Beatriz Colomina, Kurt Forster, Peter L. Galison, Caroline A. Jones & Sylvia Lavin *Nature of Architecture / Architecture of Nature*Moderated by Paul Lewis
Panel Discussion | October 3, 2019 | The Great Hall

# Florian Idenburg

Open Structure, Open Form Visiting Lecture | October 10, 2019 | Room 315F

#### **Vincent James & Jennifer Yoos**

Surreptitious Urbanisms
Visiting Lecture | November 7, 2019 | Room 315F

#### Elizabeth O'Donnell & Lorena del Rio

The Public Program
In Conversation | February 11, 2020 | Room 315F

# **Bryan Young**

Working Title
Visiting Lecture | February 18, 2020 | Room 315F

# **Daniel Bonilla**

TAB>|Praxis & Research
Introduced and moderated by Julian Palacio
Remote Lecture and Discussion | April 14, 2020 | Online

#### **Elisa Iturbe & Austin Wade Smith**

Human Body/Carbon City: The Environment from Two Different Scales Moderated by Kevin Chow
In Conversation | April 15, 2020 | Online



#### Elisa Iturbe & Rania Ghosn

Carbon Fictions
Discussion | September 21, 2020 | Online

# Janette Kim & Lydia Kallipoliti

Beneath the Dome and the Closed World Followed by a debate and conversation moderated by Farzin Lotfi-Jam Entanglements | September 23, 2020 | Online

#### Mokena Makeka

Experiments in Agonistic Praxis

Discussion moderated by Lauren Kogod

Visiting Lecture | October 13, 2020 | Online

#### Julián Palacio & Nima Javidi

Two Perspectives on Typology In Conversation | October 16, 2020 | Online

#### Will Shapiro & Farzin Lotfi-Jam

Extracting Urban Intelligence
In Conversation | October 29, 2020 | Online

# Diana Agrest & Lydia Kallipoliti

The Body, In Question
In Conversation | November 19, 2020 | Online

# Robert Johnson & Austin Wade Smith

Fatconomy and the Material Underground—Consume, Waste, Harvest, Produce Moderated by Lydia Kallipoliti & Areti Markopoulou Entanglements | March 9, 2021 | Online

# **Lesley Lokko** & Sumayya Vally

Counterparts: This Fragile Condition—Architecture, Autonomy, and Allegiance Elenore Pettersen Lecture | March 30, 2021 | Online

# Michael Young & Bryan Young

Sheets, Decks, Levels
In Conversation | April 2, 2021 | Online

# **Gary Bates**

Make Make Lecture | September 9, 2021 | Room 315F

# Susannah Drake

The Geophysical City
Lecture | October 5, 2021 | Room 315F

# **Diana Agrest**

The Wall and the Books Lecture | November 11, 2021 | The Frederick P. Rose Auditorium

#### Joshua Ramus



Rethinking Flexibility
The NADAAA Visiting Professor Lecture | November 18, 2021 | Room 315F

# **Brad Cloepfil**

Calling
With Dean Nader Tehrani
Lecture | January 27, 2022 | Online

#### **Stella Betts**

Thirteen Ways of Looking Lecture | February 24, 2022 | Room 315F

#### **Jonathan Tate**

Thoughts on Housing
Visiting Lecture | April 12, 2022 | Room 315F

#### **Matthew Waxman**

Animating the Tectonic Image
Followed by a discussion moderated by Sofia Mercado
Student Lecture Series | October 14, 2022 | Room 315F

# **Brad Samuels & Gauri Bahuguna**

Beyond the Frame
Followed by a discussion moderated by Mersiha Veledar
Exhibition Lecture | October 27, 2022 | Room 315F

Andrés Jaque, **Hayley Eber**, Lola Ben-Alon, Sharon Yavo-Ayalon, Andreas Theodoridis, Sonia Ralston, Sanjana Lahiri, Mitchel Joachim, Caroline O'Donnell, & **Lydia Kallipoliti** *Edible, Or; The Architecture of Metabolism Conference*Conference | November 18, 2022 | The Peter Cooper Suite

Elisa Iturbe, Kathi Weeks, Esra Akcan, Cameron McEwan, Ross Exo Adams, Matthew Soules, Ana María Durán, Catherine Ingraham, Gary Fields, & David Wengrow
Order!: The Spatial Ideologies of Carbon Modernity
Symposium | April 1, 2023 | The Frederick P. Rose Auditorium

#### **Sue Ferguson Gussow**

Architects Draw
Book Talk | November 16, 2023 | Library Atrium

# Jimenez Lai

A Litter of Monsters
Robert Gwathmey Chair Lecture | March 26, 2024 | Room 315F

# **Nahyun Hwang**

Migrating Commons
Visiting Lecture | April 4, 2024 | Room 315F

# Lydia Kallipoliti

Histories of Ecological Design: An Unfinished Cyclopedia
Book Launch and Reception | April 18, 2024 | Third Floor Lobby

# NVB

#### PC.1 Career Paths—

April 2, 2024

Eleanore Pettersen Lecture | Elizabeth Diller

October 14, 2021

<u>Lecture</u> | **T.J. Gottesdiener**: *SOM in New York: The Complex Role of the Architect in the Transformation of the City* 

Sponsored by the YC Foundation, NY

February 23, 2021

CU @ Lunch | Lunch with Alumni Caitlin

Martusewicz (Arch '11)

November 10, 2019 Lecture | AXP Seminar Michael Samuelian Robert Lopez Martin Smith

PC.2 Design-

April 11, 2024

Student Lecture Series | Lisa Switkin: Immersion

April 9, 2024

**Visiting Lecture** | **Jen Wood and Emanuel Admassu** 

AD-WO: Edges

April 4, 2024

**<u>Visiting Lecture</u>** | **Nahyun Hwang**: *Migrating* 

Commons

March 26, 2024

Robert Gwathmey Chair Lecture | Jimenez Lai: A

Litter of Monsters

March 6—Thursday, March 28, 2024 Exhibition | Jimenez Lai: Hall of Monsters

Third Floor Hallway Gallery

September 26, 2019

Panel Discussion | Pedagogies of Risk

KADK in Conversation with The Cooper Union

Nora Akawi, Peter Bertram, Lorena del Rio, David

Gersten, Sue Ferguson Gussow, Arne Høi, Joan

Ockman, Anne Romme, & Mersiha Veledar

September 12, 2019

<u>Panel Discussion</u> | Architectural Research in the

Digital Age

Benjamin Dillenburger, Fabio Gramazio, Matthias Kohler, Hannes Mayer, Mania Aghaei Meibodi, Jenny Sabin, Skylar Tibbits & Nader Tehrani

September 12 - October 13, 2019

Exhibition | How to Build a House: Architectural

Research in the Digital Age

June 12, 2019

<u>Panel Discussion</u> | Behind the Prize: Jurying the Mies

Crown Hall Americas Prize

Ricky Burdett, Jose Castillo, Dirk Denison & Claire

Weisz

February 20, 2024

Student Lecture Series | Rafi Segal: Architecture as

Dialogue

February 15, 2024

Student Lecture Series | Boonserm Premthada: Non-

Human Centered

January 30, 2024

The Ornamental Metal Institute of New York Lecture

| **Kersten Geers**: Architecture and Everything

November 15, 2023

Visiting Lecture | Dongwoo Yim, PRAUD

November 14, 2023

<u>Visiting Lecture</u> | Jennifer Newsom and Tom Carruthers, Dream The Combine: Afterimages



March 30, 2023

<u>Architectures of Transition Lecture</u> | *The Other Architecture – Accelerationism, Defuturing, and Contra-Practice* 

**Tony Fry** 

March 24, 2023

<u>Student Lecture Series</u> | *Timeless – Finding Kronos* **Takaharu Tezuka** & **Yui Tezuka**; Conversation moderated by **Tate Liang** 

January 31, 2023

Current Work | Assemble:elsbmessa

Mary Anderson & Owen Lacey; Conversation moderated by Jerome Haferd

January 26, 2023

<u>Architectures of Transition Lecture</u> | Forming Life in Common

**Neeraj Bhatia**; Conversation moderated by **Elisa Iturbe** 

January 24, 2023

Book Launch and Lecture | Spatial Infrastructure
José Aragüez with Catherine Ingraham & Nader
Tehrani, moderated by Elisa Iturbe

November 29, 2022

Current Work | MASS: Seeking Abundance
Conversation with: Jha D Amazi, Sierra Bainbridge,
Christian Benimana, Jonathan Evans, Patricia
Gruits, Jeffrey Mansfield, Jean Paul Sebuhayi
Uwase, &. Caitlin Taylor
Q&A with Justin Brown, Regina Chen, Rosie
Goldrick, Christopher Kroner, Anton Larsen, Ashley
Marsh, Sarah Mohland, Julie Rhoad, Alan
Ricks, David Saladik, Adam Saltzman, Amie
Shao, Katie Swenson, & Peter Torrebiarte,
Moderated by Quilian Riano

November 18, 2022

<u>Conference</u> | Edible, Or; The Architecture of Metabolism Conference

Andrés Jaque, Hayley Eber, Lola Ben-Alon, Sharon Yavo-Ayalon, Andreas Theodoridis, Sonia Ralston, Sanjana Lahiri, Mitchel Joachim, Caroline O'Donnell, & Lydia Kallipoliti November 15, 2022

Current Work | NYC: Building Community
Nandini Bagchee, Alan Chan, Peter Coombe,
Jennifer Sage, Rob Rogers, & Andrea Steele;
Moderated by Mariana Mogilevich

November 3, 2022

Student Lecture Series | ANY: Flipper

**Michael Abel & Nile Greenberg**; Followed by a discussion moderated by **Dov Diamond** 

October 28, 2022

<u>Visiting Lecture</u> | "Is There an Indian Way of Thinkina?"

Sameep Padora; Discussion moderated by Vladimir Belogolovsky

October 27 – November 13, 2022

<u>Exhibition</u> | *Beyond the Frame – SITU Research* **SITU Research**; With remarks by **Brad Samuels** & Gauri Bahuguna

October 25, 2022

<u>Student Lecture Series</u> | *Dramaturgy, Disruption, and Architecture* 

**Rubén Polendo**; Followed by a discussion moderated by **Martina Duque Gonzalez** 

October 18, 2022

<u>In-Class Lecture</u> | *Studio Talk – Brigitte Shim* **Brigitte Shim**, hosted by ARCH 121A Design II Studio

October 12, 2022

Current Work | Centering Community: Pilares
PILARES; Introduced by Carlos Zedillo Velasco;
Followed by a discussion moderated by Suleman
Anaya

October 4 – November 18, 2022 <u>Exhibition</u> | *Model Behavior* 

September 21, 2022

**Lecture** | If Walls Could Speak: My Life in

Architecture

Moshe Safdie and Sam Lubell



# PC.3 Ecological Knowledge and Innovation—

April 18, 2024

<u>Book Launch and Reception</u> | **Lydia Kallipoliti**: *Histories of Ecological Design: An Unfinished Cyclopedia* 

April 4 - April 28, 2024

**Exhibition** | **Lydia Kallipoliti**: Histories of Ecological

Design: An Unfinished Cyclopedia

March 12, 2024

Visiting Lecture | Raphael Hefti

November 13, 2023

Book Talk | Rachely Rotem and Phu Hoang, MODU

April 13, 2023

<u>Architectures of Transition Lecture</u> | *The Alternative Building Industry (ABI) Collective: Building Coalitions for a Just Transition* 

The ABI Collective

April 6, 2023

<u>Architectures of Transition</u> | *Remaking a Future with a Future* 

**Tony Fry** 

April 1, 2023

<u>Symposium</u> | Order!: The Spatial Ideologies of

Carbon Modernity

Elisa Iturbe, Kathi Weeks, Esra Akcan, Cameron McEwan, Ross Exo Adams, Matthew Soules, Ana María Durán, Catherine Ingraham, Gary Fields, & David Wengrow

March 23, 2023

<u>Architectures of Transitions Lecture</u> | *Time Machines* for a Future Climate

**Brittany Utting & Daniel Jacobs**; Conversation moderated by **Elisa Iturbe** 

March 21 – April 16, 2023

**Exhibition** | Confronting Carbon Form

Elisa Iturbe, Stanley Cho, & Alican Taylan

March 1, 2023

<u>Current Work</u> | raumlaborberlin: Working on

Common Ground

**Benjamin Foerster-Baldenius & Jan Liesegang**; Conversation moderated by **Mark Wigley**  November 18, 2022

Conference | Edible, Or; The Architecture of

Metabolism Conference

Andrés Jaque, Hayley Eber, Lola Ben-Alon, Sharon Yavo-Ayalon, Andreas Theodoridis, Sonia Ralston, Sanjana Lahiri, Mitchel Joachim, Caroline

O'Donnell, & Lydia Kallipoliti

November 1, 2022

 $\underline{\text{Architecture of Transition Lecture}} \mid \textit{Modernizing}$ 

Baku – The Difference that Oil Makes

**Eve Blau**; Followed by a discussion moderated by

Elisa Iturbe

October 17, 2022

<u>Architecture of Transition Lecture</u> | A Just Transition

for Architecture

The Architecture Lobby & Green New Deal Working

**Group** with **The Cooper Climate Coalition** 

September 19, 2022

Lecture and Discussion | Climate, Labor, and Policy

Cooper Climate Coalition & The New Republic, Liza Featherstone, Zohran Kwame Mamdani & Dr.

