

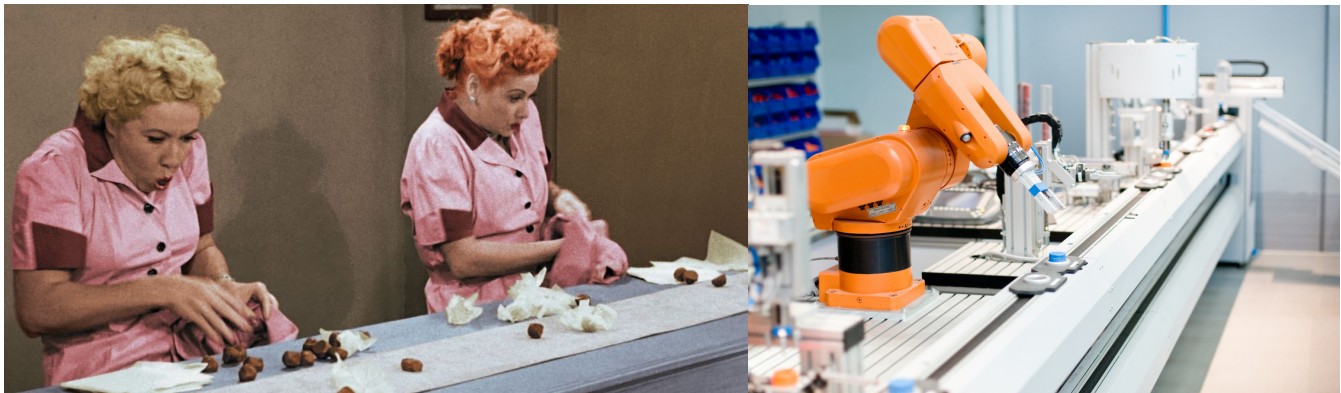
**Type of Course:** Advanced Studio ARCH 51000 / ARCH 85101 / ARCH 91102  
**Class Meetings:** M/TH 2:00PM – 5:50PM; Thursday lectures @ 5:30 PM  
**Instructor:** Professor Ali C. Höcek  
**Location:** Spitzer 222  
**Semester/Year:** Fall 2019

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## URB FAB

### Project Statement

The rapidly decreasing presence of light industry within New York City is part of the design premise of the Urban Fabrication (Urb Fab) studio, and is seen within a greater context as a decrease in the city's cultural and economic diversity. The project proposes the reintroduction of a fabrication system within the surrounding setbacks of the windowless AT&T Long Lines building at 33 Thomas Street. Several subtexts will also inform the student's design process and may include the parasitic nature of the design construct to its site, the non-spatial network operating within the host building, and conceptual parallels in culturally critical works from the 1960s. A common subtext for all projects will be the inquiry and experimentation in techniques to convey conventions of tectonics, urban context, and design concept.



### Introduction

Since the late 19<sup>th</sup> century, the factory has been relegated to the periphery of the city (see Foucault). In many ways rightly so, as production waste and fossil fuels contributed to the squalor of cities and widespread illnesses, such as tuberculosis. This is the stuff of Charles Dickens and Karl Marx. As industry progressed during and after the second world war and things got bigger, the factory sprawled and took up even greater portions of the landscape outside cities.

In our lives, the advent of digital production has proven that its fabrication techniques can be cleaner, less wasteful, take up less area, and provide safer and healthier environments for workers and those living within the factory's environment.

