Architecture Program Report- Initial Accreditation

New York City College of Technology
City University of New York

Date: March 01, 2022
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Architecture Program Report-Initial Accreditation (APR-IA)

2020 Conditions for Accreditation
2020 Procedures for Accreditation

Institution	New York City College of Technology
Name of Academic Unit	Department of Architectural Technology
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 semester credit hours)*	☒ Bachelor of Architecture Track: ☐ Master of Architecture Track: Track: ☐ Doctor of Architecture Track: Track:
Application for Accreditation	**Initial Accreditation**
Year of Previous Visit	2020
Current Term of Accreditation	Continuation of Candidacy
Program Administrator	Ting Chin+ Claudia Hernandez-feiks, B. Arch Co-directors
Chief Administrator for the academic unit in which the program is located *(e.g., dean or department chair)*	Sanjive Vaidya- Chair, Department of Architectural Technology
Chief Academic Officer of the Institution	Pamela Brown, Ph.D., P.E., interim Provost and Vice President for Academic Affairs
President of the Institution	Russell K. Hotzler, Ph.D.- President
Individual submitting the APR	Ting Chin+ Claudia Hernandez-feiks, B. Arch Co-directors
Name and email address of individual to whom questions should be directed	Sanjive Vaidya- SVaidya@citytech.cuny.edu Ting Chin- tchin@citytech.cuny.edu Claudia Hernandez-feiks- CHernandez@citytech.cuny.edu

Submission Requirements:

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

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INSTRUCTIONS FOR APR-IA

The APR-IA must include the following appendices:

- Plan for Achieving Initial Accreditation (documenting the program's complete implementation of the plan)
- Steps that may be taken after initial accreditation is received
- All previous VTRs
- the eligibility memorandum

Instructions for the preparation, format, and submittal of the APR-IA are published in the "Guidelines to the Accreditation Process."

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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.

I.1.5 Long-Range Planning

2020 Analysis/Review:

The Department has focused significant resources toward initial accreditation and is in the process of strengthening self-initiated Long-Range Planning efforts to better identify multi-year objectives.

Annually, the department chair is responsible for summarizing the department's alignment with broader college initiatives in an annual "Goals and Targets" report. These goals include access, degree completion, career success, knowledge creation and new economic models

Every ten years, the provost's office undertakes an external review of the department. The most recent review covered the academic years of 2003-2013 and was the genesis for creating a Bachelor of Architecture degree.

Planning objectives to-date have been student-centric, focused on relevant skill building in an ever-changing profession. Course-coordination meetings, super-juries, town halls and targeted lecture content combine to accomplish these objectives. A steering committee, composed of faculty members, has convened to craft and implement a vision for the long-term future of the department. A formal document or process has not yet been ratified.

In tandem with these initiatives, the program has reconstituted the Advisory Board as the Executive Council on Design Education and Engagement to help promote the program. This group is composed of industry professionals that will help elevate the program through fundraising and relevance in the marketplace**.**

Program Response:

Departmental long range planning objectives continue to be student-centric, focused on relevant skill building and partnerships in an ever-changing profession. Additionally, the added focus on resources and space requirements has been seen as essential to advancing overall student-centric goals. Moving to an online format due to the pandemic has not impeded the advancement of course-coordination meetings, curriculum development super-juries, town halls and targeted lecture content that support the overall objectives of:

- Degree Completion
- Career Success
- Knowledge Creation
- New Industry Partnerships

A Steering Committee, composed of faculty members, continues to work with the Executive Council and industry partners for resource building, fundraising and visibility.

Advancing the long-range planning and department goals.

Since the last visit the department has advanced on many fronts with several areas in development and others yet to be realized. In spite of the pandemic and limited access to facilities the department has met the goal of creating new faculty office spaces on the 8th floor, bringing all full-time faculty together for the first time (see 5.6.3). The new offices provide students with enhanced accessibility to both full time and adjunct faculty. Additional computer stations have been added to this new space for adjunct faculty use.

The department has met the goal of providing Bachelor of Architecture thesis studio students with a dedicated space for their course work. This is the first time at City Tech that students have a dedicated space, with desks and resources to facilitate their work. The department recognizes that further advancement in this area is needed in the future.

The Steering Committee has established a partnership with the AIA Brooklyn Chapter to advance the goal of holding an annual fundraising event to support student advancement. Event planning has been underway for several months and our first annual fundraiser will be in the Fall of 2022.

Enhancing the curriculum through relevant industry partnerships and certifications is an essential ingredient of our long-range planning and the goal of enhancing student relevance in the marketplace. To advance these goals the Architecture Technology Department partnered with the Urban Land Institute (ULI) and has run UrbanPlan coursework (https://newyork.uli.org/get-involved/urbanplan/) as part of our curriculum for the past 4 semesters. We plan to expand the ULI curriculum across multiple studios and train additional faculty to deliver the course work.

A new partnership with the Passive House Institute (PHI) has been established. Current coursework and curriculum integration with Passive House curriculum and standards is underway and was piloted in the Spring 2022 semester across several courses. The integration of Passive House (https://passivehouse.com/) into the curriculum will provide our students options for certification, enhancing our graduates value in the marketplace

I.1.6 Assessment

2020 Analysis/Review:

Program Self-Assessment: Program self-assessment was evident in supplemental information that was provided at the time of the team visit. Although not explicitly stated, the self-assessment is being carried out in terms of the department mission that can be found on page 4 of the APR. The Department of Architectural Technology is in the process of implementing growth based on a 2015 program review, which the college requires on a 10-year cycle. The 2015 program review makes an assessment based on the program's mission and objectives. At that time, the department had seen substantial growth in their student body after developing the 4-year B.Tech. degree, which had grown out of the 2-year AAS degree program. The development of the B.Arch. is the result of the department following suggested objectives for growth coming out of that review process. Progress continues to be on track.

Curricular Assessment and Development: The B.Arch. and B.Tech. programs have the same requirements for the first three years of each degree. In the meeting with the faculty, they noted that curricular assessment of the first three years has led to updating some of the courses. This is the first year that the program is teaching the B.Arch. fourth year curriculum. Courses are developed according to the curricular plan, and additional classes will be developed and put in place over the next two years. In the APR, the program states that the curriculum will be examined and assessed annually to understand its impact on student diversity and ensure access. The APR notes that a committee assesses program faculty teaching performance yearly to align faculty and

course assignments according to their teaching strengths. The APR notes that the department has developed a culture of assessment that needs to be broadened and codified, and notes that they intend to institute this as the B.Arch. program develops. They plan on assessing student reading, development of visual tools and 'whole student' assessment through the use of an e-portfolio.

Program Response:

To satisfy the NAAB 2020 Conditions and Procedures we have developed and implemented a new framework for assessment. Each PC, SC, and Shared Value now has a designated faculty leader, who is responsible for leading the vision, documentation, and annual assessment of this criteria. The results of the first assessment will be completed prior to the Initial Accreditation visit. We will use the results of our annual program assessment to guide changes to the program for the following academic year.