**Genevieve Guenther** 

April 26, 2022

<u>Eleanore Pettersen Lecture</u> | Samia Henni: Colonial

Toxicity – France's Nuclear Heritage in the Sahara

February 8, 2022

Book Launch | Jeffery Nesbit: Nature of Enclosure with Daisy Ames, Lydia Kallipoliti, and Mae-Ling

Lokko, Moderated by Elisa Iturbe

September 30, 2021

Student Lecture Series | Jeannette Sordi: Landcycles: On

Landscape, Resources, and Infrastructure

April 20, 2021

<u>Publication Launch</u> | Manifest #3: Future Fossils and Elysian Fields

Anthony Acciavatti, Dan Handel, Enrique Ramirez, & Lydia Xynogala

March 29, 2021

<u>In-Class Lecture</u> | *Digitally Supported Design and Fabrication Methodologies for Timber Structures* **Evy L. M. Slabbinck**; Hosted by Structures II with

professors Thorsten Helbig & Florian Meier



March 18, 2021

Student Lecture Series | The Anthropocene Museum

Kabage Karanja & Stella Mutegi

March 12, 2021

<u>Student Lecture Series</u> | *Architecture in the* 

**Ecological Crisis** 

Feifei Zhou; Moderated by Javier Blancas

March 9, 2021

Entanglements | Fatconomy and the Material Underground – Consume, Waste, Harvest, Produce Robert Johnson & Austin Wade Smith; Moderated by Lydia Kallipoliti & Areti Markopoulou March 2, 2021

<u>Visiting Lecture</u> | Feminist Sensing to Land in

Aeropolis

Nerea Calvillo; Followed by a conversation and Q&A

moderated by Benjamin Aranda

February 16, 2021

Visiting Lecture | Piles, Drifts, Freezers, and

Icebreakers

Mason White and Lola Sheppard; Followed by a conversation and Q&A moderated by Lydia

Kallipoliti

November 16, 2020

<u>In-Class Guest Lecture</u> | *De-Carbonization: Rammed* 

Earth

Martin Haas & Thomas Auer. Hosted by Structures II with professors Thorsten Helbig & Florian Meier

October 23, 2020

Student Lecture Series | Caitlin Tayler: The

Architecture of the Food System

# PC.4 History and Theory—

February 15, 2024

Student Lecture Series | Boonserm Premthada: Non-

**Human Centered** 

February 8, 2024

Book Launch | Peter Trummer: The City as a Technical Being — On the Mode of Existence of

Architecture

January 30, 2024

The Ornamental Metal Institute of New York Lecture

| Kersten Geers: Architecture and Everything

January 25 – February 14, 2024

**Exhibition** | **Anthony Vidler**: Origins of Study

November 14, 2023

<u>Visiting Lecture</u> | Jennifer Newsom and Tom Carruthers, Dream The Combine: Afterimages

November 9, 2023

Roundtable | Ways of Making: Mario Carpo in Conversation with Michael Young, Nader Tehrani,

and Elisa Iturbe

November 2 – November 30, 2023

**Exhibition** | **Architecture Archive** *Exhibitions* 

Collection: 1971-1999

October 4 - October 27, 2023

Exhibition | First Edition: Making Multiples

September 12, 2023

Visiting Lecture | Anthony Titus: Anatomical

**Apparitions** 

September 6 – September 24, 2023

Exhibition | Michael Young: The Turned Room

April 25 – May 5, 2023

Exhibition | Vkhutemas: Laboratory of Modernism,

1920-1930

Anna Bokov and Steven Hillyer

February 28, 2023

Architectures of Transition Lecture | Libertarian Noir: Exit Strategies and New Enclosures (1960 to the

**Present**,

Raymond Craib; Conversation moderated by Elisa

Iturbe



February 8, 2023

Architecture of Transition Lecture | Ancient Maya
Settlement Patterns and Traditional Maya Housing —
Interpreting Population and Land Use
Dr. Anabel Ford; Conversation moderated by
Elizabeth O'Donnell

February 2, 2023

Roundtable Discussion | Drawing Conversations Bryan Cantley, Mark Dorrian, Riet Eeckhout, Adrian Hawker, Arnaud Hendrickx, Perry Kulper, Nada Subotincic, Mark West, & Michael Young; Moderated by Ashley Simone

November 10, 2022

<u>Eleanore Pettersen Lecture</u> | *Carefree, Not Careless*Maria Shéhérazade Giudici; Followed by a

discussion moderated by Elisa Iturbe

November 8, 2022

Exhibition Lecture | Kiel Moe: The Broken World

Model of Design

Kiel Moe; Followed by a discussion moderated by

**Sanford Kwinter** 

April 26, 2022

Eleanore Pettersen Lecture | Samia Henni: Colonial Toxicity – France's Nuclear Heritage in the Sahara Samia Henni; Followed by a conversation moderated by Nora Akawi

April 19, 2022

<u>Lecture</u> | **Léopold Lambert**: *Mapping the Colonial* 

Continuum

Co-sponsored with the Intra-Disciplinary Seminar (IDS)

February 21, 2021

<u>Exhibition Opening</u> | *Pullman Porters: A Legacy of Resilience, Resistance, and Progress* 

#### PC.5 Research and Innovation—

Tuesday, March 12, 2024
<u>Visiting Lecture</u> | Raphael Hefti

February 8, 2024

Book Launch | Peter Trummer: The City as a Technical Being — On the Mode of Existence of

Architecture

September 15, 2020

<u>Visiting Lecture and Discussion</u> | *Fronts: Military* 

Urbanisms and the Developing World

**Ersela Kripa & Stephen Mueller**; Discussion Including **Nora Akawi** 

November 10, 2020

**Entanglements** | Writing within and without

Architecture

**Hélène Frichot** & **Naomi Stead** in conversation with **Michael Young**; Conversation moderated by **Lydia** 

Kallipoliti

April 23, 2020

<u>Lecture</u> | **Andrea Simitch:** *Context Matters – Pedagogy in an Expanding Landscape* 

March 11, 2020

<u>Visiting Lecture</u> | **David Gissen:** *Of a Weaker Nature* 

February 13, 2020

<u>Visiting Lecture and Book Launch</u> | **Ines Weizman**: *Dust & Data. Traces of the Bauhaus Across 100* 

Years

**Ines Weizman** 

January 23 - March 13, 2020

<u>Exhibition Reception</u> | *Nivola in New York | Figure in Field* 

**Costantino Nivola** 

January 22, 2019

Discussion | Contested Ground: Design and the

**Politics of Memory** 

Jeanne Gang, Amanda Williams & Mabel O. Wilson

January 14 - February 8, 2019

**Exhibition** | Regular City: Construction of Ideas Past

and Future

Joan Busquets

November 9, 2023

Roundtable | Ways of Making: Mario Carpo in Conversation with Michael Young, Nader Tehrani,

and Elisa Iturbe

October 31, 2023

Fariba Tehrani Lecture | Catie Newell: Architecture

and Loss



October 24, 2023

**Visiting Lecture** | **Andrew Witt:** Formulating Form

September 12, 2023

Visiting Lecture | Anthony Titus: Anatomical

**Apparitions** 

September 6 – September 24, 2023

**Exhibition** | **Michael Young:** The Turned Room

May 2, 2023

Current Work | Athar Lina Initiative: Heritage as a

Community Resource

May al-Ibrashy; Conversation moderated by Randall

Mason

April 25 - May 5, 2023

Exhibition | Vkhutemas: Laboratory of Modernism,

1920-1930

Anna Bokov and Steven Hillyer

April 1, 2023

**Symposium** | Order!: The Spatial Ideologies of

Carbon Modernity

Elisa Iturbe, Kathi Weeks, Esra Akcan, Cameron McEwan, Ross Exo Adams, Matthew Soules, Ana María Durán, Catherine Ingraham, Gary Fields, & David Wengrow

January 24, 2023

Book Launch and Lecture | Spatial Infrastructure
José Aragüez with Catherine Ingraham & Nader
Tehrani, moderated by Elisa Iturbe

November 29, 2022

Exhibition Opening | Flow State

**Leong Leong** 

November 8, 2022

Exhibition Lecture | Kiel Moe: The Broken World

Model of Design

Kiel Moe; Followed by a discussion moderated by

Sanford Kwinter

November 8, 2022

Current Work | Lacol: Community Infrastructure

Lacol – Cristina Gaboa Masdevall & Eliseu Arrufat Grau; Followed by a discussion moderated by Anna

Puigjaner

PC.6 Leadership and Collaboration—

January 30, 2024

The Ornamental Metal Institute of New York Lecture

| Kersten Geers: Architecture and Everything

January 26, 2024

**<u>Current Work</u>** | Making the Inclusive Museum

JSA/MIXdesign

April 13, 2023

Architectures of Transition Lecture | The Alternative

Building Industry (ABI) Collective: Building Coalitions

for a Just Transition
The ABI Collective

November 29, 2022

<u>Current Work</u> | MASS: Seeking Abundance

Conversation with: Jha D Amazi, Sierra Bainbridge,

Christian Benimana, Jonathan Evans, Patricia

Gruits, Jeffrey Mansfield, Jean Paul Sebuhayi

Uwase, &. Caitlin Taylor

Q&A with Justin Brown, Regina Chen, Rosie

Goldrick, Christopher Kroner, Anton Larsen, Ashley

Marsh, Sarah Mohland, Julie Rhoad, Alan

Ricks, David Saladik, Adam Saltzman, Amie

Shao, Katie Swenson, & Peter Torrebiarte,

Moderated by Quilian Riano

November 15, 2022

Current Work | NYC: Building Community

Nandini Bagchee, Alan Chan, Peter Coombe, Jennifer Sage, Rob Rogers, & Andrea Steele;

Moderated by Mariana Mogilevich

October 20, 2021

Symposium | Digital Fabrication Roundtable

Brandon Clifford, Fabio Gramazio, Mania Aghaei

Meibodi, Wes McGee, Nader Tehrani

October 13, 2020

<u>Visiting Lecture</u> | Experiments in Agonistic Praxis

Mokena Makeka, with a discussion moderated by

**Lauren Kogod** 

September 26, 2019

Panel Discussion | Pedagogies of Risk

KADK in Conversation with The Cooper Union

Nora Akawi, Peter Bertram, Lorena del Rio, David Gersten, Sue Ferguson Gussow, Arne Høi, Joan Ockman, Anne Romme, & Mersiha Veledar



October 18, 2019

**Book Launch and Panel** | Breaking Ground:

Architecture by Women

PC.7 Teaching and Learning Culture—

January 26, 2024

<u>Current Work</u> | Making the Inclusive Museum

JSA/MIXdesign

November 16, 2023

Book Talk | Sue Ferguson Gussow: Architects Draw

April 6, 2023

<u>Architectures of Transition</u> | *Remaking a Future with* 

a Future

**Tony Fry** 

February 2, 2023

Roundtable Discussion | Drawing Conversations

Bryan Cantley, Mark Dorrian, Riet Eeckhout, Adrian Hawker, Arnaud Hendrickx, Perry Kulper, Nada Subotincic, Mark West, & Michael Young;

Moderated by Ashley Simone

November 8, 2022

Exhibition Lecture | Kiel Moe: The Broken World

Model of Design

**Kiel Moe**; Followed by a discussion moderated by

**Sanford Kwinter** 

October 4, 2022

Book Launch and Lecture | Figments of the

**Architectural Imagination** 

Todd Gannon with Lydia Kallipoliti & Michael

Young

September 21, 2022

Lecture | If Walls Could Speak: My Life in

Architecture

Moshe Safdie and Sam Lubell

September 20, 2022

Architectures of Transition | Domestic Imaginaries -

Platforms for Social Change

Tatiana Bilbao; Followed by a conversation

moderated by Elisa Iturbe

September 19, 2022

Faculty Meet-Up | Teaching in a Warmer World

September 6 — September 25, 2022

Toshiko Mori, Hilary Sample, Brigitte Shim, & Marion Weiss; Hayley Eber & Lorena del Rio,

moderators

Exhibition | At the Intersection of Ideas and Material

**Conditions** 

Royal Danish Academy

April 9, 2022

Symposium | Nuance and Intimacy in Civic Space

Introductory Remarks: Yael Hameiri Sainsaux, Elena

Fanna, and Peter Lynch

Panel One: Conceiving the Plan: The Ethical

Question, Moderator: Guido Zuliani

Dorian Wiszniewski, Catherine Ann Somerville

Venart, Sotirios Kotoulas, Laila Seewang and Uri

Wegman

Panel Two: The City and the House: What is Civic?

Moderator: Nader Tehrani

Panel Three: *Nuance and Intimacy*Moderator: **Elisabetta Terragni** 

Holger Kleine, David Turnbull, Georg Windeck,

Peter Lynch, Anna Asplind, and Martin Heidesjö

Panel Four: Roundtable Moderator: Elena Fanna

Anna Kostreva

March 23, 2022

Roundtable | Hina Jamelle: Under Pressure: Essays

on Urban Housing

with Scott Erdy, Laia Mogas-Soldevilla, Brian

**Phillips**, and **Nader Tehrani** Moderated by **Daisy Ames** 

September 26, 2019

Panel Discussion | Pedagogies of Risk

KADK in Conversation with The Cooper Union

Nora Akawi, Peter Bertram, Lorena del Rio, David Gersten, Sue Ferguson Gussow, Arne Høi, Joan Ockman, Anne Romme, & Mersiha Veledar

April 16, 2019

In Conversation | Samuel Anderson, AR'82 & Nader

**Tehrani** – The Pedagogical Engagement between the

Studio and the Office

Moderated by Mireya Fabregas, AR'19 & Isaac Islas-

Cox, AR'21



February 5, 2019

<u>In Conversation</u> | **Anna Bokov** & **Tamar Zinguer**, AR'89 – *The New Studio Template* 

December 1, 2018

Symposium | Thesis Now by Michael Young & Igor Bragado

# PC.8 Social Equity and Inclusion—

April 16, 2024

<u>Visiting Lecture</u> | **Torkwase Dyson**: Black Comp — Forming Without the Promise of Stability

January 26, 2024

<u>Current Work</u> | Making the Inclusive Museum JSA/MIXdesign

May 2, 2023

<u>Current Work</u> | Athar Lina Initiative: Heritage as a

Community Resource

May al-Ibrashy; Conversation moderated by Randall

Mason

April 26, 2023

Symposium | What Black is this, You Say?
Storefront for Art and Architecture; Andrés
Hernández with panel Williams, Justin Garret
Moore, &Mable O. Wilson. Moderated by Deana
Haggag. With J Wortham and Jamilia Woods

February 8, 2023

<u>Architecture of Transition Lecture</u> | Ancient Maya Settlement Patterns and Traditional Maya Housing – Interpreting Population and Land Use

**Dr. Anabel Ford**; Conversation moderated by **Elizabeth O'Donnell** 

November 15, 2022

Current Work | NYC: Building Community
Nandini Bagchee, Alan Chan, Peter Coombe,
Jennifer Sage, Rob Rogers, & Andrea Steele;
Moderated by Mariana Mogilevich

November 16, 2021

<u>Pluriversal, Bewildered, and Otherwise Lecture</u> <u>Series</u> | **Mpho Matsipa**: *Black Time and Spatial Futures* 

October 26, 2021

<u>Pluriversal, Bewildered, and Otherwise Lecture</u> <u>Series</u> | *Sigil Collective* — *Monuments of the Everyday: Condemned to Hope* 

April 9, 2021

<u>Student Lecture Series</u> | Brenda Zhang (Bz): The Master's Concerns

March 30, 2021

<u>Eleanore Pettersen Lecture</u> | Lesley Lokko + Sumayya Vally, Counterparts: *This Fragile Condition -Architecture, Autonomy and Allegiance* 

March 25, 2021

<u>Exhibition Lecture</u> | David Heymann, AR '84: *A Building You Should Know - the John S. Chase Residence* 

February 21, 2021

Exhibition Opening | Pullman Porters: A Legacy of Resilience, Resistance, and Progress

September 15, 2020

<u>Visiting Lecture and Discussion</u> | Fronts: Military

Urbanisms and the Developing World

Ersela Kripa & Stephen Mueller; Discussion
Including Nora Akawi



# **APPENDIX B. Faculty Resumes**

The School of Architecture includes six full-time Faculty, whose resumes are included below, as well as the resume of the Acting Dean. Additional Faculty resumes will be available in the Digital Team Room 45 days before the scheduled Site Visit.