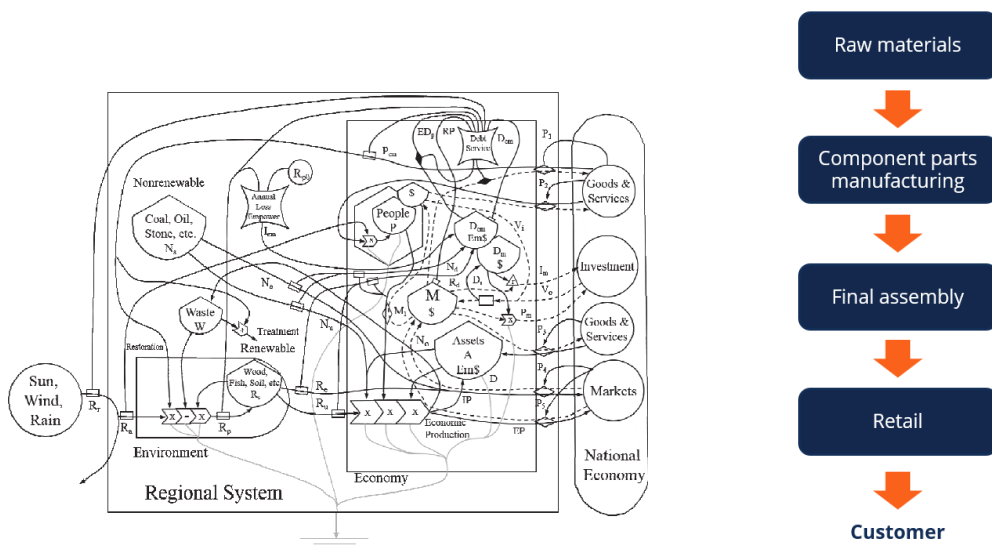
The current market environment has favored high-end residential housing at the expense of many other types of urban programs. In New York City and particularly Manhattan, we have seen the displacement of light industrial programs, many of which were constructed around the time of the previous century. An example of these are the buildings in Soho, whose high ceilings and open floor layouts were designed for light industrial use, then in the late 1960s and 70s appropriated by artists as studios, venues for performances, and spaces of alternative social interactions, and in recent decades converted to luxury loft apartments. The increase in property value has either made it more profitable for light industrial facilities to sell, or higher rents have made it untenable for tenants.

**Program + Research**

Interactions, economics, and people in New York City and particularly Manhattan are becoming more homogeneous and less diverse, as a result of this progressive trend in the real estate market. As a counter to this trend, our studio will speculate on the reintroduction of a fabrication system into the urban environment. The reinsertion of industry, (making things whether by craft or machine), is seen as a critical act, viewed in relation to this pattern of urban homogeneity.

Each student will choose a business that makes some particular thing. It cannot, however, be food related. The recently closed Manhattan location of the headphone company “Normal” comes to mind as an example. Its footprint is small, while accommodating both fabrication and retail (see Rappaport). The product does not necessarily have to be a consumer product; it might be, for instance, a bottle recycling station. The means of fabrication may be fully automated – requiring minimal or no human interaction.

Each project will begin the design process by preparing analytical drawings illustrating sequences in the chosen fabrication system. This will start with raw materials and end with the arrival of the end product to its user. A Vertical Integrated Business Model may serve in identifying a suitable process (diagram below right). It will identify waste, transportation, storage and other, no less significant stages within the production cycle. The design will seek to minimize the carbon footprint generated by each stage of the fabrication process.



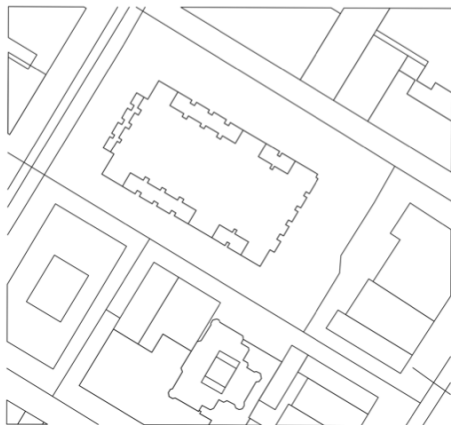
As the pedestrian entrance to the building is on the south façade, each project will reconsider the entrance from the street and include the immediate interior lobby. As you will read from the Godel text,

33 Thomas Street has historically been defined in terms of secrecy, nuclear fallout, and state security (see also “Titanpointe” for a rather conspiratorial text and video). The events of September 11, 2001 have perpetuated much of this same thinking. When visiting, bring ID. Visits inside the building are not allowed, though the small lobby is open to the public. In contrast, the Urb Fab project will invite the public to participate in various ways, such as through transparencies, interactions, and creating proximities to diverse or alternative programs.

The total area of the proposed design will be approximately 15,000sf. In considering the project’s physical context and our interest in urban diversity, this area will not necessarily be completely occupied by the Urb Fab alone. Relying on its proximity to the AT&T building, it may tap into one or two functions of the host building, e.g. the egress stairs. All parts of the design must be accessible to everyone. The activities will include:

- Fabrication
- Fabrication Support, e.g. office, storage, retail, shipping, loading
- Egress
- HVAC (note, some fabrication systems may need separate ventilation)
- Restrooms

### Site / Network



The site is the narrow, south facing setback of the AT&T building at 33 Thomas Street, though some portion may extend into the other setback areas. The building is chosen for several reasons. Its urban context is varied and includes Tribeca, the Financial District, city government buildings, and locally shares a mix of tall commercial and residential buildings, as well as turn-of-the-century five and six story buildings. The building, from the late 60s and early 70s, exhibits an indifference to its urban context, eliminating the street wall, in favor of (what at the time was a popular alternative) the public plaza garden to the east. This area was originally planned as a second phase extension of the building. The voids of setbacks, in and around the building, invite the architectural intervention, like a parasite that completes a need of its host. These are your specific sites.