In addition to our elected B. Arch directors, who have general oversight over the program, and the NAAB criteria, each sequence (Design, Technical, History/Theory, Structures) of the B. Arch program is also directed by a faculty team that steers the sequence, coordinates faculty assignments for each course, and oversees adjustments to course content with the guidance of the department Curriculum and Appointments Committees. These teams meet frequently to assess and continually improve their respective sequences.

In lieu of the e-portfolio we have instead developed more comprehensive assignment rubrics to assess student work more holistically. These rubrics evaluate both general education and architecture specific learning outcomes. Data from these rubrics is then used to create assessment reports that are reviewed by the NAAB criteria leaders, Curriculum and Appointment Committees, and faculty teams that coordinate the curriculum sequences noted above.

Additionally, we are continuing to track the demographics of our students to ensure the makeup of the B. Arch students maintains the diverse demographics of the department's student body. The charts below show that as of Spring 2021 the enrollment of the B. Arch students by ethnicity closely aligned with that of the B. Tech students. We will continue to monitor this annually.

Spring 2021 B. Arch Enrollment by Ethnicity[1]	
American Indian or Alaskan Native	0%
Asian	9.7%
Black or African American	12.9%
Hispanic/ Latino	58.1%
Native Hawaiian or Other Pacific Islander	0%
Nonresident alien	6.5%
Two or more races	0%
White	12.9%

Spring 2021 B. Tech Enrollment by Ethnicity[2]	
American Indian or Alaskan Native	.5%
Asian	16.4%
Black or African American	16.9%
Hispanic/ Latino	41.9%
Native Hawaiian or Other Pacific Islander	.2%
Nonresident alien	8.3%
Two or more races	.7%
White	15.0%

[1] Data provided by NYC College of Technology Office of Assessment, Institutional Research & Effectiveness, Link: http://air.citytech.cuny.edu/data-dashboard/enrollment-trends-spring/

[2] Data provided by NYC College of Technology Office of Assessment, Institutional Research & Effectiveness, Link: http://air.citytech.cuny.edu/data-dashboard/enrollment-trends-spring/

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I.2.2 Physical Resources

2020 Team Assessment:

The Department of Architectural Technology is primarily located on the eighth floor of Voorhees Hall. This space has long supported the department's large student body (700-800) and faculty (approximately 81 full- and part-time).

With high utilization rates and limited hours, access to facilities for students and faculty has placed a strain on physical resources. The lack of dedicated storage and studio space places a burden on students to complete most of their work off-campus, heavily depending on space at home and a precarious commute for physical models. The department has developed a plan for enhancements to learning environments across the first, second, third and eighth floors. This includes space reconfiguration and furniture upgrades. A formal timeline for funding and implementation is presently on hold. In conversations with college leadership (president and provost), they expressed continued commitment to these capital improvements, with the current delay due to diversion of state and city funding, as a result of the pandemic.

Modeling spaces for the creation and exploration of three-dimensional representation reside on the first and third floors of Voorhees Hall, supported by 3D printers, laser cutters, CNC mills, robotic arms and other digital infrastructure. There is also a digital fabrication model shop located on the 8th floor. All students are taught to utilize these resources with the support of College Laboratory Technicians (CLT) faculty/staff.

Virtual Desktop Infrastructure (VDI), which enables students to access digital tools, software and computational power from outside the classroom, was on a path for implementation pre-pandemic and has since been partially deployed. This model has allowed the School of Technology and Design, as well as the Department of Architectural Technology, to creatively navigate the limits of physical space and access. Additionally, VDI presents opportunities for students to decrease personal expenses and utilize consolidated computing power for digital creation. Used primarily by freshman at present, this infrastructure shows great promise. The program anticipates that VDI will be expanded in the future with additional capital funding.

Program Response:

Plans to upgrade facilities were in progress prior to the pandemic. While the pandemic caused a temporary pause in several planned initiatives, these are again moving forward, despite a slower rate of growth in B. Arch enrollment than initially projected, as these initiatives also support students in the AAS and B. Tech programs. The college continues to move forward in investing $350,000 towards the upgrade of studio and computational spaces. This funding provided 110 high end laptops and wide screen monitors for the use of our students. In Fall 2021, two (2) additional classroom spaces were allocated and renovated (1625 sq ft) to support the B. Arch program. These spaces accommodate 18 students in each room. We have also established a dedicated studio space (780 sq ft) for the senior (5th year) thesis studio. The department has been working closely with the College Chief Technology Officer to explore cost effective cloud based Virtual Desktop Infrastructure (VDI) systems that can be expanded quickly to accommodate student computational demands on and off campus. This resulted in the adoption of the Apporto Virtual Desktop environment which was successfully tested in the Spring of 2022 in our computational heavy photo-realist rendering and animation course and was fully implemented in the Fall of 2022.

As academic partners New York City College of Technology (City Tech) and Pratt Institute are currently working with the Brooklyn Navy Yard Development Corporation to develop the "Research Yard", a 40,000-square-foot space advanced research and applied learning facility located in the Brooklyn Navy Yard. The shared research facility, an open-plan space, will house new lab and

office space to help develop solutions for real-world problems locally and globally. The space will also house a facility where City Tech students and faculty, along with their peers from Pratt, can collaborate with industry professionals from the Yard's ecosystem of more than 500 businesses. Students and industry professionals will be able to work together on research projects, sharing technology and equipment, allowing students to build their professional networks. The Research Yard will supplement existing fabrication tools for Architecture students in the Voorhees building. It will enable a significant scaling up in project sizes, types and complexity.

PART TWO (II): SECTION 3 – EVALUATION OF PREPARATORY EDUCATION

2020 Team Assessment:

The APR and additional information provided in the virtual team room document evidence of evaluation of preparatory education, although transfer admissions have not yet occurred. Students are evaluated for admissions at the college level, which has established a minimum standard that all students entering into the Department of Architectural Technology must meet. All prospective students admitted into the department have the opportunity to submit additional requirements to apply for the B.Arch., which are posted on the program website:
http://www.citytech.cuny.edu/architectural/architectural-B. Arch.aspx#.

Since the B.Tech. and B.Arch. curricula are the same for the first three years, transfer students and students in the B.Tech. program can be admitted to the B.Arch. program through advanced standing in the spring of their third year. In meetings with the department chair and program directors, they clarified that in spring 2020 the first cohort, a small group of freshmen admitted to the B.Tech. degree program in 2017, submitted materials for admission to the B.Arch. Those who met the requirements are designated as advanced standing students in the B.Arch. program. The requirements for consideration for admission to the B.Arch. through advanced standing are posted on the program website:
http://www.citytech.cuny.edu/architectural/architectural-B. Arch.aspx.

The program provided evaluation rubrics and sample evaluation files for both entering freshman and advanced standing students.

In meetings with the chair and program directors, they confirmed that of the B. Arch. SPCs, only one that is satisfied in the first three years of the B.Tech./B.Arch. curriculum (A.5. Ordering Systems) will be evaluated for equivalency for transfer students. Transfer students must satisfy all other SPCs through regularly designated coursework at City Tech. At the time of the visit, the program has not yet admitted any transfer students that have gone through this process.