Name: Nader Tehrani

Courses Taught: ARCH 141B Design IV (spring 2024), ARCH 131A Design III (fall 2023), ARCH 131B Design III (spring 2023), VIP 38X Solar Decathlon (fall 2022)

#### **Educational Credentials:**

Master of Architecture in Urban Design with distinction, Harvard University, Graduate School of Design, Department of Urban Planning and Design, Cambridge, MA, 1991

Post-Graduate Studies, Architectural Association, Graduate School of History and Theory, London, England, 1987 Bachelor of Architecture, Rhode Island School of Design, Department of Architecture, Providence, RI, 1986 Bachelor of Fine Arts, Rhode Island School of Design, Department of Architecture, 1985

# **Teaching Experience:**

Dean, The Irwin S. Chanin School of Architecture of The Cooper Union, NY, 2015-2022

Professor with Tenure, Architectural Design, The Irwin S. Chanin School of Architecture of The Cooper Union, 2015-Present

Visiting Professorships: Eero Saarinen Visiting Professorship of Architectural Design, Yale University School of Architecture, New Haven, CT, 2024

Professor, Architectural Design, MIT School of Architecture and Planning, Cambridge, MA 2007–2015 Head of Department, Massachusetts Institute of Technology School of Architecture and Planning, 2010-2014 Adjunct Professor, Associate Professor, and Assistant Professor, Harvard University Graduate School of Design, 1998-2007

Adjunct Professor, Architectural Design, Rhode Island School of Design, 1993-1998

Frank O. Gehry International Visiting Chair in Architectural Design, University of Toronto John H. Daniels School of Architecture, Landscape, and Design, Toronto, Canada, 2010–2011

Thomas W. Ventulett III Distinguished Chair in Architectural Design, Georgia Institute of Technology College of Architecture, Atlanta, GA, 2005 – 2006

# **Professional Experience:**

Founder & Principal, NADAAA, Boston, MA, 2011–Present Founder & Principal, Office dA, Boston, MA, 1986–2010.

#### **Selected Publications and Recent Research:**

Tehrani, Nader. "Blank Shots: Monolithic Desires and Laminar Inevitabilities." In *Blank: Speculations on CLT*, edited by Jennifer Bonner and Hanif Kara. Spain: ORO Editions, October 2021.

Tehrani, Nader, "The Figure in Translation." In *Body, Object, Enclosure*, edited by Jonathan Anderson and Lois Weinthal. Routledge, September 2021.

Tehrani, Nader, et al. My House Is Better than Your House. ORO Editions, 2021.

Tehrani, Nader. "Machado & Silvetti: A Selective Biography." In *The work of – La Obra de Machado & Silvetti,* written by Javier Cenicacelaya, Iñigo Saloña, and Nader Tehrani. 36-67. Spain: ORO Editions, 2018.

Tehrani, Nader. "The Projective Allure of History." *John Hejduk Works Exhibition*. The Cooper Union Irwin S. Chanin School of Architecture, 2017.

Tehrani, Nader. "A Disaggregated Manifesto: Thoughts on the Architectural Medium and its Realm of Instrumentality," *The Plan* 090, May, 2016. 11-16.

Tehrani, Nader. "Difficult Synthesis." In *Material Design: Informing Architecture by Materiality*, written by Thomas Schroepfer. 34-47. Switzerland: Birkhauser GmbH, 2011.

Tehrani, Nader, and Justin Fowler. "Aggregation." *Material Design: Informing Architecture by Materiality,* written by Thomas Schroepfer. 48-61. Switzerland: Birkhauser GmbH, 2011.



Name: Michael Young

Courses Taught: ARCH 111B Architectonics (spring 2024), ARCH 411 Graduate Studio (fall 2023), ARCH 141B Design IV Option Studio (spring 2023), ARCH 225.68 Advanced Topics "Epistemologies of Aesthetics" (spring 2023), ARCH 151A Thesis (fall 2022)

#### **Educational Credentials:**

Master of Architecture, Princeton University School of Architecture, Princeton, NJ, 2003
Bachelor of Architecture, California Polytechnic State University College of Architecture and Environmental Design, San Luis, CA, 1997

#### **Teaching Experience:**

Associate Professor with Tenure, The Irwin S. Chanin School of Architecture of The Cooper Union, New York, NY, 2022–Present

Assistant Professor, The Irwin S. Chanin School of Architecture of The Cooper Union, 2017–2022 Adjunct Assistant Professor, The Irwin S. Chanin School of Architecture of The Cooper Union, 2005–2017

#### **Professional Experience:**

Founding Partner, Young & Ayata LLC, Brooklyn, NY, 2008-Present Designer, Pfau Architecture, San Francisco, CA, 1997-2002

Licenses/Registration: Registered Architect, State of New York, 2007-Present

#### **Selected Publications and Recent Research:**

Young, Michael. "Background Concerns," In *Design Technology and Digital Production: An Architectural Anthology*, edited by Gabriel Esquivel. London, UK: Routledge, 2024.

Young, Michael. The Estranged Object: Realisms in Art and Architecture. Chicago, IL: Graham Foundation, 2015.

Young, Michael. "A Cross-Temporal Standstill," in *Architecture, Film, and the In-Between: Spatio-Cinematic Betwixt,* edited by Vahid Vahdat & James F. Kerestes. Bristol, UK: Intellect, 2023.

Young, Michael. "Spectral Mediums," in *Drawing Architecture: Conversations on Contemporary Practice*, edited by Mark Dorrian, Riet Eeckhout, and Arnaud Hendrickx. London, UK: Lund Humphries, 2022.

Young, Michael. *Reality Modeled after Images: Architecture and Aesthetics after the Digital Image*. London, UK: Routledge, 2021.

Young, Michael. "Excessive Relief," *Breaking Glass: Spatial Fabulations & Other Tales Of Representation In Virtual Reality. SAC JOURNAL* No. 6. Baunach, Germany: Spurbuch Verlag, 2021.

Young, Michael. "Fear of the Mediated Image," Fear. Cornell Journal of Architecture 11 (Spring 2021): 146-161. Ithaca, NY: Cornell AAP, 2021.

Young, Michael. "Innovations in Distortion," *Occupying Drawings. Design Ecologies* 10, no. 1 (Spring 2021). Bristol, UK: Intellect, 2021.

Young, Michael. "The Aesthetic Recycling of Cultural Refuse," in *Writing Architecture: Ficto-Critical Approaches*, edited by Hélène Frichot and Naomi Stead. London, UK: Bloomsbury, 2020.

Young, Michael. "In the Shadow of Information," Onus. Perspecta 53. Cambridge, MA: MIT Press, 2020.

Young, Michael. "Paradigms in the Poche," Black Box. ACSA Annual Meeting Proceedings 107 (Spring 2019).



Name: Diana Agrest

Courses Taught: ARCH 141A Design IV Option Studio (fall 2023, 2022), ARCH 412 Graduate Studio (spring 2024, 2022)

# **Educational Credentials:**

Postgraduate Studies, Ecole Pratique des Hautes Etudes, VI Section, Paris, France, 1967-1969 Postgraduate Studies, Universite Paris Sciences et Lettres PSL, Centre de Recherche d'Urbanisme, Paris, France, 1967-1969

Diploma Architect, University of Buenos Aires School of Architecture and Urbanism, Buenos Aires. Argentina 1961-1967

# **Teaching Experience:**

The Irwin S. Chanin Distinguished Professor with Tenure, The Irwin S. Chanin School of Architecture of The Cooper Union, New York, NY, 1977-Present

Adjunct Professor, Columbia University GSAPP, New York, NY, 1993-2000 Full-time Lecturer, Princeton University School of Architecture, Princeton, NJ, 1972-1976

# **Professional Experience:**

Co-Founder, Agrest and Gandelsonas Architects, New York, NY, 1975-1980

Licenses/Registration: Registered Architect, State of New York

**Professional Memberships:** American Institute of Architects

# **Selected Publications and Recent Research:**

Agrest, Diana and John Angus McPhee. *Architecture of Nature/Nature of Architecture*. Spain: ORO Editions, 2019. Agrest, Diana, Patricia Conway, and Leslie Kanes Weismann, eds. *The Sex of Architecture*. New York, NY: Abrams Books, 1996.

Agrest, Diana and Mario Gandelsonas. *Agrest and Gandelsonas: Works*. New York, NY: Princeton Architectural Press, 1997.

Agrest, Diana. "Introduction." *Places and Memories: Photographs by Roberto Schezen* written by Roberto Schezen. New York, NY: Rizzoli International, 1987.

Agrest, Diana, ed. *A Romance with the City: Irwin S. Chanin* written by Irwin S. Chanin. New York, NY: Cooper Union Press, 1982.



Name: Lydia Kallipoliti

Courses Taught: ARCH 402.1 Thesis Research Tutorial (spring 2024), ARCH 124A Environments (fall 2023, 2022), ARCH 225.70 Advanced Topics "Cookbooks and Manuals" (fall 2023), ARCH 151B Thesis (spring 2023), ARCH 225.64 Advanced Topics "Architecture and Astropolitics" (fall 2022)

#### **Educational Credentials:**

PhD, History, Theory, and Criticism of Architecture, Princeton University School of Architecture, Princeton, NY, 2013

Master of Arts, History, Theory & Criticism of Architecture, Princeton University School of Architecture, 2007 Master of Science in Architecture Studies, Building Technology and Design, Massachusetts Institute of Technology School of Architecture and Planning, Cambridge, MA, 2004

Diploma of Architecture & Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece, 2001

#### **Teaching Experience:**

Associate Professor with Tenure, The Irwin S. Chanin School of Architecture of The Cooper Union, New York, NY, 2022-Present

Assistant Professor, Tenure-Track, The Irwin S. Chanin School of Architecture of The Cooper Union, 2019-2022 Assistant Professor, Tenure-Track, Rensselaer Polytechnic Institute, Troy, NY, 2015-2019 Assistant Professor, Tenure-Track, Syracuse University, Syracuse, NY, 2013-2015 Assistant Professor Adjunct, The Cooper Union Irwin S. Chanin School of Architecture, 2008-2014 Assistant Professor Adjunct, Columbia University GSAPP, New York, NY, 2010-2013

# **Professional Experience:**

Founder and Principal, ANAcycle design research + writing thinktank, 2013-Present
Senior Associate, Cooper Union Institute of Sustainable Design, New York, NY, 2010-2013
Project Architect, dECOi Architects / DECOI Digital Design Group, Boston, MA, 2003-2004
Architect of Record, "Ermidis & Partners" Construction Company, Thessaloniki, Greece, 2001-2003

Licenses/Registration: Licensed Professional Architect and Engineer, Greece and Europe

Professional Memberships: Member of the Technical Chamber of Greece

Assistant Professor Adjunct, Pratt Institute, Brooklyn, NY, 2010-2011

# **Selected Publications and Recent Research:**

Kallipoliti, Lydia, *Histories of Ecological Design; An Unfinished Cyclopedia*. Barcelona: ACTAR Publishers, 2023. *The Architecture of CLOSED WORLDS, Or, What is the Power of Shit*. Zurich, Switzerland: Lars Muller Publishers, 2018.

Kallipoliti, Lydia and Areti Markopoulou, eds. *Edible, Or, The Architecture of Metabolism, Exhibition Catalog.* Tallinn, Estonia: Estonian Museum of Architecture, 2022.

Kallipoliti, Lydia, ed. "EcoRedux: Design Remedies for an Ailing Planet." *Architectural Design* no. 208. (Academy Press, 2010).

Kallipoliti, Lydia. "The History of Ecological Design." Oxford English Encyclopedia of Environmental Science (2018).



Name: Nora Akawi

Courses Taught: ARCH 151A-B Thesis (2024, 2023, 2022), ARCH 225.71 Advanced Topics "Public Art as Alimentary Infrastructure" (Fall 2023), ARCH 225.56 Advanced Topics "Unbordering" (Fall 2022)

#### **Educational Credentials:**

Master of Science in Critical, Curatorial, and Conceptual Practices in Architecture, Columbia University GSAPP, New York, NY, 2011

Bachelor of Architecture, Bezalel Academy of Arts and Design, Jerusalem, Palestine, 2009

# **Teaching Experience:**

Assistant Professor with Tenure, The Irwin S. Chanin School of Architecture of The Cooper Union, New York, NY, 2019-Present

Adjunct Assistant Professor, Columbia University GSAPP, New York, NY, 2014–2019

Visiting Lecturer, Critical Habitats Program, Royal Institute of Art, Stockholm, Sweden, 2016

Adjunct Assistant Professor, Bezalel Academy of Arts and Design, Jerusalem, Palestine, 2011-2012

#### **Professional Experience:**

Co-Founder, Interim Studio for Interdisciplinary Research and Exhibitions, New York, Palestine, and Canary Islands, 2009-Present

Director, Studio-X Amman, Columbia University GSAPP, Amman, Jordan, 2012-2019

Assistant Curator, Studio-X New York, Columbia GSAPP, New York, NY, 2009-2010

Architect and Urban Designer, Senan Abdelqader Architects, Jerusalem, Palestine, 2008-2009

#### **Professional Memberships:**

Editorial Board, Journal of Architectural Education, 2023-Present

Editorial Board of Advisors, Faktur: Documents and Architecture, 2023-Present

International Jury, Venice Architecture Biennale 2023

Board of External Examiners, Architectural Association, London, England, 2022-Present

# **Selected Publications and Recent Research:**

Akawi, Nora, Exhibition Researcher. *You Are the Voice; We Are Its Echo*. Graham Foundation for Advanced Studies in the Fine Arts. Chicago, IL: Chicago Architecture Biennale, 2003-2024.