The tower’s most salient feature is that it has no windows. Stairs, cables, and mechanical systems, rather than being located inside the building, are brought to the exterior façade and form the only significant articulation of its facades. Its interior is primarily an organization of telephone wiring. What the building lacks spatially, in architectural and urban articulation, it offers instead in profound concept: a network of connectivity of data; digital over Cartesian space (see Godel).

Whereas buildings house function, networks are pure function, function without shell. If modern architects are serious in their commitment to function, they will have to reduce their fixation on shells and become responsible for networks.

Mark Wigley

## Drawings

Oddly, while 33 Thomas Street may share in the kind of controlling interests of government or big business, it shares an historic period, after the second world war, that manifested itself in counter-cultural works. By way of *Brutalism*, (stemming from the works and writings of Alison and Peter Smithson, and Reyner Banham), we can follow a trajectory back to the critical works of the 1950s and 60s. In particular, we will take as a starting point the drawings of Archigram, Superstudio, Archizoom, and others, which, in their counter-cultural position, extended their critical questioning of the profession and the world at large, to include the drawn means of conveying architectural design. Speaking of Superstudio's efforts in this regard, Ross K. Elflin wrote,

As such, Superstudio deploys the postcard and, by extension, the international architecture journal to replace the place-bound, fetishized, and auratic architectural work with a fugitive and degradable object that exists only in multiple.



Arguably, the architectural drawing is a device for anticipating construction. As such, it is a narrative of sorts. The content of a story also speaks about how the story is told. Each project will look to developing a sequence of narrations that are in relation to architectural conventions, but also departures from them through supporting techniques and means. They will serve to convey the specific tectonics (materials, details, etc.), the urban context, as well as the conceptual basis of its design.

## Bibliography

### Related to Urban Fabrication and Vertical Integration

Rappaport, Nina. "Vertical Urban Factory." Filmed March 2015 at Conférence Archizoom, EPFL, Lausanne. Video, 47:53. <https://www.youtube.com/watch?v=XfjKPERDKkE>.

Foucault, Michel. "Of Other Spaces: Utopias and Heterotopias." In *Rethinking Architecture: A Reader in Cultural Theory*, edited by Neil Leach, 330-336. New York City: Routledge, 1997.

Corporate Finance Institute. "Vertical Integration."

<https://corporatefinanceinstitute.com/resources/knowledge/strategy/vertical-integration/>.

### Related to 33 Thomas Street

Addison Godel, "When Windows Were Wires: The Projection of Network Invulnerability and the Architecture of the AT&T Long Lines," *Grey Room* No. 61, (Fall 2015): p.34.

The Intercept. "Titanpointe, The NSA's Spy Hub in New York, Hidden in Plain Sight."  
<https://theintercept.com/2016/11/16/the-nsas-spy-hub-in-new-york-hidden-in-plain-sight/>.

Mark Wigley, "Network Fever," *Grey Room* 4, (Summer 2001).

### Related to Concept

Ross K. Elflin, "Discotheques, Magazines and Plexiglas: Superstudio and the Architecture of Mass Culture," *Footprint* Issue 8, (Summer 2011): 59-75.

Shaviro, Steven. *Discognition* (London: Repeater Books, 2015), 8-20.

Tschumi, Bernard. *Architecture and Disjunction*, (Cambridge: The MIT Press, 1996)

### Related to Drawing

Rosalyn Deutsche, Rosalyn. "Breaking and Entering: Drawing, Situationism, Activism." In *The Activist Drawing, Retracing Situationist Architectures from Constant's New Babylon to Beyond*, edited by Catherine de Zegher and Mark Wigley, 75-81. Cambridge: The MIT Press, 2001.

Diller, Elizabeth. "Autobiographical Notes." *Ibid*, 131-133.