Program Response:

Admission requirements have been updated on our website for the three admission types. Since the last Visiting Team Report, we have reviewed one cohort of transfer students. By the time of our NAAB-IA visit we will have reviewed two cohorts of transfer students.

Our first review of transfer students was completed for acceptance in Fall 2021. Only two students applied and were evaluated. Neither was accepted into the B. Arch program; due to the quality of work presented in their applications. These students are currently enrolled in the B. Tech program and will have another opportunity to apply as advanced standing students during their third year.

We have revised our NAAB criteria matrix to meet the 2020 NAAB Procedures and Conditions. In the new matrix the PC/SC criteria are dispersed throughout the curriculum with most of the criteria being met in the last two years of the program. We do not accept transfer credits for ARCH 3512 Architectural Design V or ARCH 3531 Building Technology IV at City Tech, so that most of the

NAAB criteria will be met within our curriculum. For other courses, taken by transfer students outside of our college, a transfer credit evaluator will determine course equivalences and apply credit as warranted. Two full-time faculty members serve as transfer credit evaluators. Within CUNY most general education course equivalencies have already been evaluated and can be reviewed online within the CUNY system. Students transferring from other institutions who are accepted into the B. Arch program must provide copies of architecture, architectural technology, or equivalent syllabi, course descriptions and writing samples or coursework for evaluation by the department's transfer credit evaluator.

ARCH 3512 Architectural Design V and ARCH 3531 Building Technology IV, must be taken in residence at City Tech. Transfer credits will not be accepted for these two courses.

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.

We have revised our NAAB criteria matrix to meet the 2020 NAAB Procedures and Conditions. Although most of the current course curricula already satisfied the new NAAB criteria requirements, the faculty did vote to make taking either ARCH 3550 Building Performance Workshop or ARCH 3551 Sustainability History and Theory a requirement for B. Arch students. Making these courses a requirement aligns with our mission of preparing student to meet current industry standards and helps to satisfy PC.3 Ecological Knowledge and Responsibility.

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NARRATIVE TEMPLATE

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 those shape or influence the program.

Program must specify their delivery format (virtual/on-campus).

Program Response:

New York City College of Technology (City Tech) is one of the largest public colleges of technology in New York State. With a Fall 2020 enrollment of 15,513 students, the highest among the City University of New York's (CUNY) senior colleges, it stands as a national model for technological education.

Since its founding in 1946 as the New York State Institute for Applied Arts and Sciences, City Tech has been a pioneer in technology-based education. Established in response to the emerging needs of business and industry, it provided highly trained technicians and other specialists to fuel a post-war economy marked by new inventions, industrial processes, and technologies. In 1953, oversight was transferred from the State to the City of New York and the institute was renamed New York City Community College. Eleven years later it became a part of the City University of New York (CUNY) system.

A second root of City Tech can be traced to 1881 when the Technical Schools of the Metropolitan Museum of Art were renamed The New York Trade School. That institution – which became the Voorhees Technical Institute many decades later – was a model for the development of technical/vocational schools worldwide. In 1971, Voorhees was incorporated into NYCCC and continued to offer two-year associate degrees.

In 2002, the college was renamed New York City College of Technology to keep pace with its new status as a senior college offering four-year programs. In the same year the Department of Architectural Technology was authorized to offer a four-year Bachelor of Technology (B. Tech) degree. In New York State, B. Tech degrees require a minimum of 30 credits of liberal arts. In its distinctive commitment to providing a strong general education in the liberal arts and sciences along with specialized technical training, City Tech requires 42 credits in liberal arts out of a total of 120 credits. By encouraging lifelong learning, this curriculum prepares students for challenging, high-level professional opportunities, and not merely for technical jobs.

The college has experienced a significant upward trend in its annual growth rate in the past decade. As of the Fall of 2022, there were just over 13,000 students enrolled across the college in various bachelor and associate degree programs, and that number continued to grow each year until the onset of the pandemic. The college has expanded its physical plant with the construction of a new 350,000 square-foot academic building equipped with state-of-the-art science and clinical laboratories, classrooms fully outfitted with the latest technologies, a 1000-seat auditorium and a fully serviced athletic facility. At the same time, the college continues to update its existing facilities. Voorhees Hall, the home of the Architectural Technology Department, recently received a new exterior curtain wall enclosure, a refurbished lobby and cafeteria, and updated elevators. Labs and studios in the department are continually upgraded with new equipment and software.

New York City College of Technology is fully accredited by the Board of Regents of the University of the State of New York and the Middle States Commission on Higher Education (3624 Market Street, Philadelphia, PA 19104, 267-284-5000). Discipline-specific boards also accredit individual degree programs for several departments in the college.

COLLEGE MISSION STATEMENT

New York City College of Technology is a baccalaureate and associate degree-granting institution committed to providing broad access to high quality technological and professional education for a diverse urban population. City Tech's distinctive emphasis on applied skills and place-based learning built upon a vibrant general education foundation equips students with both problem-solving skills and an understanding of the social contexts of technology that make its graduates competitive. A multi-disciplinary approach and creative collaboration are hallmarks of the academic programs. As a community, City Tech nurtures an atmosphere of inclusion, respect, and open-mindedness in which all members can flourish.

COLLEGE EDUCATION GOALS

As a result of a City Tech education, students will:

- Develop knowledge from a range of disciplinary perspectives and hone the ability to deepen and continue learning.
- Acquire and use the tools needed for communication, inquiry, analysis, and productive work.
- Work productively within and across disciplines.
- Understand and apply values, ethics, and diverse perspectives in personal, professional, civic, and cultural/global domains.

The Department of Architectural Technology, at its founding as part of the Voorhees Technical Institute, provided a traditional two-year program in architectural drafting. At that time an associate degree was adequate for entry-level employment in an architectural office. In the building industry, graduates of the department were sought after for their work-related skills, in particular their ability to develop construction documents.

The Bachelor of Technology and the Associate of Applied Science degrees in Architectural Technology are the only programs of their kind in the CUNY system. The addition of the four-year degree proved popular, and our student population expanded significantly topping off at almost 900. Currently our enrollment varies year to year in the range of 700-800 students.

From 2009-2013 the department conducted a comprehensive review of the curriculum of both degrees, redesigning them to balance the demands of the workforce, technological focus, and to be more in line with NAAB requirements for an accredited degree. The updated degrees are more well-rounded, integrating the college's general education focus as well as placing greater emphasis on an integrated design process with a strong foundation in technical knowledge and cutting-edge tools training and skills development.

To support this new curriculum, the department hired eight new full-time faculty, bringing the current total to 20, including some with significant specializations to enhance our offerings of specialized courses. These courses cover topics of sustainability, high-performance building envelopes, digital fabrication, and advanced design. At the same time, we added a significant range of equipment including 3D printers, laser cutters, CNC mills, and robotic arms as well as thermal imaging cameras, 3D laser scanners, and other tools for examining existing buildings and their environmental performance. This equipment allows us to further enhance the knowledge and skills of our students through their integration into numerous courses.