Akawi, Nora. "The Museum as Public Infrastructure: On Anti-Colonial Curatorial Practice." The Palestinian Museum, Birzeit, West Bank. 2023.

Akawi, Nora. "Tuning, Bias, and the Wild Beyond." In *Glossary of Common Knowledge*. Museum of Modern Art, Museum of Contemporary Art Metelkova, and L'International Online. Ljubljana, Slovenia. 2022.

Akawi, Nora. "The Words Were Limited" in *Dictationship: Revised, Makhzin*, edited by Mirene Arsanios, Iman Mersal, and Ghalya Saadawi. Beirut. 2020.

Akawi, Nora. "Drawing From the Jawlan" in *GTA Papers 2: War Zones*, peer reviewed and edited by Samia Henni. Verlag and Institute, ETH. Zürich, Switzerland. 2019.

Akawi, Nora and Noura Al Sayeh, eds. *Friday Sermon*, 16th Venice Biennale of Architecture. Venice and Bahrain: Pavilion of Bahrain, 2018.

Akawi, Nora, Amale Andraos and Caitlin Blanchfield, eds. *Architecture and Representation: The Arab City*, Columbia Books on Architecture and the City. New York, NY: Columbia University Press, 2016.



Name: Lorena Del Rio Gimeno

Courses Taught: Professor Del Rio Gimeno has been on medical leave since 2021. Courses taught before her leave include ARCH 141A Design IV Option Studio, ARCH 186-05 Workshop, VIP-381-B Solar Decathlon, ARCH-121A-B Design II, ARCH-131B Design III

#### **Educational Credentials:**

Credits towards Architecture PhD at the Architecture School of Madrid, Madrid, Spain, 2009-2010
Bachelor of Science and Master of Architecture at Polytechnic University of Madrid Higher Technical School of Architecture of Madrid, 2008

# **Teaching Experience:**

Assistant Professor, The Irwin S. Chanin School of Architecture of The Cooper Union, New York, NY, 2017-Present Assistant Professor, Architecture Division California College of the Arts, San Francisco, CA, 2016-2017 Co-director, Build-Lab California College of the Arts, 2016-2017

Visiting Assistant, Professor Cornell University Department of Architecture, Ithaca, NY, 2013-2016 Visiting Critic, Cornell University Department of Architecture, 2012-2013

Teacher Assistant, Polytechnic University of Madrid Higher Technical School of Architecture of Madrid, 2005-2006 Researcher, "MINIMAL HOUSING," Polytechnic University of Madrid Higher Technical School of Architecture of Madrid, 2005-2006

# **Professional Experience:**

Co-Founder, Rica Studo, 2014-Present

Director of the Architecture and Real Estate Management Department, Sociedad Mercantil Estatal de Gestión Inmobiliaria de Patrimonio (SEGIPSA), Madrid, Spain, 2020-2023 Project Architect, Selgascano Office, Madrid, Spain, 2008-2012

Licenses/Registration: Registered Architect, Colegio Oficial de Arquitectos de Madrid (COAM)

# **Selected Publications and Recent Research:**

Del Rio, Lorena and Iñaqui Carnicero. "La Subjetividad en su exacta medida (Subjectivity in its exact measure)." In *Quaderns d'arquitectura i urbanisme* n. 273: 2022.

Del Rio, Lorena. "Reimagining the Kiosk." Folly/Function. Architecture League (New York, 2019).

Del Rio, Lorena. "Biblio-Huerta Productiva." In *Ga Document* no. 151, edited by Ada Edita Global Architecture. 2019.



Name: Hayley Eber

Courses Taught: ARCH 151A-B Thesis (2022-2024), ARCH 186 Workshop "Everything is on the Table" (Spring 2022)

#### **Educational Credentials:**

Master of Architecture, Princeton University School of Architecture, Princeton, NJ, 2003

Bachelor of Architecture, The Irwin S. Chanin School of Architecture of The Cooper Union, New York, NY 2001

Bachelor of Architectural Studies, The University of Cape Town, Cape Town, South Africa, 1997

# **Teaching Experience:**

Acting Dean, The Irwin S. Chanin School of Architecture of The Cooper Union, 2022-Present
Associate Dean, The Irwin S. Chanin School of Architecture of The Cooper Union, New York, NY, 2019-2022
Assistant Professor Proportional Time, The Irwin S. Chanin School of Architecture of The Cooper Union, 2007Present

Adjunct Assistant Professor, Columbia University GSAPP, New York, NY, 2017-2019 Visiting Faculty, Princeton University School of Architecture, 2013-2019 Assistant Instructor, Princeton University School of Architecture, 2004-2007, 2002-2003

## **Professional Experience:**

Founding Principal and Architect, Studio Eber, New York, NY, 2015-Present Founding Principal and Architect, EFGH, New York, NY, 2007-2015 Project Architect/Lead Designer, Diller Scofidio + Renfro, 2001-2007 Architectural Research Assistant, Lebbeus Woods, New York, NY 2001 Designer, subWAVE Installation, Roy Projects, Lindy Roy, MoMA PS1, Queens, NY, 2001 Architectural Intern, Eisenman Architects, New York, NY, 1999 Architectural Intern, Wiel Arets Architects, Maastricht, Netherlands, 1999

Licenses/Registration: Registered Architect, State of NY, 2015-Present

**Professional Memberships:** Public Director for Educational Affairs, Board of Directors, AIA, New York Chapter, New York, NY, 2015-Present

#### **Selected Publications and Recent Research:**

Eber, Hayley, researcher. "Algae Sips and Java Brews; A Digestive Food Truck," exhibition, with Lydia Kallipoliti. *Shanghai Urban Space Art Season.* Shanghai, China, 2023-2024.

Eber, Hayley and Lydia Kallipoliti. "Algae Sips and Java Brews" in *Shanghai Urban Space Art Season Catalogue*. Shanghai, China, 2023.

Eber, Hayley and Anne Romme. "Afterword," in *Architects Draw*, written by Sue Ferguson Gussow. Copenhagen, Denmark: The Architectural Publisher, 2023.

Eber, Hayley, researcher. "Everything is on the Table," exhibition, with Mae-ling Lokko. *Tallinn Architecture Biennale: Edible, Or, The Architecture of Metabolism*. Tallin, Estonia, 2022.

Eber, Hayley and Mae-ling Lokko. "Everything's on the Table." Architecture Daily. 2022.

Eber, Hayley, researcher. "Microcosms and Schisms," exhibition, with Nora Akawi, Lydia Kallipoliti, Lauren Kogod, and Ife Vanable representing The Irwin S. Chanin School of Architecture of The Cooper Union. 17th Venice Biennale of Architecture no. 17. Venice, Italy, 2021.

Eber, Hayley, Nora Akawi, Lydia Kallipoliti, Lauren Kogod, and Ife Vanable. "Microcosms and Schism," in *How will we live together?*, *BIENNALE ARCHITETTURA Catalogue* no. 17. Venice, Italy, 2021.



#### **APPENDIX C. Additional Documentation**

#### 2—Shared Values of the Discipline and Profession

SV.1—Design Representation Course Descriptions

- ARCH 117A Representation I Geometry: Introduction to various geometric logics; methods of graphic description, as well as an introduction to concepts and systems of projection and the two-dimensional representation of three-dimensional form and space. Emphasis on the control, precision, and rigor of the geometric description of form. 3 credits per semester.
- ARCH 117B Representation II Observation: This course is an exploration of the visual and conceptual
  aspects of drawing from direct observation. Focusing on drawing in a variety of media; questions of
  figuration and abstraction, space and form, perception, and composition will be investigated. 3 credits
  per semester.
- ARCH 127A Representation III Analysis: Introduction to the representational conventions of architectural analysis. Drawing modes include plans, sections, elevations and axonometrics. Analytical readings of form, structure, space, program, and site will be explored. Students to achieve the ability to critically interpret architectural precedents through analytical representation. 3 credits per semester.
- ARCH 127B Representation IV Imaging: This course will focus on the various techniques and methods of
  producing architectural images including photography, rendering, animation, and pixel manipulation. In
  addition to exposing students to advanced imaging methods, questions of aesthetics, composition, color
  theory and optical mechanics will be explored in relation to architectural representation. 3 credits per
  semester.
- **FA 100RA-RB Shop Tech:** An introduction to the physical aspects of working with wood, metal and plaster (mold making) as well as digital fabrication techniques. **1 credit per semester.**
- ARCH 177.05 Computer Applications, Offered by Tyler Putnam and Gjergji Shkurti (Fall 2023): The entire life cycle of our built environment is increasingly intertwined with sophisticated data- connected technologies, automation, and collaboration. The Design Technology Curriculum will introduce the concepts of a Building Information Modeling approach to create a technical set of coordinated Construction Documents, analysis, and visualizations. Students will learn not only the mechanics of producing data-rich 3-dimensional models but also the grammar of professional documentation including, view references of varying scales, annotations, bills-of-material, and rendering. We will explore these Design Technology concepts by studying and documenting case studies of notable single-family Residential structures. We will first begin by situating parametric design in the context of cybernetics and the Model–View–Controller computational paradigm. Next, we will coordinate and analyze existing source material and finally through practical guidance, re-articulate our case studies, digitally; documenting building construction details through both 2 and 3 dimensions within an orthographic drawing set. As our Buildings become more complex with data sources and larger team collaboration, the Building Information Model (BIM) Model remains One Single Source of Truth.
- ARCH 178 Advanced Drawing Seminar, Offered by Sue Gussow (every fall since the 1990s): The basis of this course is the dialog between figuration and abstraction. Students are expected to elaborate a series of drawings generated from personal experience and observation. Within this framework, it would be difficult to avoid reflecting on and processing the ravages of the past 3 years: the Covid pandemic, its effect on us as individuals and citizens of this globe; this nation's shameful history and ongoing practice of systemic racism and economic oppression; the nation's deep political divisions: the ongoing war in Ukraine. It would be an overreach to imagine that our drawings could take on the whole spectrum of these cruel years. The hope is that through the process of drawing we might explore/filter how we are to live in and survive this fearful time, how we might explain it to ourselves and to one another. Each student will plan and develop a series of drawings generated from individually chosen themes. Weekly seminars meet to critique work in progress and discuss issues relevant to the discipline of drawing. Students are encouraged to investigate a broad spectrum of imagery and materials.



#### 4.1 Institutional Accreditation



June 22, 2018

Ms. Laura Sparks
President
The Cooper Union for the Advancement of Science & Art
30 Cooper Square
New York, NY 10003

Dear President Sparks:

At its session on June 21, 2018, the Middle States Commission on Higher Education acted:

To reaffirm accreditation. To request that beginning in 2019 and in conjunction with each Annual Institutional Update prior to Mid-Point Peer Review in 2023, the institution provide further evidence of (1) periodic assessment of the effectiveness of assessment processes utilized by the institution for the improvement of educational effectiveness (Standard V), (2) improved financial viability and sustainability, (3) assessment of the adequacy and efficient utilization of institutional resources required to support the institution's mission and goals and (4)an annual independent audit confirming financial viability with evidence of follow-up on any cited concerns (Standard VI). To note the institution's obligation to inform the Commission about any and all significant developments related to any investigations conducted by the institution or by state, federal, or other government agencies, including the New York Attorney General's Office. The next evaluation visit is scheduled for 2026-2027.

This action is an affirming action, as explained in the policy Accreditation Actions, which is available on the Commission's website.

Enclosed is a copy of the institution's Statement of Accreditation Status (SAS) for your review. If any of the factual information is incorrect, please contact the Commission as soon as possible.

In accordance with Commission policy, the accreditation status of the institution must be accurately represented. Please ensure that published references to your institution's candidate status or accredited status (catalog, other publications, web page) are accurate and include the full name, address, and telephone number of the accrediting agency, and the effective date (month and year) when status was granted. Candidate for Accreditation is a status with the Commission that indicates that an institution has achieved membership and is progressing toward, but is not assured of, accreditation.

Please be assured of the continuing interest of the Middle States Commission on Higher Education in the well-being of The Cooper Union for the Advancement of Science & Art. If any further clarification is needed regarding the SAS or other items in this letter, please feel free to contact Dr. Hilda M. Colon Plumey, Vice President.

Sincerely,

Gary L. Wirt, Ed.D.

Chair





# MIDDLE STATES COMMISSION ON HIGHER EDUCATION

3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501

#### STATEMENT OF ACCREDITATION STATUS

#### THE COOPER UNION FOR THE ADVANCEMENT OF SCIENCE & ART

30 Cooper Square New York, NY 10003 2) 353-4150: Fax: (212)

Phone: (212) 353-4150; Fax: (212) 353-4271 www.cooper.edu

Chief Executive Officer:

Ms. Laura Sparks, President

# INSTITUTIONAL INFORMATION

Enrollment (Headcount): 876 Undergraduate; 88 Graduate

Control:

Private (Non-Profit)

Affiliation:

None

2015 Carnegie

Baccalaureate Colleges - Diverse Fields

Classification:

Approved Degree Levels: Postsecondary Award/Cert/Diploma (>= 2 years, < 4 years),

Bachelor's, Master's;

**Distance Education** 

Not Approved

Programs:

Accreditors Recognized by U.S. Secretary of Education:

#### **Instructional Locations**

Branch Campuses: None
Additional Locations: None
Other Instructional Sites: None

# ACCREDITATION INFORMATION

Status: Member since 1946 Last Reaffirmed: June 21, 2018

# Most Recent Commission Action:

June 21, 2018:

To reaffirm accreditation. To request that beginning in 2019 and in conjunction with each Annual Institutional Update prior to Mid-Point Peer Review in 2023, the institution provide further evidence of (1) periodic assessment of the effectiveness of assessment processes utilized by the institution for the improvement of educational effectiveness (Standard V), (2) improved financial viability and sustainability, (3) assessment of the adequacy and efficient utilization of institutional resources required to support the institution's mission and goals and (4)an annual independent audit confirming financial viability with evidence of follow-up on any cited concerns (Standard VI). To note the institution's obligation to inform the Commission about any and all significant developments related to any investigations conducted by the institution or by state, federal, or other government agencies, including the New York Attorney General's Office. The next evaluation visit is scheduled for 2026-2027.



# Brief History Since Last Comprehensive Evaluation:

November 21, 2013: To accept the Periodic Review Report and to reaffirm accreditation.