### WEEKLY SCHEDULE

*Note: schedule below is subject to revision through the duration of the semester.*

#### INTRODUCTION

Thu 08.29 First day of class (Lottery and general presentation)

- Introduction of Project
- Issue readings and videos related to Urb Fab and Vertical Integration

**5:00pm. Convocation, Aaron Davis Hall**

#### W1

Mon 09.02 college closed / Labor Day

Thu 09.05 Monday schedule – Studio

- Discuss readings and videos – Rappaport, Foucault, and Vertical Integration
- Project Lecture
- Issue readings related concept related to concept

#### W2

Mon 09.09 Studio

- Vertical Integration Lecture – Tom Graham (tbd)
- Select and present three integrated fabrication systems in diagram; discuss pros and cons related to its application in an Urb Fab context.

Thu 09.12 Studio

- Visit fabricators - Sisha Ortuzar (tbd)
- Issue site related text and video.

#### W3

Mon 09.16 Studio

- Present in detail one vertically integrated system and its relation to the site.

Thu	09.19	Studio	<ul style="list-style-type: none"> <li>• Discuss site related readings and video related to concept.</li> <li>• Desk Crits</li> </ul>
<b>W4</b>			
Mon	09.23	Studio	<ul style="list-style-type: none"> <li>• SCHEMATIC PRESENTATION</li> <li>• Sketch models, diagrams, one concept rendering</li> </ul>
Thu	09.26	Studio	<ul style="list-style-type: none"> <li>• Desk Crits</li> <li>• Begin site model – ¼” scale</li> <li>• Issue drawing related readings</li> </ul> <p><b>5:30pm. Sciamé Lecture: Maria Fullaondo, Rm 107</b></p>
<b>W5</b>			
Mon	09.30	no classes / Rosh Hashanah	
Thu	10.03	Studio	<ul style="list-style-type: none"> <li>• Drawing Lecture</li> <li>• Discuss drawing readings</li> </ul> <p><b>5:30pm. Sciamé Lecture: Deborah Berke, Rm 107</b></p>
<b>W6</b>			
Mon	10.07	Studio	<ul style="list-style-type: none"> <li>• Desk Crits – structural engineer (tbd)</li> </ul>
Thu	10.10	Studio	<ul style="list-style-type: none"> <li>• Desk Crits – mechanical engineer (tbd)</li> </ul> <p><b>5:30pm. Sciamé Lecture: Rahul Mehrotra with Filiep Decorte, Rm 107</b></p>
<b>W7</b>			
Mon	10.14	college closed / Columbus Day	
Wed	10.16	Monday Schedule – Studio	<ul style="list-style-type: none"> <li>• Desk Crits – structural engineer (tbd)</li> </ul> <p><b>5:30pm. Max Bond Lecture: Zena Howard, moderator Mabel Wilson, The New School</b></p>
Thu	10.17	Studio	<ul style="list-style-type: none"> <li>• MID-TERM PRESENTATION</li> <li>• Minimum four sketch model and one well developed model.</li> <li>• Revised/updated diagrams, conceptual orthographic drawings, concept renderings.</li> </ul>
<b>W8</b>			
Mon	10.21	Studio	<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul>
Thu	10.24	Studio	<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul> <p><b>5:30pm. Sciamé Lecture: Jean-Pierre Pranlas-Descours, Rm 107</b></p>
<b>W9</b>			
Mon	10.28	Studio	<ul style="list-style-type: none"> <li>• Desk Crits</li> <li>• Begin final drawings</li> </ul>
Thu	10.31	Studio	<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul>
<b>W10</b>			
Mon	11.04	Studio	<ul style="list-style-type: none"> <li>• Desk Crits</li> <li>• Begin final model</li> </ul>
Thu	11.07	Studio	<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul> <p><b>5:30pm. Sciamé Lecture: Håvard Breivik and Saskia Sassen, Rm 107</b></p>
<b>W11</b>			
Mon	11.11	Studio	<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul>

Thu	11.14	Studio
		<ul style="list-style-type: none"> <li>• Desk Crits</li> <li>• <b>6:00pm. Habana 500 colloquium, Rm 107</b></li> </ul>
<b>W12</b>		
Mon	11.18	Studio
		<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul>
Thu	11.21	Studio
		<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul>
<b>W13</b>		
Mon	11.25	Studio
		<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul>
Thu	11.28	college closed / Thanksgiving
<b>W14</b>		
Mon	12.02	Studio
		<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul>
Thu	12.05	Studio
		<ul style="list-style-type: none"> <li>• Desk Crits</li> </ul>
<b>W15</b>		
TBD	12.09-12.12	<b>FINAL REVIEWS</b>
		<ul style="list-style-type: none"> <li>• Diagrams, architectural, structural and mechanical drawn narratives, renderings, concept narratives, models. Concept and presentation techniques will be equally evaluated.</li> </ul>
Fri	12.13	End of Semester assessment
<b>W16</b>		
Mon	12.15	Last Meeting. Final Studio Materials due for: SSA/CCNY Archive, end of semester assessment, Graduation Show, etc., as directed