DEPARTMENT MISSION STATEMENT

The Architectural Technology Department provides an innovative, progressive, nurturing environment that prepares students for advanced education and employment in architecture and related fields. The Department aspires to produce graduates who are recognized leaders in architecture and related fields. The faculty will develop education in design, building technology, history, theory, and the environment through creative and scholarly investigation, leading edge computational tools, interdepartmental collaboration, and community-based learning.

Several unique factors have a significant impact on the learning culture at City Tech. First is the nature of the institution as an open enrollment commuter college. Open enrollment allows students of varying degrees of college preparedness to enroll in our program. Many students have long distance commutes, traveling over an hour on public transportation each way. The commute is time consuming, and the distance impacts access to campus resources such as the library and labs. The college does not currently provide 24/7 access, limiting the time students can work on campus each day. Additionally, many of our students have other responsibilities including jobs, or the care of children or elders, requiring them to be particularly efficient with their time. The combination of high enrollment and limited classroom and studio space requires high utilization rates of learning spaces, leaving students limited access to studio space outside of their class time while on campus. All these factors combine to make the learning culture in our department distinct from the architectural education culture typically found at residential colleges. These factors impact our studio culture, the sequence of the curriculum, and the camaraderie of the cohorts.

Our studio courses used to meet 2 days a week, with 4-5 credit hours allocated, translating to a range of 7-9 contact hours per week. As we set out to revise our curriculum, we studied our allocation of credits and contact hours in our studio courses. We compiled data from 27 B. Arch programs around the country. We found that our credit allocation was 77% of the average of other programs and our contact hours were only 66% of the average allocation. The limitations on class time due to low credit and contact hour allocations put more pressure on the students to execute significant amounts of their project work outside of class time, where they work without guidance or feedback from either faculty or student peers. While some students were able to manage their time out of class well, others struggled to make a consistent effort outside the classroom throughout the semester, hampering their progress and level of achievement. The high student to instructor ratio also limited the amount of one-on-one desk critique interaction that is necessary to the pedagogy of the design studio. Our assessment of the impact of these challenges provided the motivation to modify our design curriculum as part of our B. Arch. curriculum development.

We prepared a curriculum proposal for submission to our College Council that was implemented in the Fall of 2019. This increased the credit allocation to 5 credits for design studios and 6 credits for foundations studios. This results in 9 nominal lab hours total divided into three class meetings each week for studios during the first two years: and twice a week, with longer meeting times, for the upper-level studios. We have also worked successfully with the college to reduce the number of students in each studio section, allowing for a better faculty to student ratio. Critical to student success, the longer and more frequent class contact hours allow students to execute more of their design in the supportive environment of the studio, helping to develop better design and time management skills. This higher allocation of studio credits expands our current effort to integrate knowledge from across the curriculum into studio work, an important pedagogical goal of our program where we place a high level of importance on building technology. This integrative approach to studio is enhanced by a wide range of workshops that offer students supplemental support in the development of their technical skills.

As commuters, our students need to focus on developing a more efficient time-management and work-school-life balance than students at residential colleges. This factors into the management of our students' studio workload and access to studio spaces. As many of our students do not have the resources at home to adequately support their studio assignments, we wish to extend the hours

the school is open for student access. At the same time, the department is not contemplating pursuing a 24/7 environment, nor are the faculty promoting in any way the culture of the “all-nighter”. The department’s facilities committee developed a vision and plan for instructional workspace to address multiple teaching modalities and improve student access to digital resources. This includes the successful implementation of the Virtual Desktop Infrastructure. Requests for additional funding to support this effort was made through the Capital Funding mechanism which funds major equipment and infrastructure upgrades. Furthermore, working with the department’s Master Course Scheduler tool, classroom resources throughout the campus are being leveraged to improve supplemental instructional space on the 8th floor of Voorhees. This includes large format lecture spaces and professional quality seminar rooms made available in the recently completed New Academic Building.

Through in-class mentoring, the department reinforces the development of professional skills in communication, vocabulary, time-management and general conduct throughout the curriculum. The department recognizes this as a critical aspect of the preparation of our students for the workforce.

The nature of our open enrollment student body with outside responsibilities such as employment and the need for family support, present additional obstacles to the creation of a supportive learning environment. While each course type (design, building technology, history, structures) is clearly sequenced, the inability for many of our students to maintain a full credit load creates challenges in our attempts to maintain synergies between learning as it occurs across these parallel subjects. To support the outside responsibilities of our urban commuter students, we look to offer flexible programming with sections of most courses offered both during the day and in the evening. While our curriculum modifications seek to continue to find the right balance between a reinforced integrated sequence and flexibility, the final two years of the B. Arch degree require a tighter adherence to the sequence.

An important goal of our program is to develop additional support mechanisms to help maintain strong and supportive student cohorts. Residential colleges with 24/7 access to studios have the potential to create strong cohort bonds between students who spend long hours together. Contrary to the expectation that the urban commuter environment would minimize cohort bonding, we have found that the burden of this shared experience has increased the level of camaraderie and peer support among our students. Our students tend to develop efficient schedules that keep them on campus for extended periods of time, promoting greater opportunity to socialize and support each other. Due to existing space constraints these activities typically occur in the cafeteria or other informal study spaces that are carved out by our students. While cohort bonding is occurring, we seek to further facilitate this through the introduction of a series of events throughout the academic year that bring the cohorts together and encourages them to share their experiences and give feedback to the department. This includes a new cohort group advisement structure that assists our students’ understanding of the degree program options available to them and helps them to make better and more informed decisions. This also includes periodic Town Hall meetings that encourage broad attendance by the full student body and our full-time and part-time faculty. This allows the department community to build relationships and promotes a common sense of perspective and intention.

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.

Program Response:

In its role within City Tech, the senior college of technology of The City University of New York (CUNY), our department offers the most accessible architectural education in the metropolitan area, with competitive tuition and a large enrollment capacity. City Tech's Department of Architectural Technology is known for its workplace-oriented curriculum, leading edge technologies and student-focused environment, providing opportunities for students to engage in real-world community service projects. Our easily accessible location in Downtown Brooklyn makes the department uniquely situated to use New York City and its environs as a laboratory for learning and as an extension of the classroom.

All many of our full-time faculty are practicing, licensed professionals, and our part-time instructional pool of over sixty adjuncts hold prominent positions in city agencies, at prestigious public and not-for-profit institutions, and positions with the region's leading private architecture, design and engineering firms. Our faculty are increasingly recognized regionally and nationally for their important contributions to the profession. The department has been awarded significant grants that have provided new resources and interdisciplinary research opportunities for our faculty and students. The student experience is enriched through participation in programs such as Emerging Scholars, which provides students the opportunity to conduct advanced study and research alongside faculty mentors. Faculty and students have presented research at professional conferences receiving awards from organizations such as ACSA (Association of Collegiate Schools of Architecture), SARA (Society of American Registered Architects), and the AIA (American Institute of Architects).