The next evaluation visit is scheduled for 2017-2018.

September 3, 2015: To request a supplemental information report, due October 16, 2015,

addressing recent developments at the institution which may have implication for continued compliance with Standard 3 (Institutional Resources), Standard 4 (Leadership and Governance), Standard 5 (Administration), and Standard 8 (Student Admissions and Retention).

November 19, 2015: To accept the supplemental information report. To request a progress

report, due April 1, 2016, documenting further implementation of (1) analysis of the projected FY2016 budget relative to actual and budgeted enrollment for fall 2015 and spring 2016 (Standard 3); and (2) adoption of the new by-laws and related changes with respect to the functioning of the board of trustees (Standard 4). The next evaluation visit is

scheduled for 2017-2018.

June 23, 2016: To accept the progress report. The next evaluation visit is scheduled for

2017-2018.

Next Self-Study Evaluation: 2026 - 2027

Date Printed: June 22, 2018

#### DEFINITIONS

Branch Campus - A location of an institution that is geographically apart and independent of the main campus of the institution. The location is independent if the location: offers courses in educational programs leading to a degree, certificate, or other recognized educational credential; has its own faculty and administrative or supervisory organization; and has its own budgetary and hiring authority.

Additional Location - A location, other than a branch campus, that is geographically apart from the main campus and at which the institution offers at least 50 percent of an educational program. ANYA ("Approved but Not Yet

Active") indicates that the location is included within the scope of accreditation but has not yet begun to offer courses. This designation is removed after the Commission receives notification that courses have begun at this location.

Other Instructional Sites - A location, other than a branch campus or additional location, at which the institution offers one or more courses for credit.

Distance Education Programs - Fully Approved, Approved (one program approved) or Not Approved indicates whether or not the institution has been approved to offer diploma/certificate/degree programs via distance education (programs for which students could meet 50% or more of the requirements of the program by taking distance education courses). Per the Commission's Substantive Change policy, Commission approval of the first two Distance Education programs is required to be "Fully Approved." If only one program is approved by the Commission, the specific name of the program will be listed in parentheses after "Approved."

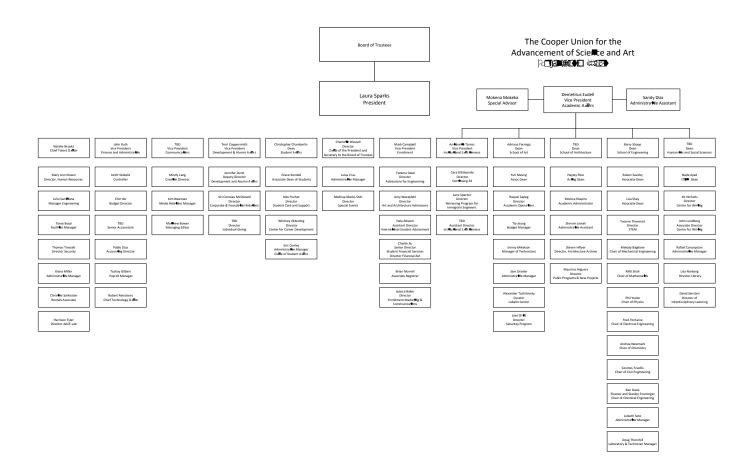
Commission actions are explained in the policy <u>Accreditation Actions</u>.

# 5.1 Structure and Governance

#### 5.1.1 Administrative Structure:

The Cooper Union Organization Chart; Large format available in Digital Team Room

# MAB





# 6.5 Admissions and Advising

# Example Studio Test

Irwin S. Chanin School of Architecture
First Year and Transfer Regular Decision Studio Test 2023

Instructions



The Cooper Union for the Advancement of Science and Art

All applicants to the Irwin S. Chanin School of Architecture at The Cooper Union are asked to complete the Studio Test. The Studio Test, designed each year by faculty and students, is a way for the admissions committee to understand how you think visually, creatively, and conceptually. Only transfer applicants are required to submit a portfolio in addition to the Studio Test components. Additional portfolios from first time college applicants will not be accepted.

#### THE STUDIO TEST

The Studio Test contains visual projects, writing projects, and a questionnaire. You have a month to complete the Test. Following the first two pages of instructions and key, you will find each of the visual project prompts on its own page, accompanied by a blank area outlined by a square frame. These square frames outline the area for your responses to the visual project prompts. Following those you will find the writing projects and questionnaire, each accompanied with lined space in which you should type your responses.

The Test is formatted to fit on 11 inch x 14 inch paper. As this is not a standard size paper, we recommend you print the Test at full scale on 11 inch x 17 inch (standard tabloid) size paper and cut the test down using the dotted lines provided in the PDF. For your reference, when printed at full scale the square frames for your responses are each 10.5 inches x 10.5 inches.

All media is acceptable for each question unless otherwise specified. This includes, but is not limited to: drawing, painting, modeling, photography, collage, video, and digital imaging.

There is a two-step submission process: we ask for completed Studio Tests to be submitted both physically and digitally. All work will be reviewed equally and evaluated separate to technical proficiency with digital media. Instructions for both submission types are outlined in the section below.

#### TWO-STEP SUBMISSION PROCESS

All completed Studio Tests must be submitted in a two-step process:

- Step 1: Mail or drop off physical submission (must be received by 4 pm EST on Friday, February 10, 2023).
  - o Your completed Studio Test must fit inside an envelope no larger than 14 inches x 17 inches x 2 inches. Please label the outside of the envelope clearly with your full name, and print and attach the QR code found in your applicant portal. Drop-off submissions can only be accommodated Monday to Friday from 9 am-4 pm EST. All submissions should be dropped off or mailed to the following addresses:

Drop off Address: Mailing Address:
The Cooper Union The Cooper Union

The Hub-Office of Admissions Attn: The Hub-Office of Admissions

 201 East 6th St.
 41 Cooper Square

 New York, NY 10003
 New York, NY 10003

- Step 2: Upload digital submission (must be received by 11:59 pm EST Monday, February 6, 2023)
  - o In the Studio Test checklist item on your applicant portal, use the check box to indicate completion of the Studio Test. The correlating works should be uploaded to the Widget as one PDF file. If you completed your responses using a physical medium, you may choose to represent your work in the following ways: by scanning in high resolution or by photographing (with any camera you have access to) in any good lighting scenario that captures your Studio Test details well.

Important note regarding video submissions: If you choose to respond to one or more of the Studio Test visual prompts with a video, please upload those responses using the "Video Upload Widget" on your applicant portal. (Transfer students only: use the "Portfolio Upload Widget" instead). Clearly label your video file with the question number and title, and in the corresponding question's square frame response area in both your physical and digital submission, please write out that you have included a video (instead of leaving it blank). Refer to the Portfolio Widget for acceptable file types, and limit all videos to under 5 minutes in length. We are unable to view embedded videos or click hyperlinks when viewing the uploaded PDF submissions.

If you have any questions regarding mailing, or technical issues with the upload of your materials, please contact Assistant Director of Admissions for Architecture, Maya Krtić, at maya.krtic@cooper.edu.

#### DEADLINES

- All digital Studio Test materials must be uploaded to your applicant portal no later than 11:59 pm EST on Monday, February 6, 2023.
- All physical Studio Test materials must be received by the Office of Admissions no later than 4 pm EST on Friday, February 10, 2023.



Irwin S. Chanin School of Architecture First Year and Transfer Regular Decision Studio Test 2023

Key to Submission Sheets: All work is to be submitted on paper that is 11 inches x 14 inches. Trim along the dotted line in the pdf.

All media is acceptable for each question unless otherwise specified.

This includes, but is not limited to, drawing, modeling, photography, collage, and digital imaging.

The square area on each sheet defines the field of operation.



QUESTION 1 - A PLAN CUT OF A COMPOSITION In the space below the image, project the plan looking down at each element of the composition as cut through the level indicated by the white line.	1
QUESTION 2.1 - TWO-DIMENSIONAL ORGANIZATION  Compose a two-dimensional drawing with selections from the following elements: points, lines, circles; using ONE organizational concept chosen from: intersection, alignment, fusion, blur, overlap.	2.1
QUESTION 2.2 · THREE-DIMENSIONAL ORGANIZATION Compose a three-dimensional space from your two-dimensional organization in Question 2.	2.2
QUESTION 3 - SPACE FROM TEXT Produce a visual transformation of ONE of the 3 provided texts.	3
QUESTION 4 · STORYBOARD Imagine a repeated activity and translate it into a spatial sequence using ONE of the following analog or digital techniques: collage, photography, line drawing, painting, time lapse, freehand drawing, montage, animation.	4
QUESTION 5 · MEASUREMENT OF A TERRITORY  Develop a system of measuring a territory of your choice. Document your tools and measurements.	5
QUESTION 6 - ECLIPSE Perform an eclipse.	6
QUESTION 7 - WRITING PROJECTS	
QUESTION 8 - QUESTIONNAIRE	



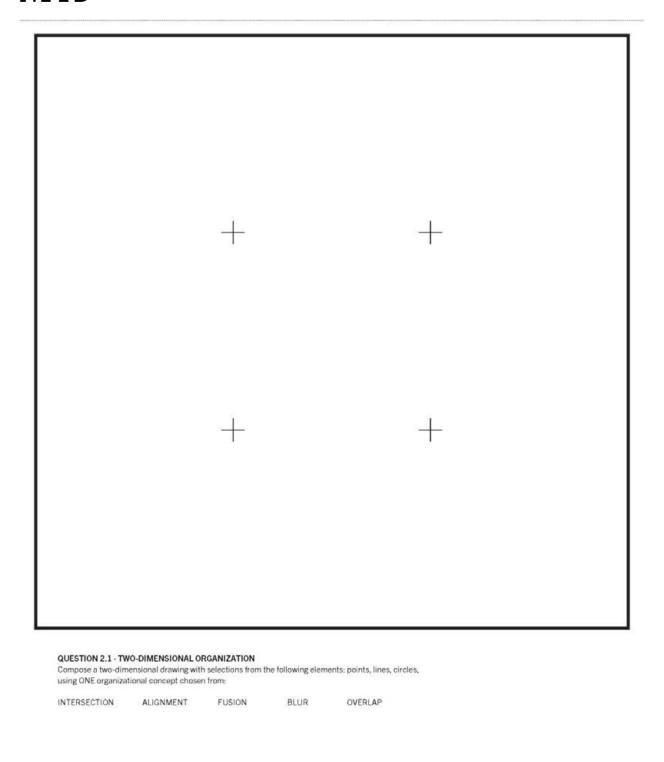


# QUESTION 1 - A PLAN CUT OF A COMPOSITION

In the space below the image, project the plan looking down at each element of the composition as cut through the level indicated by the white line.

Still Life with Peeled Orange and Grapes by Albertus Steenbergen, 19th century





Name





QUESTION 3 · SPACE FROM TEXT	Sanctian (2007) And Sanctian (100)		
Produce a visual transformation of ONE of	the 3 texts below.		
Circle which text you choose.			
"Architecture is a game, correct and magni	ificent, of forms assembled in the	light." — Le Corbusier	
"A line is a dot that went for a walk." — Pau	ul Klee		
"Color is whatever comes out of the material		Harra	
	ai and keeps it what it is." — Eva	nesse	
COIOI 15 WHATEVEL COINES OUT OF THE HINTER			
Name			



		1		
		-		
		1		
QUESTION 4 · S Imagine a repea	TORYBOARD ted activity and translate it into	a spatial sequence usi	ng ONE of the following analog or di	gital techniques:
COLLAGE	PHOTOGRAPHY	LINE DRAWING	PAINTING	
TIME LAPSE	FREEHAND DRAWING	MONTAGE	ANIMATION	
Name				
Name				



OUTCTION E MEACUIPEMENT OF A TERRITORY	
QUESTION 5 · MEASUREMENT OF A TERRITORY	
Develop a system of measuring a territory of your choice.	
QUESTION 5 - MEASUREMENT OF A TERRITORY  Develop a system of measuring a territory of your choice.  Document your tools and measurements.	
Develop a system of measuring a territory of your choice.	
Develop a system of measuring a territory of your choice.	
Develop a system of measuring a territory of your choice.	
Develop a system of measuring a territory of your choice.	
Develop a system of measuring a territory of your choice.	
Develop a system of measuring a territory of your choice.	
Develop a system of measuring a territory of your choice.	
Develop a system of measuring a territory of your choice.	
Develop a system of measuring a territory of your choice.  Document your tools and measurements.	
Develop a system of measuring a territory of your choice.	
Develop a system of measuring a territory of your choice.  Document your tools and measurements.	



QUESTION 6 - ECLIPSE		
Perform an eclipse.		
1,000,000 (100,000,000,000,000,000,000,000,000,000		
Name		

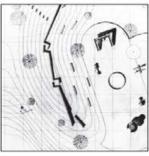


#### QUESTION 7 - WRITING PROJECTS

All responses should be typed.

1	TRANSITION	BOUNDARY	PASSAGE	MATRIX	ORDER	GRID	
	WALL	APERTURE	COLUMN	SQUARE	STAIR	THRESHOLD	
	Choose one wor	d and elaborate on	its spatial implic	ations in your ow	n experience.		
2		ulary above, descr nces below each da		rangements you s	ee in the drawing	s below.	-
FE			4	1.			







Name



	What is a book that changed the way you think? How?
	200000-10.000000000000000000000000000000
	What is a film that changed the way you act? How?
	What is a work of art that changed the way you see? How?
0	What is a piece of music that changed the way you listen? How?
	Why do you want to study architecture at The Cooper Union?



#### 6.6 Student Financial Information

#### Example Financial Award Letter:



Date: 4/19/2024 Student ID:

Award Year:

2024-2025 Academic Year

Congratulations on your admission to The Cooper Union! Outlined below is your financial aid award for the current academic year. The need-based portion of the financial aid award package is based on the Free Application for Federal Student Aid (FAFSA) information you provided to us.

All merit scholarships and institutional grants are 4 years (total of 8 semesters) for School of Art and School of Engineering students, and 5 years (total of 10 semesters) for School of Architecture students. Students must be enrolled full-time, maintain satisfactory academic progress eligibility, and adhere to the institutional code of conduct.