## GRADING/ATTENDANCE POLICIES AND STUDIO CULTURE

### Course Expectations:

- That students will develop a high level of independent thought and rigor and a willingness to go beyond both basic project requirements and their own perceived limits and abilities.
- That students will successfully complete all project requirements. No make-up or postponed project submissions will be accepted except in the case of medical emergencies or other extraordinary circumstances. Excused absences and project delays must be officially cleared by professor in advance in order to be considered valid.

### Methods of Assessment:

- Attendance and participation in class discussions: 20%
- Project development in response to semester schedule: 50%
- Project presentation, completion and resolution: 30%

*Note: The Research component of the studio will be weighed more heavily in assessment of graduate student work and class performance.*

### Key areas of Grading Assessment:

- **Studio performance & work habits:** Ability to respond to studio criticism & discourse in a consistent & clear manner throughout the course of the semester as demonstrated in the evolution and development of design work.
- **Clarity of representation & mastery of media:** Ability to utilize both digital and manual drawing and model-making techniques to precisely and creatively represent architectural ideas.
- **Pre-design:** Ability to prepare a comprehensive program for an architectural project that includes such tasks as: an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.
- **Research:** Understanding of the theoretical and applied research methodologies and practices used during

the design process.

- **Integrated evaluations and decision-making design process:** Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.
- **Attendance:** Consistent level of preparation and on-time presence for each studio class and scheduled evening lectures.
- **Portfolio:** Completion of portfolio as directed by coordinator and attendance at all scheduled portfolio related events.

### Grading Criteria:

- A (+/-)** Work meets all requirements and exceeds them. Presentations are virtually flawless, complete, and finely detailed. Work exhibits professional, “museum quality” level of craft. Student has developed an individual design process that shows a high level of independent thought and rigor. Work shows evidence of intense struggle to go beyond expectations, and beyond the student’s own perceived limits of their abilities.
- B (+/-)** Work meets all requirements. Presentations are complete and finely detailed. Work exhibits professional level of craft. Student has developed an individual design process that shows a high level of independent thought and rigor.
- C (+/-)** Work meets minimum requirements. While presentations may be complete, student has struggled to develop an individual design process and/or is lacking in craft or design resolution.
- D (+/-)** Work is below minimum requirements. Presentations are incomplete, student has struggled to develop an individual design process and/or is lacking in craft or design resolution.
- F** Work is well below minimum requirements. Student does not develop adequate design process, and/or does not finish work on time.
- INC** Grades of “incomplete” are not given under any circumstances unless there is evidence of a medical or personal emergency. In such cases, instructor and student develop a contract to complete work by a specified date, as per CCNY policy. Classes / work missed due to illness must be explained with a physician’s note.

#### Notes:

C is the lowest passing grade for M.Arch I and M.S. Arch (M.Arch II) students. No D grades are given to graduate students.

Working in teams does not guarantee the same grade for each team member; grades are based on a range of criteria for each student.

For more information on grading guidelines and other CCNY policies and procedures, consult the current CCNY academic bulletins: <https://www.ccnycunyu.edu/registrar/bulletins>

#### Office Hours:

Office hours are set by appointment. If a student needs to speak in private with a studio critic they must email in advance to request a meeting time. Students may seek office hour appointments to discuss any matters of concern including personal, private matters and general inquiries about course related work, grading, assessment and content.

**Probation & Dismissal:** for program specific information related to grades, academic standing, probation and dismissal, please see your program academic advisors:

B.Arch: Michael Miller [mmiller@ccny.cuny.edu](mailto:mmiller@ccny.cuny.edu)

Amy Daniel [adaniel@ccny.cuny.edu](mailto:adaniel@ccny.cuny.edu)

M.Arch: Hannah Borgeson [hborgeson@ccny.cuny.edu](mailto:hborgeson@ccny.cuny.edu)

#### Studio Culture:



Working in the studio is mandatory. Studio culture is an important part of an architectural education. Please see the Spitzer School of Architecture Studio Culture Policy, which can be accessed on the SSA website here: <https://ssa.ccnycuny.edu/about/policies/>.