New York City College of Technology's Department of Architectural Technology is committed to building strong partnerships with industry professionals. Our core curriculum and electives are focused on key areas of industry need, as identified by our faculty and Advisory Board. These include: Building Information Modeling (BIM); Environmentally Sustainable Technologies; Advanced Computation and Fabrication; Preservation, Restoration and Existing Building Tools and Technologies; Zoning Regulations; Building Code and Approvals; Acoustics and Lighting; Advanced Construction Detailing. Faculty with special expertise in these fields lead these courses. Our proximity and ease of access to all of New York City, coupled with nearly fifty years of faculty-cultivated relationships with employers, practicing former graduates, and other related career professionals allows us to identify potential jobs and other unique learning opportunities for our students.

Our students are motivated to participate and be leaders in the college's many student-initiated clubs. The Architectural Club, AIAS, NOMAS and the Study Abroad Program have facilitated students' travel and study at destinations around the world. As active members of professional organizations our students have won design competition awards from the AIA Student Chapter (AIAS) and the Society of American Registered Architects (SARA). In 2015 our students participated in the Solar Decathlon, an international competition sponsored by the U.S. Department of Energy, finishing fifth in engineering and seventh in architecture.

The faculty of New York City College of Technology are unique in many ways. Each full-time faculty member is a registered architect, and many maintain an active practice and belong to a broad range of professional societies and certifying bodies such as USGBC, EDRA, NOMA, 2030 District, the AIA, and SARA. Our faculty have played key roles in professional development and leadership of the architecture profession in addition to providing community outreach and engagement.

Prof. Barbara Mishara AIA, has served as AIA New York state president, and serves as the NCARB academic licensing advisor at the department.

Prof. Paul C. King, ARA, has been a member of the executive board of the New York Council of the Society of American Registered Architects (SARA) since 2009 and served two consecutive two-year terms as president from 2012-2014. As a recognized historian with a specialty in the early works of John Roebling, he lectures often at various museums and provides consulting services to the National Parks Service at the site of Roebling's Delaware Aqueduct.

Prof. Philip Anzalone AIA has served as a Member of the Board of Directors for AIA New York State and New York Regional Representative to the Young Architects Forum 2015-16 and is currently Co-Chair of AIANY Professional Practice Committee. Prof. Anzalone is also on the Board of Directors of the Association of Computer Aided Design in Architecture (ACADIA) 2018.

Prof. Shelley E Smith AIA, PhD. is recognized for her research on historic preservation and serves as the professional member of the Bedford Historic Building Preservation Commission and the Katonah Historic District Advisory Commission.

Prof. Jill Bourtagalou, RA serves on the Board of Brooklyn Autism Center and like many of the faculty maintains a professional practice and consultancy.

Prof. Esteban Beita, AIA, PhD. is known for his research on traditional and contemporary Japanese architecture and immersive technologies, including photorealistic 3d and virtual reality experiences. He has been invited on multiple occasions to be part of a panel of architects discussing urban spaces in Asian cities at the Center for Architecture in NYC. As former coordinator of the Urban Design course, Prof. Beita coordinated collaborations with several NYC communities, including the Chinatown Partnership, Downtown Brooklyn Partnership, Industry City Brooklyn and Brownsville Brooklyn, exposing students to working and collaborating within their own communities. Prof. Beita also serves as the department's exhibition coordinator, resulting in multiple student exhibitions on campus, at the Brooklyn Courthouse, Chinatown and Industry City.

Prof. Illya Azaroff FAIA is recognized for his expertise in resilience and served on the AIA National Strategic Council (2016-18), AIA New York Board and AIA New York State board. He served as the YAF - Young Architects Forum Advocacy Director and co-founder of the AIA Design for Risk and Reconstruction committee at the AIA New York chapter. He serves on the Board for SHADE-Sustainable Humanitarian Architecture Design for the Earth and the Scientific Advisory Council for Oceanic Global. He advises the New York City Mayor's office of Climate Resilience (MOCR) and the Federal Government (HHS) on building the National Disaster Framework. He recently served as Chair of the National AIA Board Knowledge Committee and served as the 2021 AIANYS President. He has been appointed to the New York State Climate impact Assessment by Governor Hochul and at the request of incoming New York City Mayor Adams worked on the administration's transition informing resilience, sustainability and infrastructure.

Prof. Ken Conzelmann, AIA, has served as co-instructor with the AIA/NY Learning by Design/Architects in Schools program for NYC public schools as well as the ACE Mentor Program that helps prepare high school students for careers in design and construction. He is part of a roundtable for Professional Practice Professors in New York City and since 2009 serves as a board director and co-chair for Special Design Awards committee with SARA|NY.

Prof. Claudia Hernandez is the department's acting liaison with the Architecture League Mentorship program, the City Tech Peer mentorship program and supports various student organizations.

Prof. Michael Duddy serves on the Executive Committee of the Board of Directors for the Yale University Alumni Fund, is the Co-chair of Yale School of Architecture Alumni Fund (2016-current), a Delegate of Yale Alumni Association for the School of Architecture (2011-2015), and is co-chair of the Reunion Committee, YSoA Classes '80-'85. He is the recipient of the 2021 Chair's Award for his service on the Yale Alumni Fund. He is serving the college as a faculty director for the First

Year Learning Communities Project which is a successful interdisciplinary effort to enhance student experience and encourage lifelong learning in the first year of college.

Several faculty members have worked with the 2030 District that is being set up in New York. They provide expertise on various technical matters, such as Prof. Jihun Kim, PhD., with his expertise in energy modeling and environmental design. Professors Alexander Aptekar AIA and Paul King, along with a broad spectrum of faculty, led the school's 2015 Solar Decathlon Team DURA entry and continue to engage in advancing sustainability through prototyping.

The demonstrated outreach, partnerships and valuable leadership to professional societies by the City Tech faculty sets a high standard for our students and continues to demonstrate exemplary leadership in service to the profession, community, and society.

The department is a growing center for academic and scholarly activity in cutting-edge design and technologies that impact the field. Prof. Smith was the project director of the National Science Foundation Fuse Lab project at the college, a four-year, $877,322 grant funded by the National Science Foundation's Advanced Technology Education program. The grant supported curriculum development, co-curricular support structures, faculty training and enrichment, and partnerships with industry experts focused on three key technology areas in today's construction industry: Building Information Modeling (BIM), building performance (green/sustainable technologies), and advanced computation and digital fabrication. The project was undertaken as part of a broad curriculum initiative in response to the accelerating roles of digital modeling, simulation, and prototyping in the AEC industry. These tools allow builders, engineers, and architects to collaborate more closely from the outset of project conception and design, through construction and post-occupancy. These industry developments have required a transformation in preparing students for the workplace. The Fuse Lab provided funding for a more rapid, rich, and effective transition of curriculum and access to resources than would otherwise have been possible. Prof. Smith has served as co-PI for several other grant projects at the college-funded by Title V and the National Endowment for the Humanities. In the Fall of 2021, Prof. Smith was also awarded a $3M USDOE Title V grant and is serving as the PI. This grant is focused on developing Hispanic Serving Institutions to expand education opportunities for and improve attainment of Hispanic Students.