Term	Housing Status	
FALL	ON CAMPUS	
SPRING	ON CAMPUS	

Awards	FALL	SPRING
Grants & Scholarships - Money you don't hav back	e to pay	
Tuition Merit	\$11,137.00	\$11,138.00
Innovator Scholarship	\$2,500.00	\$2,500.00
Cooper Grant	\$11,137.00	\$11,138.00
Federal Pell Grant	\$3,698.00	\$3,697.00
Financial Grant	\$3,056.00	\$3,057.00
Student Loans - Optional		
Subsidized Loan	\$1,750.00	\$1,750.00
Other		
Federal Work Study	\$1,714.00	\$1,714.00
Total	\$34,992.00	\$34,994.00
Grand Total		\$69,986.00

All Cooper scholarships and grants are for students seeking their first bachelor's degree. If you receive additional scholarships or grants from outside The Cooper Union, it is essential that you inform the Office of Financial Aid immediately as this may impact your award.

The Parent Plus Loan amount, if your family chooses to utilize this loan option, may vary and is subject to a credit check by the Federal Department of Education. Finally, The Cooper Union reserves the right to modify your financial aid award based on your enrollment status, academic standing, and the final FAFSA verification outcome.

If you have questions, please contact us at financialaid@cooper.edu. Sincerely,

Charlie Xu

Senior Director of Student Financial Services



# Example College Financing Plan:



	On Campus Residence	Off Campus Residence
Tuition and fees	\$46	5,820
Housing and meals	\$19,090	
Books and supplies	\$1,	,800
Transportation	\$7	700
Other education costs	\$1,	576
Estimated Cost of Attendance	\$69,5	986/ yr

Expected Family Contribution:	
Based on FAFSA As calculated by the institution using information reported on the FAFSA or to your institution.	-801 / yr
Based on Institutional Methodology Used by most private institutions in addition to FAFSA.	N/A / yr

#### **Scholarship and Grant Options**

Scholarships and Grants are considered "Gift" aid - no repayment is needed.

Scholarships		
Merit-Based Scholarships		
Scholarships from your school	N/A	
Scholarships from your state	N/A	
Other scholarships	N/A	
Employer Paid Tuition Benefits	N/A	
Total Scholarships	N/A / yr	

Grants	
Need-Based Grant Aid	
Federal Pell Grants	\$7,395
Institutional Grants	\$55,663
State Grants	N/A
Other forms of grant aid	N/A
Total Grants	\$63,058 / yr

VA Education Benefits	
VA Education Benefits	N/A / yr

College Costs You Will Be Required to Pay	
Net Price (Cost of attendance minus total grants and scholarships)	\$6,928 / yr

#### Loan and Work Options to Pay the Net Price to You

You must repay loans, plus interest and fees.

Loan Options <sup>*</sup>	
Federal Direct Subsidized Loan (Variable interest rate)(Variable origination fee)	\$3,500 / yr
Federal Direct Unsubsidized Loan (Variable interest rate)(Variable origination fee)	\$0 / yr
Total Loan Options	\$3,500 / yr

For federal	student	loans,	origination	fees	are	deducted from loan	
proceeds.							

Work Options	
Work-study Hours Per Week (estimated)	\$3,428 / yr N/A / wk
Other Campus Job	N/A / yr
Total Work	\$3,428 / yr

For More Information

# Continued on next page.



#### **Other Options**

You may have other options to repay the remaining costs. These include:

- · Tuition payment plan offered by the institution
- · Parent PLUS loans, which your parent can apply for
- Non-Federal Private education loan, which you or your parent can apply for after passing a credit check.
- apply for after passing a credit check

  Other Military or National Service Benefits

#### Customized Information from The Cooper Union

Part 2 College Financing Plan

The Cooper Union Financial Aid Financial Aid Office

41 Cooper Square New York, NY 10003

Telephone: 212-353-4120

E-mail: financialaid@cooper.edu

#### \* Loan Amounts

Note that the amounts listed are the maximum available to you. To learn about loan repayment choices and calculate your Federal Loan monthly payment, go to: https://studentaid.gov/h/manage-loans.

#### Glossary

Cost of Attendance (COA): The total amount (not including grants and scholarships) that it will cost you to go to school during the 2024-25 school year. COA includes tuition and fees; housing and meals; and allowances for books, supplies, transportation, loan fees, and dependent care. It also includes miscellaneous and personal expenses, such as an allowance for the rental or purchase of a personal computer; costs related to a disability; and reasonable costs for eligible study-abroad programs. For students attending less than half-time, the COA includes tuition and fees; an allowance for books, supplies, and transportation; and dependent care expenses.

Direct Subsidized Loan: Loans that the U.S. Department of Education pays the interest on while you're in school at least half-time, for the first six months after you leave school (referred to as a grace period\*), and during a period of deferment (a postponement of loan payments).

Direct Unsubsidized Loan: Loans that the borrower is responsible for paying the interest on during all periods. If you choose not to pay the interest while you are in school and during grace periods and deferment or forbearance periods, your interest will accrue (accumulate) and be capitalized (that is, your interest will be added to the principal amount of your loan).

Expected Family Contribution: A number used by your school to calculate the amount of federal student aid you are eligible to receive. It is based on the financial information provided in your Free Application for Federal student Aid (FAFSA). This is not the amount of money your family will have to pay for college, nor is it the amount of federal student aid you will receive.

Federal Work-Study: A federal student aid program that provides part-time employment while the student is enrolled in school to help pay his or her education expenses. The student must seek out and apply for work-study jobs at his or her school. The student will be paid directly for the hours he or she works may not automatically be credited to pay for institutional tuition or fees. The amount you earn cannot exceed the total amount awarded by the school for the award year. The availability of work-study jobs varies by school. Please note that Federal Work-Study earnings may be taxed in certain scenarios; however the income you earn will not be counted against you when calculating your Expected Family Contribution on the FASFA.

Grants and Scholarships: Student aid funds that do not have to be repaid. Grants are often need-based, while scholarships are usually merit-based. Occasionally you might have to pay back part or all of a grant if, for example, you withdraw from school before finishing a semester. If you use a grant or scholarship to cover your living expenses, the amount of your scholarship may be counted axable income on your tax return.

Loans: Borrowed money that must be repaid with interest. Loans from the federal government typically have a lower interest rate than loans from private lenders. Federal loans, listed from most advantageous to least advantageous, are called Direct Subsidized Loans, Direct Unsubsidized Loans, and Parent PLUS Loans. You can find more information about federal loans at StudentAid.gov.

Net Price: An estimate of the actual cost that a student and his or her family need to pay in a given year to cover education expenses for the student to attend a particular school. Net price is determined by taking the institution's cost of attendance and subtracting any grants and scholarships for which the student may be eligible.

Non-Federal Private Education Loan: A private education loan is a loan issued expressly for postsecondary education expenses to a borrower (either through the educational institution or directly to the borrower) from a private educational lender, rather than as a Title IV, HEA loan offered by the Department of Education.

Origination Fees: An upfront fee charged by a lender for processing a new loan application. It is compensation for putting the loan in place. Origination fees are quoted as a percentage of the total loan.

Parent Plus Loan: A loan available to the parents of dependent undergraduate students for which the borrower is fully responsible for paying the interest regardless of the loan status.

Teach Grant Program: Provides grants of up to \$4,000 a year to students who are completing or plan to complete course work needed to begin a career in teaching. If you do not meet the requirements of your service obligation, all TEACH Grants you received will be converted to Direct Unsubsidized Loans. You must repay these loans in full, with interest charged from the date of each TEACH Grant disbursement. Service obligation information can be found at https://studentaid.go/understand-aid/types/grants/teach.

Tuition Payment Plan: A tuition payment plan offered by an institution may allow students to spread out their payments. It includes an extension of credit of 90 days or less in which the educational institution is the lender, or of one year or less where an interest rate will not be applied to the credit payment.

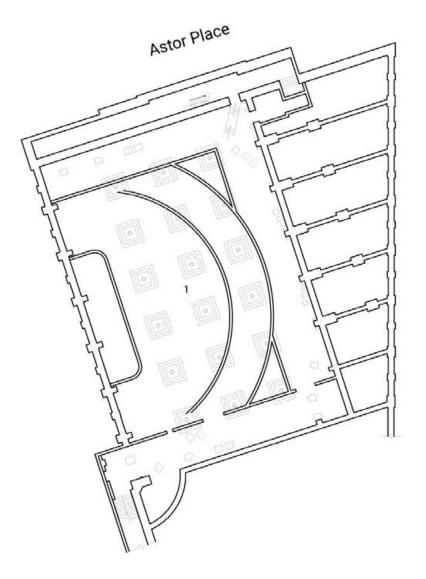
VA Education Benefits: Benefits that help Veterans, service members, and their qualified family members with needs like paying college tuition, finding the right school or training program, and getting career counseling. You can find more information here: https://www.va.gov/education/.

For more information visit https://studentaid.gov.



# **APPENDIX D. Program and Student Criteria Matrix.**

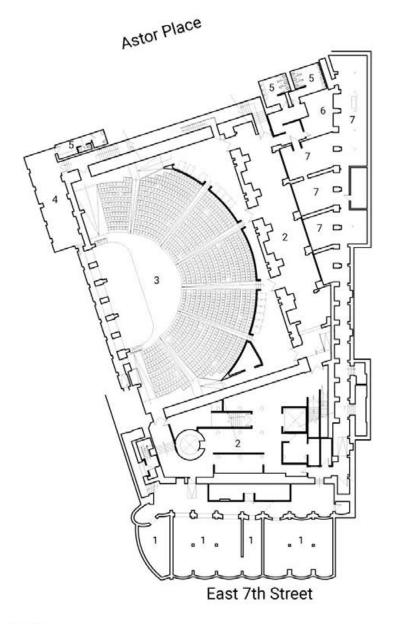
MATRIX							
Irwin S. Chanin School of Architecture	e   NAAB Shared Values / Progra	n Criteria / Student Criteria					
KEY:	Primary Evidence						
	Supplementary Evidence						
	Year 1	Year 2			Year 4	Year 5	Non-Curricular Activity
	Fall Spring	Fall Spring	ng Fall	Spring Fall	Spring Fall	Spring	
	Arch 111A Architectorics Arch 115A History of Architecture I Arch 115A History of Architecture I Arch 1103 Goliculus and Analytic Geometry HSS 1 The Freshman Seminar FA 100RA Sing Techniques FA 100RA Sing Techniques Arch 111B History of Architecture I Arch 111B Retroy of Companies Offivers and New Host 110 Companies Offivers and New Host 110 Companies Offivers and New Host 110 Companies Offivers and New Host 110B Compani	Actorial Since Techniques Actorial Actoria Actoria Actoria Actoria Actoria Actoria Actoria Actoria Actoria Acto	137 A 132 A 135 A 135 A 135 A	Ach 1316 Design III Ach 132 Bildudus II Design III Ach 132 Bildudus II Düben History and Theories Ach 134 Bildudu Technology Ach 134 Bildud Technology Ach 134 Bildudus Technology Ach 134 Bildudus Technology Ach 134 Bildudus III Ach 135 Aircuns III Ach 135 Aircuns III Ach 134 Ac	B Design IV B Structures II B Construction Electives (x Thesis A Thesis A Professional	99 #         Electives (           151 B         Thesis           154 B         Profession           225         Advanced           89 #         Electives (           Year Show Exhibit         Exhibit	res and Even ipation in Exi Lecture St Lay Program ret Council min Mensche or Union Gram r Fair / Portt ret Clubs
	Arc	FA 10 Arch Arch Arch Arch Arch Arch Arch Arch	Arch Arch Arch Cours	Arch Arch Arch Arch Arch Arch Arch Arch	Cours Arch Arch Arch Arch	Cours	Lecture Partici Stude Sumn Stude VIP II Benja Coope Coree Caree Stude
Shared Values							
Design Env. Stewardship & Professional Respon.							
Equity, Diversity & Inclusion Knowledge & Innovation		<del>-    -    -    -    -    -    -    -  </del>					
Leadership, Collab. & Community Engmt.							
Lifelong Learning							
Program Criteria							
PC.1 Career Paths							
PC.2 Design							
PC.3 Ecological Know. & Respon. PC.4 History & Theory		<del>-                                      </del>			<del></del>	<del></del>	
PC.5 Research & Innovation							
PC.6 Leadership & Collaboration							
PC.7 Learning & Teaching Culture	┞┺╅╀╀┦┞┶┵┼┼	<del>-11-11-1-1-1</del>					
PC.8 Social Equity & Inclusion							
Student Criteria							
SC.1 HSW in the Built Environ.							
SC.2 Professional Practice			++++++++++++++++++++++++++++++++++++	<del>                                     </del>			
SC.3 Regulatory Context		<del>-1111111</del>	┼┼┦┞┶┷┷┵┦	┞	<del>┤├┼┼┼</del> ┤┠┼╄╃		
SC.4 Technical Knowledge SC.5 Design Synthesis	<del>                                     </del>	<del>-1                                     </del>			<del></del>	<del>                                      </del>	
SC.5 Design Synthesis SC.6 Building Integration	<del>                                     </del>	<del>-1                                      </del>					



Key

1. Mechanical Area Under Seating

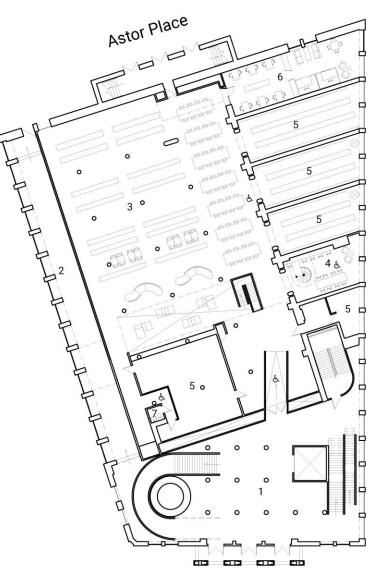
Foundation Building: Sub-Basement



# Key

- 1. 2. 3. Mechanical Rooms
- Lobby The Great Hall Auditorium
- 4. Green Room
- 5. Restrooms
- Storage
- Vault Mechanical and Storage Area

# Foundation Building: Basement



East 7th Street

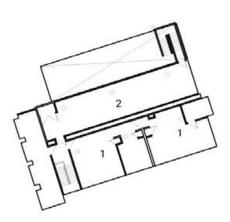
#### Key

- 1.
- Entrance Lobby Entrance Colonnade Library Stacks 2.
- 3.
- 4. Study Room
- Library Offices 5.
- 6. The Center for Writing and Learning
- Restroom

### Foundation Building: First Floor

Third Avenue



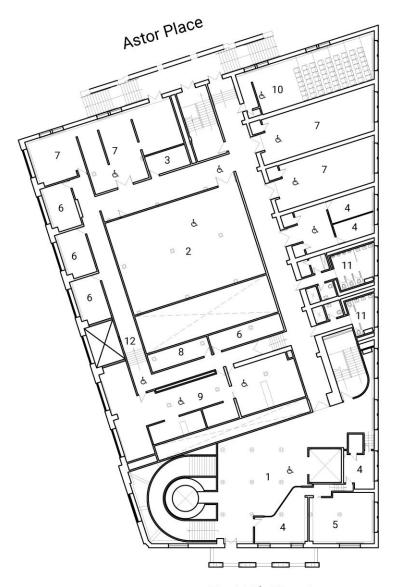


# Key

- Archive Storage Study Area and Library Archives Workspace 1. 2.