**Absence & Lateness:**

Arriving more than ten minutes late to class will constitute an absence. Two unexcused absences will result in a whole letter grade deduction from a final grade; more than four will result in a failing grade. It is expected that all students will participate in all scheduled working, midterm and final reviews and contribute constructively to the discussion.

**Absences due to Religious Observances:**

Students who will miss any class sessions, exams, presentations, trips, or the like due to a religious observance should notify the instructor at the beginning of the semester so that appropriate adjustments for observance needs can be implemented. This could include an opportunity to make up any examination, study, or work requirement that is missed because of an absence due to a religious observance on any particular day or days.

**Noise Policy:**

The studio environment should be a quiet and respectful place where all students can work and think in peace. At no time may students play music out loud in studio, even at a low volume. If you desire to listen to music, either during class hours or after hours, headphones are a requirement. Conversations must also be kept to a reasonable volume to respect classmates and those students in adjacent studios.

**Readings & Journals:**

Students are expected to keep a journal or sketchbook throughout the duration of studio to document their thought process & take notes of any texts, books, terms or references that are mentioned by either the studio critic or fellow classmates and to selectively follow up on these and any other assigned readings before the next class.

**Academic Integrity:**

As a student you are expected to conduct yourself in a manner that reflects the ethical ideas of the profession of architecture. Any act of academic dishonesty not only raises questions about an individual's fitness to practice architecture, but also demeans the academic environment in which it occurred. Giving or receiving aid in examinations, and plagiarism are a violation of an assumed trust between the school and the student.

Plagiarism, i.e. the presentation as one's own work of words, drawings, ideas and opinions of someone else, is a serious instance of academic dishonesty in the context as cheating on examinations. The submission of any piece of work (written, drawn, built, or photocopied) is assumed by the school to guarantee that the thoughts and expressions in it are literally the student's own, executed by the student. All assignments must be the student's original work. Any copying, even short excerpts, from another book, article, or Internet source, published or unpublished, without proper attribution will result in automatic failure of the entire course.

The CCNY Academic Integrity Policy: <https://www.ccnycuny.edu/about/integrity>

For citations, the Chicago Manual of Style is recommended:

[http://www.chicagomanualofstyle.org/tools\\_citationguide.html](http://www.chicagomanualofstyle.org/tools_citationguide.html)

**AccessAbility Center (Student Disability Services):**

The AccessAbility center (AAC) facilitates equal access and coordinates reasonable accommodations, academic adjustments, and support services for City College students with disabilities while preserving the integrity of academic standards. Students who have self-identified with AAC to receive accommodations should inform the instructor at the beginning of the semester. (North Academic Center 1/218; 212-650-5913 or 212-650-6910 for TTY/TTD). <https://www.ccnycuny.edu/accessability>

**Library:**

The school's library is a shared resource that is necessary supplement to all research and design work. Please direct questions to the library staff or the Architecture Librarian Nilda Sanchez: [nsanchez@ccny.cuny.edu](mailto:nsanchez@ccny.cuny.edu)

**NAAB (National Architectural Accrediting Board):**

The National Architectural Accrediting Board (NAAB) is the sole agency authorized to accredit US professional degree programs in architecture. Since most state registration boards in the United States require any applicant for

licensure to have graduated from a NAAB-accredited program, obtaining such a degree is an essential aspect of preparing for the professional practice of architecture. While graduation from a NAAB-accredited program does not assure registration, the accrediting process is intended to verify that each accredited program substantially meets those standards that, as a whole, comprise an appropriate education for an architect.

More specifically, the NAAB requires an accredited program to produce graduates who: are competent in a range of intellectual, spatial, technical, and interpersonal skills; understand the historical, socio-cultural, and environmental context of architecture; are able to solve architectural design problems, including the integration of technical systems and health and safety requirements; and comprehend architects' roles and responsibilities in society.

The following student performance criteria from the 2014 NAAB Conditions are addressed in this course:

**Realm B: Building Practices, Technical Skills, And Knowledge.** Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.

**B.1 Pre-Design:** ability to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.

**Realm C: Integrated Architectural Solutions.** Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.

**C.1 Research:** understanding of the theoretical and applied research methodologies and practices used during the design process.

**C.2 Integrated Evaluations and Decision-Making Design Process:** ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

*Students should consult the NAAB website [www.naab.org](http://www.naab.org) for additional information regarding student performance criteria and all other conditions for accreditation.*

## **CONTACT INFORMATION:**

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