Our faculty and students study issues related to development in Brooklyn and bring these to the public through exhibitions and symposia. Professional development workshops sponsored by our department provide faculty, students, and local professionals with opportunities to develop new skills in software and tools to enhance their practice.

The Architectural Technology Department provides architectural history courses which form part of the College's general education curriculum, and which are available to students across all departments of the College. In addition, faculty of the Architectural Technology Department participate in several interdisciplinary courses in which they team up with a professor from another college department to co-teach a full semester class. Professor Montgomery, from our faculty, took the initiative to develop a new Interdisciplinary Course titled Learning Places that brings together faculty from the Architectural Technology, Library, and Hospitality Management Departments, among others, to help students across the college develop placed-based learning skills that are rooted in primary source research, direct observation, and information literacy. Courses like this prepare a wide range of City Tech students for life in the 21st century with skills rooted in inquiry and community and civic engagement. The success of the Learning Places course was published by Professor Montgomery in 2020 as "Learning Places: Place-Based Learning in an Interdisciplinary Approach to Undergraduate Research." In *Interdisciplinary Team Teaching: A Collaborative Study of High-Impact Practices*, edited by Reneta D. Lansiquot, and in 2021 as "The City as a Learning Lab: Using Historical Maps and Walking Seminars to Anchor Place-Based Research." In *Engaging Undergraduates in Primary Source Research*, edited by Lijuan Xu.

As mentioned elsewhere, First Year Learning Communities bring our faculty together with professors from Mathematics or English to bring first-semester students into the college experience with cross-disciplinary teaching. In support of the college's emphasis on general education and interdisciplinary learning, our department's faculty have played a leading role on campus in curriculum redesign and new course development. Five of our faculty were awarded fellowships through the college's Living Lab Grant, giving them "reassigned" time to focus on general education principles and teaching techniques through seminars and projects.

From 2013-2015 we compiled a ten-year self-study of our department, a process that allowed us to reflect on our development and identify next steps for our programs. As part of this ten-year review, we invited an external reviewer, Wayne Drummond FAIA, Dean Emeritus, and Professor at the University of Nebraska-Lincoln, to visit our program and provide recommendations for future development. Dean Drummond visited in the Spring of 2015 and noted that the quality of student work, the strength of the faculty, and success of our building technology sequence had a strong correlation to that of B. Arch. programs around the country. His clear recommendation to our department was to formally pursue NAAB accreditation.

Enrollment and graduation data illustrate that an increasing number of students are seeking our four-year B.Tech. degree, demonstrating the demand for higher levels of education in preparation for the current workforce. In 2010, 31% of our graduates earned the AAS, whereas in 2015 only 20% of our graduates earned the same degree. In this time frame, the number of students earning the B. Tech degree increased 60%, rising from 71 graduates in 2010 to 114 graduates in 2015. We are compiling data to identify where our graduates go after earning their degrees, but initial findings indicate a significant increase in interest and applications to graduate schools, where students can earn an accredited professional degree. In addition, we see an increasing number of students placed in prominent NYC design firms including SHoP, SOM, KPF, Perkins Eastman, and BuroHappold, as well as city institutions such as the NYC Department of Design and Construction, NYC School Construction Authority and the NYC Department of Buildings; demonstrating their importance to the New York City marketplace.

These trends support our position and Dean Drummond's recommendation, to take the next step to evolve our program further by offering an accredited five-year B. Arch Degree This new program will provide a significantly under-served student population with a pathway to an accredited professional degree at a highly competitive tuition rate that builds on our department's technologically enriched pedagogy.

To fulfill our mission to provide a high-quality architectural education to an underserved urban population, the college collects "Tech Fee" funds from each registered student and administers these to directly benefit our students. This is a major source of funding which supports the regular updates of hardware, software and other technologies in our classrooms. In recognition of our commitment to institute an accredited professional degree program in architecture, the college intends to seek additional financial support for fifth-year B. ARCH students.

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).

Program Response:

The college fosters and encourages students and faculty to learn both inside and outside the classroom through a multiplicity of individual and collective opportunities. Below is list of current ongoing activities at the college that help support this initiative.

Professional Societies and Organizations

American Institute of Architecture (AIA)
AIA New York and Center for Architecture offer nearly 1200 programs each year. Nearly all programs are free for City Tech students to attend and many faculty encourage student participation as part of reinforcing course work.

American Institute of Architecture Students Chapter (AIAS)
In Fall 2022, the students established an AIAS chapter at City Tech. This effort will further connect students to a national network of fellow AIAS chapters, activities, and mentorship opportunities. The relationship of the AIAS to the broader architectural community will bring exposure and access to the professional world and help the student build a robust network.

National Organization of Minority Architects Student Chapter (NOMAS)
In the Fall of 2021, the students began the process of establishing a NOMAS chapter. This effort will further connect students to a national network of fellow NOMAS chapters, activities, and mentorship opportunities. Student Participation in this organization is important to our student population since the large majority belong to underrepresented minorities in the field of architecture. The organization fosters a healthy conversation about the contributions this sector of the population brings to the profession.

Architectural League of New York (ALNY)
In the Fall of 2018 the department of Architectural Technology forged a strong relationship with the ALNY. They currently provide free admission to their lectures and events for our students. More importantly, to enhance and promote student access to the local professional network the ALNY developed and runs a mentorship program specifically tailored for our students. The students are partnered individually with architecture professionals who act as mentors and supplement and guide their academic and career intentions. The program provides students with a professional experience external to the department. Regular meetings of these groups of students build pride in the unique access afforded to City Tech students to over 25-30 well known architectural practices throughout New York City.

Student Organizations

NYCCT Architecture Club
The architecture club is a student lead organization that has been active at the college since 1979. It provides City Tech students with educational events such as guest speakers, lecture, onsite tours, architectural firm visits, and fieldtrips both local and abroad.

Architecture Club – New York City College of Technology (cuny.edu)

Techne
Techne is the department's periodic publication, that showcases both student work and faculty research. Its publication is led by a group of student volunteers and faculty advisors. The students oversee the overall production of the publication; with the guidance of Professors Michael Duddy and Ting Chin. They are charged with conducting interviews, announcing calls for participation, content selection, material collecting, editing and the design and production of the publication itself.

nycct_techne Publisher Publications - Issuu

Emerging Scholars Program
The Emerging Scholars Program at City Tech provides a platform for students to present their contributions to research. Students work with a faculty advisor to advance their scholarly endeavors. The program includes specially designed workshops for students offered by the

Undergraduate Research Committee, that assists in the preparation of an abstract and participation in the Honors/Emerging Scholars poster session. The Emerging Scholars Program provides a $500 stipend for full-time students (enrolled for 12 or more credits) and a $250 stipend for part-time students (enrolled in 11 or fewer credits) for conducting research with a faculty member.