Foundation Building: First Floor Mezzanine





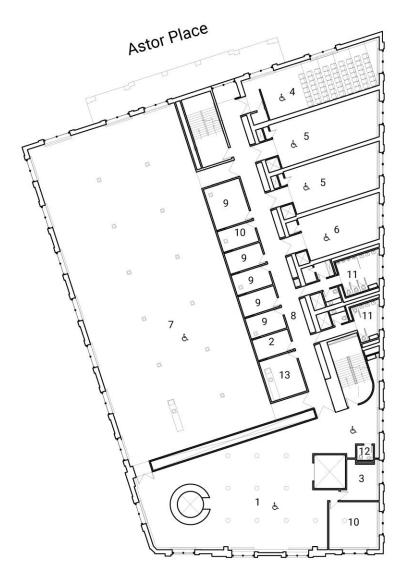
#### Key

- 1.
- 2.
- Lobby / Exhibition Area Hougton Gallery Hougton Gallery Storage 3.
- 4. School of Art Administration
- School of Art Dean's Office 5.
- School of Art Faculty Offices School of Art Studios 6.

#### Foundation Building: Second Floor

- School of Architecture Faculty Office School of Architecture Archive 8.
- 9.
- 10. Lecture Classroom
- 11. Restrooms
- 12. Accessible Lift





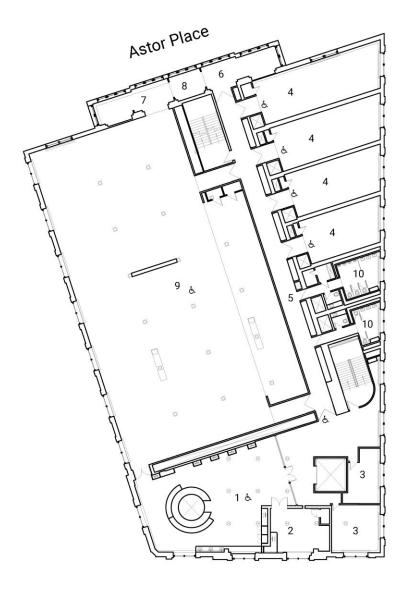
#### Key

- 1.
- Lobby / Critique & Exhibition School of Architecture Assistant Dean's Office
- School of Architecture Acting Dean's Office 3.
- 4. Lecture Classroom
- Thesis Studios 5.
- Master's Studio 6.
- First through Fourth Year Studio

- 8. Corridor and Exhibition Area 9.
  - **Architecture Faculty Offices**
- 10. Architecture Staff Office
- 11. Restrooms
- 12. Accessible Restroom
- 13. Architecture Faculty Lounge

### Foundation Building: Third Floor





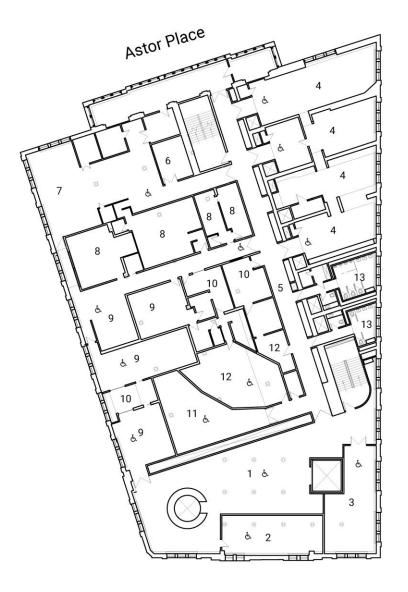
### Key

- 1.
- AACE Lab CNC Room
- Art Faculty Office 3.
- 4. Art Studios and Classrooms
- 5. Corridor
- 6. Plaster Room
- Wax Room

#### Foundation Building: Fourth Floor

- High Ventilation Room Sculpture Shop 8.
- 9.
- 10. Restrooms



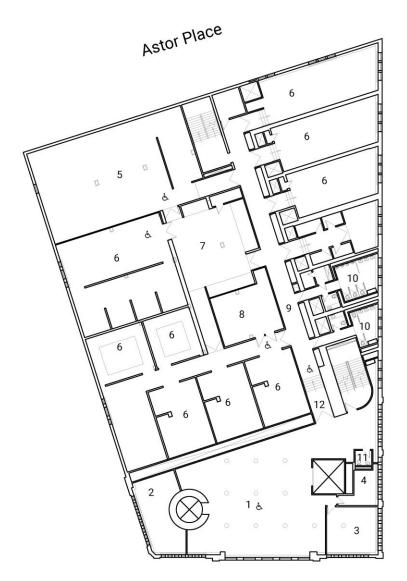


#### Key

- Lobby / Critique and Exhibition Area Classroom 1.
- 2.
- Typography / Letter Press Room 3.
- 4. Printmaking Shop
- Corridor 5.
- 6. Computer Lab
- Silk Screen Shop

#### Foundation Building: Fifth Floor

- 8. Photo Darkrooms
- 9. Film and Video Studios
- 10. **Equipment Checkout**
- Photo Studio 11.
- 12. Seminar Room
- 13. Restrooms



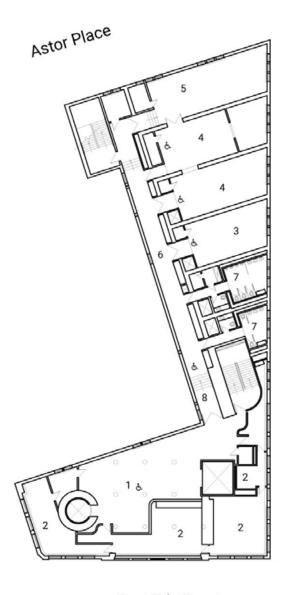
#### Key

- Lobby / Critique and Exhibition Area Classroom 1.
- 2.
- School of Art Office 3.
- 4. **Exhibition Space**
- Painting Studio 5.
- 6. Art Studios
- Prep Room / Storage

#### Foundation Building: Sixth Floor

- Mechanical Room 8.
- 9. Corridor
- 10. Restrooms
- Accessible Restroom 11.
- 12. Lift

# MAB



# East 7th Street

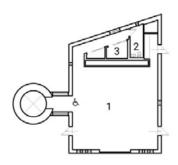
Accessible Lift

8.

#### Key

- Lobby / Exhibition Area President's Office 1.
- 2.
- Architecture Study Collection / Seminar Room School of Architecture Computer Studio 3.
- 4.
- Art Classroom / Critique Space 5.
- Corridor 6.
- Restrooms

Foundation Building: Seventh Floor



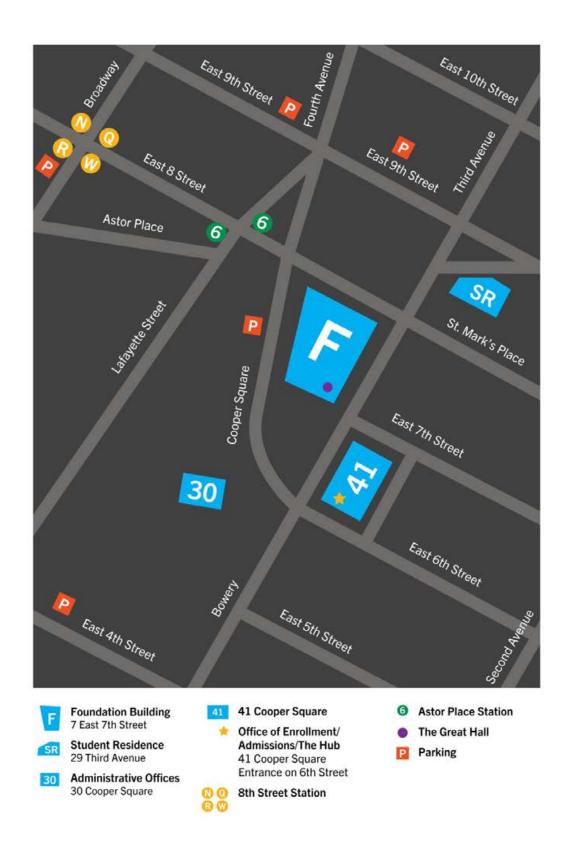
East 7th Street

# Key

- 1. Classroom
- Restroom
- 2. Storage

Foundation Building: Peter Cooper Suite

# MAB





#### **APPENDIX F. New Developments**

#### **Recent President's Office Developments:**

• Laura Sparks has stepped down as The President of The Cooper Union. The school has since launched a search for the new President. Malcom King is the new Interim President of The Cooper Union. He graduated from Cooper's Albert Nerken School of Engineering in 1997. King was elected to The Cooper Union Board of Trustees in 2013 and became Chair of the Board in 2020. In June 2024, he was elected interim president when Laura Sparks, Cooper Union's 13th president (2017-2024), made the decision to bring her time with Cooper to a close. King will serve as interim president for the year while a comprehensive search is conducted for Sparks' successor.

In addition to serving as Board Chair, King has chaired the Audit Committee and served on the Free Education Committee (FEC) which issued the plan to return to full-tuition scholarships that was approved by the board in 2018. The plan has achieved a six-year freeze on tuition, increased scholarship levels to cover an average 83% of tuition costs, enabled 50% of students to attend tuition-free, and provided for new investments in academic and student life.

King has also served as co-chair of Cooper Union on Wall Street (CUWS), an alumni group that supports the school through fundraising initiatives and provides guidance to students and alumni interested in careers in financial services. Prior to assuming the role of interim president, he was Managing Director and Control Executive for Cybersecurity at Wells Fargo. His previous positions include Managing Director and Head of Security Engineering at State Street Bank, as well as leadership roles at Morgan Stanley and Citigroup. He began his career at Federal Express as an engineer in the Information Security division. King has also contributed his expertise to industry groups such as the Cyber Risk Institute, where he has provided insights on regulatory compliance and best practices.



Home

#### UPDATE ON THE OFFICE OF THE PRESIDENT

Dear Cooper Union,

The upcoming departure of Laura Sparks as the President of Cooper Union is a bittersweet turning point for our community.

When the Board appointed her in September of 2016, Cooper Union had just come through an existential financial and community crisis. Over the last nearly eight years, under President Sparks' leadership, Cooper Union has experienced a remarkable turnaround focused on a bold and challenging goal: to return the institution to its intended tuition-free status in an age of ever-increasing higher education costs, and doing it while investing in our academic programs at the leading edge of their fields. Despite many challenges and obstacles – including the COVID 19 pandemic – our progress toward this goal has been steady and exceptional. For six consecutive years, we've held tuition flat with no tuition increases, and we are well on our way to being able to restore full-tuition scholarships for all undergraduates. In fact, in the coming year, scholarship levels will reach 83% of tuition, on average, with nearly half of students attending Cooper tuition-free.

This kind of progress is emblematic of President Sparks' leadership and unyielding focus on stewarding Peter Cooper's vision that this institution serve as an extraordinary free center of learning for all. At the outset of her service here, she worked with the Board and our full community to reenergize the aspirations we have for The Cooper Union, defining together a set of Institutional Goals and Strategic Priorities that continue to guide us. In collaboration with the Board's Free Education Committee, Laura worked to develop the ambitious and comprehensive Plan to Return to Full-Tuition Scholarships, informed by the input of this community and adopted by the Board in 2018. And just last month, we published The Plan at Five Years, a report on the incredible progress made during the first half of this history-making effort. We encourage you to read the report and are sharing a few of its highlights below. With Laura's leadership, we are not only pursuing our return to full-futition scholarships, we are:

- Investing in our academic programs, with new humanities and social sciences minors integrated into every school; new bioengineering and computer science minors and a new computer science major in the Albert Nerken School of Engineering; and continued expansion of exciting collaborations and relationships across all three of our schools with a wide range of New York City institutions and partners, such as Memorial Sloan Kettering Cancer Center, Icahn School of Medicine at Mt. Sinai, Albert Einstein School of Medicine, Simons Foundation Flatiron Institute, the Public Art Fund, Museum of Modern Art, and The Met.
- Investing in our academic spaces, such as the IDC Foundation Art, Architecture, Construction, and Engineering (AACE) Lab, which
  students are utilizing at full capacity; the Benjamin Menschel Civic Projects Lab for cross-disciplinary collaborations in the public
  interest; the expanded Center for Writing and Learning; revitalized Library space and programming; and the Irwin S. Chanin School of
  Architecture's studio and the School of Art's photo lab, modernizing both spaces.
- Investing in our physical plant, addressing long-deferred maintenance of our historic Foundation Building, including the completion of a four-year, \$6 million façade restoration of the landmark building.
- Fortifying Cooper's financial resilience for the long term, reversing decades of structural deficits to bring the annual budget into balance and securing more than \$116 million in new fundraising since Fiscal Year 2018 with increased giving across the board from individual and institutional donors as well as government sources.
- Enriching experiences and resources for our students and faculty through new initiatives like The Cooper Union Grant Program, practice-based learning opportunities in the city, deepening our academic leadership team, diversifying faculty perspectives, and building out 24/7 access to student care providers and resources.

Together, we have made tremendous strides, and we look forward to the continued work that lies ahead. We are fortunate that the blueprint for getting there remains clear and achievable and that we are in a strong position to move forward. As Trustees and colleagues, it is difficult to imagine the work without Laura at its center, but she has prepared us well, and we are more than ready to continue all that we began together with her. As interim president and board chair, we feel a deep sense of purpose and duty to this community. The full board feels the same, and we know that so many of you do, as well.

To start, Jamie and Board Vice Chair Lou Manzione ChE'75 will serve as co-chairs of the Presidential Search Committee, and the work of assembling that committee will continue this week. The Presidential Search Committee will work with an experienced search firm. We will update everyone on these developments in the weeks to come.