ECOFEST
The campus offers several opportunities for broader student engagement. An annual sustainability conference, ECOFEST, held on earth day every Spring, highlights student work and efforts across campus. This initiative, chaired by Felix Baez our senior CLT, was begun by the Department of Architectural Technology and now includes a campus wide Sustainability Committee that includes students and faculty from multiple departments. This conference brings in speakers from around the world highlighting relevant work in the field connecting students to their current and future roles in environmental stewardship and sustainability.

Mentorship/Pre-Internship Programs

Pre-Internship Programs
Over the past three years the college has developed a series of partnerships with local firms to provide the students more mentorship opportunities and better prepare them for internships and employment. The structure of these programs requires the students to attend a series of seminars hosted by Architectural firms throughout the semester and at the end students may apply for an internship position. Dedicated pre-internship programs have been created with the following firms.

- Tod Williams Billie Tsien Architects
- Selldorf Architects
- Diller Scofidio + Renfro
- Perkins & Will Architects
- HOK
- FX Collaborative
- Robert AM Stern Architects
- COOK FOX

Perkins Peer Advisement Program
The Perkins Peer Advisement Program has been active for the past five years. This initiative focusses on giving exemplary upper-level students a platform to contribute to the department and grow their leadership skills by becoming mentors themselves. Through the grant, students are hired as teacher assistants and work with students and faculty in first year studio courses.

Summary Statement of 1 – Context and Mission

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

Program Response:

…*The Department aspires to produce graduates who are recognized leaders in architecture and related fields*…

A theme runs through the stories of our students, distinguishing them from typical undergraduate students of architecture. They often carry tragedy and responsibility without familial safety nets, professional guidance, or stress- free institutional support. The students trust that studying design will set them on a course of agency and self-determination, away from uncertainty and insecurity. They believe in a professional meritocracy, where skills and knowledge deliver access and opportunity. Listening to them, an ultimatum for academia and the architecture and design industry comes into focus. We are charged with fulfilling the “sacred promise” between educator and student

in spite of many personal challenges and institutional deficits. Cultivating these students' enthusiasm can unlock intellectual and leadership potential, revealing valuable skill and talent deployed in the service of inclusive economic growth and a renewal of New York City.

Our mission is guided by the following principles. First: The built urban environment tethers the fate of the wealthy to that of the underprivileged; discounting one for the benefit of the other imperils both. Second: An alliance between schools of architecture, public agencies, and private practices is needed to foster technically proficient stewards and diversified urban leadership. This is known as the "scholarship of engagement, connecting the rich resources of the university to our most pressing social, civic, and ethical problems."

By properly equipping and empowering our students, their cultural knowledge, urban experience, and design talents can be fused into a superpower for a positive and inclusive transformation of the great City of New York.

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.

Program Response:

Narrative

Design that engages building technology, sustainability, and local communities in urban environments is at the core of our curriculum. Our studio sequence teaches fundamental principles of design by studying various building typologies through projects which increase in complexity and scale, and which address current urban issues. Foundational design studios are taken in tandem with building technology studios so that students are simultaneously exposed to both the conceptual art of architecture and the science of building. Studio projects in both courses use New York City as a lab for learning and envisioning the future. Listed below are opportunities typical of our design sequence.

Descriptions of opportunities

- Local Sites: Taking advantage of the rich environment of New York City, local sites are typically used in our studio courses affording our students the opportunity to make extensive site visits. Studios encourage research that reinforces and develops a working knowledge of New York City building, zoning, and fire codes.

- Community-Based Projects: Community-based projects ask our students to engage with and interact with members of local communities throughout New York City. These high-impact learning opportunities provide hands-on experience dealing with clients and real issues affecting urban environments.

- Case Studies and Field Trips: Case studies and field trips to local architectural landmarks are typically a part of the research phase of design studios and occur outside of class time led by faculty or through independent initiatives by students. A second significant asset of

our location in New York City, and because of our strong industry ties, are field trips to local architecture, engineering and construction firms, construction sites, and product vendor offices.

- Sustainability and Resiliency: Design is the essential tool in creating buildings that are high performance in all aspects of energy use, livability, and resiliency, and can actively respond to the environmental impacts of climate change. To that end, we imbed sustainable and resilient design principals in our upper-level design studios and require students to take a corresponding lecture course, that supplements this aspect of their studio work.

- Diversity, Equity, and Inclusion: Students are encouraged to research and present their cultural backgrounds, experiences, and perspectives and to translate that understanding into the design of unique built environments that equitably support and include people of different backgrounds, resources, and abilities.

Opportunities in the Curriculum- Spring 2022

	Year 1								Year 2								Year 3								Year 4								Year 5							
	Fall				Spring				Fall				Spring				Fall				Spring				Fall				Spring				Fall				Spring			
	ARCH 1112 Architectural Design I: Foundations and Visual Studies	ARCH 1101 Introduction to Architecture			ARCH 1212 Architectural Design II: Foundations and Visual Studies	ARCH 1231 Building Technology I	ARCH 1250 Site Planning	ARCH 1221 History of World Architecture to 1900	ARCH 2312 Architectural Design III	ARCH 2331 Building Technology II	ARCH 2381 Structures I	ARCH 2321 History of Architecture: 1900 to the Present	ARCH 2412 Architectural Design IV	ARCH 2431 Building Technology III	ARCH 2481 Structures II		ARCH 3512 Architectural Design V	ARCH 3531 Building Technology IV	ARCH 3522 History of NYC Architecture	ARCH 3550 Building Performance Workshop	ARCH 3551 Sustainability History and Theory	ARCH 3612 Architectural Design VI	ARCH 3670 Building Systems			ARCH 4712 Architectural Design VII: Urban Design	ARCH 4781 Structures III	ARCH 4722 Theory I: Principles and Theories of Architecture	ID XXXX Required Interdisciplinary Courses	ARCH 4812 Architectural Design VIII: Special Topics	ARCH 4861 Professional Practice	ARCH 4822 Theory II: Architectural Theory Applied		ARCH 5112 Architectural Design IX: Design Research				ARCH 5212 Architectural Design X: Thesis			
Design																																								
Local sites		■			■		■		■				■				■	■	■			■			■				■	■										
Community-based projects										■							■								■															
Case studies and Field trips		■			■		■	■	■				■				■		■	■	■	■			■				■	■			■							
Sustainability and Resiliency										■								■	■	■	■				■				■											
Diversity, Equity, and Inclusion		■						■					■						■		■				■								■				■			