There is wisdom in the adage that "the only constant is change." Progress, innovation, and new opportunities derive from change. The Cooper Union will build now on its 165-year legacy, on the foundations laid during President Sparks' dynamic years of leadership, and on the incredible talents and aspirations of the Cooper community.

For those c, you in New York City this summer, please save the date of Wednesday, July 24 to toast Laura on her new endeavor. We are also planning an event to celebrate her leadership in the fall when everyone returns to campus.



Home > About Cooper Union > Office of the President

#### PRESIDENTIAL SEARCH

The Cooper Union for the Advancement of Science and Art is conducting a search to identify the institution's 14th president. This follows the decision of President Laura Sparks to bring her time at Cooper to a close, after leading the college for nearly eight years from January 2017 to September 2024. (You can read the announcements regarding President Sparks' departure here: Sparks and Trustees.)

Currently serving as interim president is Malcolm King. King graduated from Cooper's Albert Nerken School of Engineering in 1997, was elected to The Cooper Union Board of Trustees in 2013, and became chair of the board in 2020. In June 2024, he was elected by the full board to serve as interim president while a comprehensive search is conducted for Sparks' successor.

#### Search Process

Leading this process is a Presidential Search Committee, composed of 11 members including alumni and non-alumni trustees, faculty representatives to the board, and a student trustee. (Each of the faculty representatives to the board was elected by their faculties. The Cooper Union student trustee was elected by students.) The committee members also span Cooper Union's schools of architecture, art, and engineering as well as the faculty of the humanities and social sciences. The Presidential Search Committee members are:

- · Jamie Levitt (Co-Chair), Trustee & Interim Board Chair
- Lou Manzione ChE'75 (Co-Chair), Trustee
- · Anne Chao, Trustee
- · Maurice Cox AR'83, Trustee
- Pamela Flaherty, Trustee
- Jadynn Hammond A'25, Student Trustee
- Raffaele Bedarida, Associate Professor of Art History, Representative to the Board
- . Benjamin Davis, Professor of Chemical Engineering, Representative to the Board
- . Beverly Joel A'95, Adjunct Professor of Art, Representative to the Board
- · Michael Young, Associate Professor of Architecture, Representative to the Board
- · Malcolm King (Interim President) (ex-officio member)

The committee selected Spencer Stuart, a global executive search firm with a dedicated Academia & Research practice, to lead the search effort. Spencer Stuart, one of four firms that made formal presentations on their approaches to the assignment, was chosen unanimously by the committee due to the firm's deep understanding and expertise in recruiting candidates with the experience, skills, and attributes necessary for college and university presidents.

Spencer Stuart has met with The Cooper Union community to receive input for the official position description for Cooper Union's next president. The firm met with each of the faculties in architecture, art, engineering, and the humanities as well as key administration leaders and staff. In addition, Spencer Stuart provided an online survey to the entire Cooper Union community as another way of collecting feedback for the position description.

The goal for the overall search process is to identify Cooper's next president by the end of the Spring 2025 semester.

If you have questions on the search process, please email presidentsearchcommittee@cooper.edu.



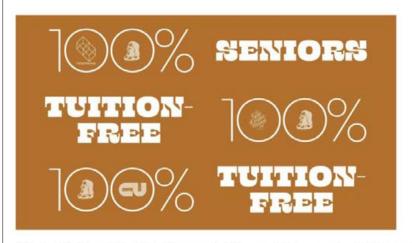
#### **Recent Tuition and Scholarship Developments:**

We are thrilled to announce that all seniors have been provided full scholarships for the next four
years at The Cooper Union. The development to cover all tuition for seniors is a major milestone and
accelerates Cooper Union's progress toward successfully completing its *Plan to Return to Full-Tuition*Scholarships for all undergraduates by the 2028-29 academic year.

Home > About Cooper Union > News

#### COOPER MAKES TUITION FREE FOR ALL SENIORS

POSTED ON: SEPTEMBER 3, 2024



Students at The Cooper Union for the Advancement of Science and Art have more than the first day of classes to be excited about today. Earlier, as part of the college's convocation, outgoing President Laura Sparks surprised students with the news that for each of the next four years, all graduating seniors will be tuition free. The Cooper Union includes internationally renowned programs in architecture, art, and engineering and classes in the humanities and social sciences.

The development to cover all tuition for seniors is a major milestone and accelerates Cooper Union's progress toward successfully completing its Plan to Return to Full-Tuition Scholarships for all undergraduates by the 2028-29 academic year. The Cooper Union Board of Trustees announced the landmark decision to pursue this plan in March 2018, just four years after partial tuition was instituted at the college for the first time in its history to help close a structural financial deficit.

Current seniors will receive refunds from The Cooper Union for any tuition payments made for the fall semester and will pay no tuition for the spring semester. First-, second-, and third-year students will receive full-tuition scholarships in their senior years.

"In 2018, we began an ambitious journey to provide full-tuition scholarships for all of our undergraduate students," said Sparks. "The response to our plan and the dedication of Cooper Union alumni and New York City funders have been tremendous. Thanks to the generosity of three extraordinary alumni donors, we are removing a major financial burden for our graduating classes and reaffirming the ideals that have been foundational to this institution since Peter Cooper opened its doors in 1859," she said.

Peter Cooper believed that education should be "open and free to all" because as he saw it, "The best investment any society can make is in the education of its people." Today, though, students are faced with higher education costs that have increased by an estimated 40% (adjusted for inflation) over the last 20 years, which has translated into outstanding private student loan debt totaling \$128.8 billion.

With the inception of the Plan to Return to Full-Tuition Scholarships, The Cooper Union has been reversing that trend. The college has held tuition flat for six, consecutive years, has consistently increased scholarship levels, and is now accelerating its plan to restore full-tuition scholarships by providing free tuition for all senior over the next four years.

The possibility of offering all seniors full-tuition scholarships came together this summer when an alumnus made a pledge to the "Until All Are Free" fund that this donor established in 2016. George Reeves, a 1964 alumnus of Cooper Union's Albert Nerken School of Engineering, and his wife and business partner Ross Wisnewski, then stepped in with a new commitment. For Reeves and Wisnewski, this fruit was a \$4 million matching grant in 2021, which generated an additional \$4 million, all for scholarships. Closing the gap to make the initial vive for seniors possible was John Manuck, a 1969 School of Engineering graduate, and his wife Mary. For the Manucks, their new gift-to-lows a \$3 million grant made in 2023 from their family foundation to fund the John and Mary Manuck Distinguished Professor of Design at Cooper. In total, the three alumni donors are contributing an additional nearly \$6 million on top of their prior gifts. Those



commitments, along with the existing scholarships that Cooper provides and other grants and scholarships that students are eligible for, made it possible for seniors to be tuition free.

"We are so encouraged that Cooper is moving steadily toward tuition-free undergraduate education for all, and we are thrilled by this amazing opportunity to contribute to achieving this goal now for current students in their senior year. It is an honor to be a part of this investment in the future and a joy to witness the impact of doing so," said Reeves and Wisnewski.

Manuck said, "The return to a tuition-free Cooper Union is of paramount importance. Establishing this status for the senior year demonstrates a serious commitment in this direction."

Sparks shared with the Cooper community in July that she would be bringing her time at the college to a close at the start of the semester. This marks her final week, and Interim President Malcolm King, who is Cooper's prior board chair and a 1997 graduate of the School of Engineering, noted the ability to make seniors tuition free is in keeping with the progress that Sparks championed throughout her time at the college. "I was the beneficiary of free tuition as a student of The Cooper Union. I was also a trustee at the time in 2014 when the difficult decision to institute tuition was made," said King. "When President Sparks joined us in 2017, I was serving on the board's Free Education Committee, and together with her and then-Board Chair Rachel Warren, we immediately set about the work of determining whether a path back to free would be possible. A year later, the Board adopted the Plan to Return to Full-Tuition Scholarships. Since then, we have surpassed the financial goals across the first six years of the plan, and Laura has been central to that momentum. We have work to do over the next four years to ensure we continue to meet our financial targets, however, the goal of restoring free tuition for all is within our reach," he said.

The Plan to Return to Full-Tuition Scholarships, as adopted in 2018, laid out a 10-year timeline to generate the savings, expense reductions, fundraising, and other revenue increases necessary to sustainably provide full-tuition scholarships for every Cooper Union undergraduate student. The plan linked returning to full-tuition scholarships with building long-term financial health for the institution and providing for ongoing investment in Cooper's academic programs and facilities. To date, more than \$114 million in new funds have been raised.

Today, as the result of disciplined implementation of the Plan, more than half of the student body attends tuition free, and, on average, undergraduates pay less than 15% of the college's \$44,550 tuition.

More News from The Cooper Union

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Furthermore, The Cooper Union's leadership team, Board of Trustees, and members of the Free
Education Committee (FEC) presented an overwhelmingly positive update on the institution's
financial and strategic progress since adopting the 10-Year Plan to Return to Full-Tuition Scholarships
in March 2018. Their report, The Plan at Five Years, details critical efforts made to improve academic
programs, introduce new spaces, and foster collaborative student experiences, all while increasing
scholarship levels and keeping tuition rates flat.

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#### TRANSFORMATION IN THE MAKING

POSTED ON: NOVEMBER 13, 2024



This past summer, The Cooper Union's leadership team, Board of Trustees, and members of the Free Education Committee (FEC) presented an overwhelmingly positive update on the institution's financial and strategic progress since adopting the 10-Year Plan to Return to Full-Tuition Scholarships in March 2018. Their report, The Plan at Five Years, details critical efforts made to improve academic programs, introduce new spaces, and foster collaborative student experiences, all while increasing scholarship levels and keeping tuition rates flat.

Behind that positive momentum is a community dedicated to Cooper's current and future students. To mark this significant milestone, we offer a glimpse behind the scenes with community members who are contributing to Cooper's transformation and, in many cases, doing so in unexpected ways. We asked them to share their perspectives and tell us about their work. These are just a few of the many people who are pushing Cooper forward.

Carol (Robinson) Wolf), a 1984 graduate of the School of Art, served on the Board as Alumni Trustee for the past four years and as chair of the Free Education Committee. Wolf is an accomplished graphic designer, an active member of the Cooper Union Alumni Association, and a leading voice in efforts to return Cooper to a full-tuition scholarship model.

Q/ What do you see as the role of the alumni community in helping to shape the future of The Cooper Union? How have your attitudes toward Cooper changed in the years since the adoption of the 10-Year Plan?

A/ Peter Cooper already answered this question more eloquently than I ever could. He envisioned a day when graduates would "rally round this institution, and if the plans I have formed can be executed in no other way they will see they are carried out." We did that when untold numbers of alumni joined with students, faculty, and the rest of the Cooper community to get our beloved institution back on a path to full-tuition scholarships. Today, "rally(ing) round this institution" means staying engaged with the school—following school news, staying connected with classmates, and attending on-campus or online events, exhibitions, and programs. And it means continued financial support by everyone in the alumni community—standing with the Cooper students of today and tomorrow by ensuring the successful culmination of our 10-Year Plan.

By the time I joined the Board as an elected Alumni Trustee in 2020, the 10-Year Plan had been in full swing for two years. I was honestly surprised and inspired by how much had been accomplished. I was, of course, keenly aware of the daunting financial challenges the school faced. I had also harbored real concerns about whether the Board was fully behind returning to full-tuition schole. This what I found instead was rigorous fiscal discipline and a conscientious approach that considered how every decision might in the Plan. This ardent commitment to the Plan has put us on a more stable, solid foundation—and because it took into acco. In. In expected events and the potential for market downturns, it kept us on track even through the pandemic. We remain on track today, and I have great confidence in The Cooper Union's future.

Please see full "Transformation in the Making" article link, here.



#### **Recent Faculty and Staff Developments:**

• We are excited to announce two new appointments in the School of Architecture for the 2024-2025 academic year. [https://cooper.edu/architecture/news/new-appointments-school-architecture]

#### Assistant Professor Mersiha Veledar, AIA | Acting Assistant Dean

A proud alumna, <u>Mersiha</u> has been a dedicated faculty member since 2005, teaching and coordinating a variety of innovative studios and seminars. She has played a pivotal role in leading the teaching team of our summer program, "Introduction to Architecture," for high school and college students, and has played a significant role on our Admissions Committee over the years. In her new role as Acting Assistant Dean, Mersiha will primarily focus on our re-accreditation efforts in preparation for the visiting committee this spring.

#### Associate Professor Michael Young, R.A. | Coordinator of Graduate Studies

<u>Michael</u> has been a valued member of our faculty since 2005, teaching across all levels of our undergraduate Design sequence and in the graduate Design studio. His electives and seminars consistently attract full enrollment with long waitlists. Awarded tenure in 2022, he is also the author of REALITY MODELED AFTER IMAGES and a recipient of the Rome Prize. As the Coordinator of Graduate Studies, Michael will collaborate with various constituencies to develop and implement a strategic vision for the graduate program, focusing on curriculum development, recruitment, and enhanced internship and career development opportunities.

Please see full article link, here.

• Additionally, we are thrilled to announce the promotion of Chris Dierks to Associate Director at The Irwin S. Chanin School of Architecture Archive at The Cooper Union.



Home > The Irwin S. Chanin School of Architecture > News

# NEW APPOINTMENTS IN THE SCHOOL OF ARCHITECTURE

News New Appointments in the School of Architecture has been updated. POSTED ON: SEPTEMBER 26, 2024



We are excited to announce two new appointments in the School of Architecture for the 2024-2025 academic year:

#### Assistant Professor Mersiha Veledar, R.A. | Acting Assistant Dean

A proud alumna, Mersiha has been a dedicated faculty member since 2005, teaching and coordinating a variety of innovative studios and seminars. She has played a pivotal role in leading the teaching team of our summer program, "Introduction to Architecture," for high school and college students, and has played a significant role on our Admissions Committee over the years. In her new role as Acting Assistant Dean, Mersiha will primarily focus on our re-accreditation efforts in preparation for the visiting committee this spring.

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The School of Architecture warmly welcomes these esteemed colleagues to their new roles. We look forward to the incredible contributions they will make in these capacities!

Hayley Eber, Acting Dean

Our tenured and proportional-time faculty composition has changed recently. Lydia Kallipoliti has
accepted a new position as an Associate Professor and a Director of MS in Advanced Architectural
Design at Columbia University GSAPP. Lorena del Rio will not be returning to The Cooper Union and
Elisa Iturbe [formerly, proportional time] has accepted a tenure-track position at Harvard, GSD.