Non-Curricular Opportunities- Spring 2022

	Non-Curricular Activity																																				
	Admissions	*Advisement Spine*	*Licensing Workshop*	*Arch Club Lecture Series*	*Arch Club*	*Course Coordination*	*Department Committees*	*Town Halls*	*Integration of General Education Objectives*	*Digital Media Workshops*	*Design Studio Reviews*	*Digital Fabrication Club*	*DOB Scholars*	*ECOFEST*	*Emerging scholars / Honors scholars*	*Faculty Meetings*	*General Education Learning Objectives*	*Graduation Fair*	*Internship Programs*	*Mentorship Programs*	*Peer Mentorship Program*	*NYCHA ARCH Scholars*	*Professional Organizations*	*Resume/ Portfolio/ Soft Skills Workshops*	*Student Awards*	*Sustainable Technology Association (STA)*	*Town Halls*	*WC2 Network*	*Required Architecture Electives*	*ARCH 3570 Lighting and Acoustics*	*ARCH 3590, 3690 Computation Fabrication I and I*	*ARCH 3630 Advanced Detailing Studio*	*ARCH 3631 Advanced Materials workshop*	*ARCH 3900 Study Abroad*	*ARCH 4400 Special Topics*	*ARCH 4709, 4890 AR/VR*	*ARCH 4900 Internship*
Design																																					
Local sites					■									■																								
Community-based projects														■								■																
Case studies and Field trips														■																								
Sustainability and Resiliency														■																				■				
Diversity, Equity, and Inclusion					■									■																								

Outcomes

- **Local sites: *Ability to analyze and respond to urban conditions***
  - Outcomes Sought:
    - Project Sites: Each design studio uses a site in New York City which allows students to see and experience many different types of urban conditions.
    - Site Analysis: Professors visit the project sites with students to document and analyze the existing conditions of the project site and adjacent neighborhoods. These site analyses progress through the design studio sequence in complexity and size. Students' design solutions are expected to respond to their site analyses.
  - Outcomes Assessed:
    - Project Sites: Design studio coordinators meet annually to ensure that a variety of urban conditions are being used for project sites that increase in complexity through the design sequence.
    - Site Analysis: Site analyses are a required component in most design studios. Students' understanding is assessed through rubrics for relevant assignments.
  - Current Status:
    - Project Sites: Almost all our project sites are urban sites in New York City. For the thesis studio, students are allowed to select the location and size of their project's site. There has been some discussion about using a rural site in at least one design studio prior to thesis so students are exposed to a non-urban site.
    - Site Analysis: We acknowledge the need to coordinate the level of expectation and analysis through the design sequence.

- **Community-based projects: *To engage with local community organizations***
  - Outcomes Sought:
    - In ARCH 3512- Architectural Design V, we partnered with Justin Rivers, Chief Experience Officer; Untapped New York, Aaron Asis and Salmaan Khan, representatives of People for the Pavilion; and with Rebekah Burgess who provided access to drawings from the archives at the Olmsted Center for NYC Parks. We visited the site, and we were given a tour of the New York State pavilion for the 1964 Worlds Fair. Drawings of the building were provided to us by the Parks Department. The design studio was tasked with designing a solution to revitalize the abandoned building.
    - In NYCHA Arch Scholars: 3rd and 4th year students partner with residents in local public housing projects to survey, document, assess, and critique shared residential spaces.
  - Outcomes Assessed:
    - In ARCH 3512- Architectural Design V, Students evaluated and researched the building. A design solution was proposed by the students based on comprehensive site analysis.
    - In NYCHA Arch Scholars: Students teams design and present environmentally and socially engaged interventions.
  - Current Status:
    - In ARCH 3512- Architectural Design V, students continue to use the site of the New York State Pavilion and hope to present their findings to the Queens Borough President.
    - In NYCHA Arch Scholars: This program has gathered interest and support from local city leaders as a model of academic engagement with the community. FXCollaborative contributes to this effort by offering supplies and space for student presentations.

- **Case studies and field trips: *Experience the built environment***
  - Outcomes Sought:
    - Field Trips:
      - In ARCH 3522- History of New York City Architecture and in the design studios, students visit various sites throughout New York City to study and experience both historic and contemporary architecture.
      - A growing number of our students participate in mentorship programs and are exposed not only to noteworthy and architecturally significant buildings, but the inner workings of architectural offices in New York City.
    - Case Studies: Precedent case studies are required in most design studios. They are presented by students to the class to expose the students to a wide variety of architectural projects.
  - Outcomes Assessed:
    - Field Trips:
      - Course coordinators and activity leaders meet annually to ensure that a variety of building typologies in different contexts, are being visited and experienced by our students.

            - Mentorship program leaders track the number of students participating in the program.
        - Case Studies: The understanding of precedent case studies is assessed by a rubric for relevant assignments
    - Current Status:
        - Field Trips:
            - We acknowledge the need to document the coordination of field trips between courses.
            - We are working towards a more consistent way of documenting individual student experiences in the mentorship program. One of these ways may be to document where a student has visited as part of the program.
        - Case Studies: Precedent case studies are done each design studio, but the coordinators have discussed the need for a master list of precedents that is shared between the studios to ensure we are covering a variety of precedents and a diversity of architects.

- **Sustainability and Resiliency: *Understand and integrate sustainable and resilient design principles***
    - Outcomes Sought:
        - Site Analysis: Sustainability and resiliency are key elements in the site analysis portion of our design studios. Students are asked to analyze specific environmental conditions of project sites such as flood zones, solar patterns, wind, and noise. They are then required to integrate their observations and responses to the site conditions in their design solutions. The number of factors and the type of response increases in complexity through the design sequence.
    - Outcomes Assessed:
        - Site Analysis: The understanding and integration of sustainable and resilient design principles is assessed by a rubric for relevant assignments.
    - Current Status:
        - Site Analysis: We acknowledge the need to coordinate the level of expectation and analysis through the design sequence.

- **Diversity: Understand the diversity of people and conditions that design can impact**
    - Outcomes Sought:
        - Design Responses: In ARCH 2412- Architectural Design IV, students are required to research and select a culture as the subject of their museum design. Many choose their own personal cultures and highlight aspects of their cultures from their native land, or the transformation of the culture in a new land. This allows students to share an aspect of who they are and gain respect from their peers while embracing their cultural differences. Additionally, exploring other cultures is often offered as an option for a conceptual premise in other design studios in the sequence.
        - Social Engagement: In non-curricular activities, such as the Architectural Club, students are encouraged through social activities sponsored by the club, to share and present their unique and individual perspectives and backgrounds with their peers.

- Outcomes Assessed:
  - Design Responses: In ARCH 2412- Architectural Design IV students' understanding and integration of their research about a culture into their design projects is assessed through an assignment rubric.
  - Social Engagement: The architectural club faculty and student leaders meet continuously to seek more opportunities for students to share their backgrounds while feeling comfortable.
- Current Status:
  - Design Responses: We acknowledge the need to coordinate and document where opportunities to integrate cultural experiences occur in the curriculum. Given our diverse student body we know that opportunities exist throughout the program but need to develop a methodology for the documentation and coordination of activities.
  - Social Engagement: We acknowledge the need to more consistently track when and where opportunities for students to introduce and present their experiences to each other occurs.

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  - Outcomes Sought:
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  - Outcomes Assessed:
    - Site Analysis: The understanding and integration of sustainable and resilient design principles is assessed by a rubric for relevant assignments.
  - Current Status:
    - Site Analysis: We acknowledge the need to coordinate the level of expectation and analysis through the design sequence.

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  - Outcomes Sought:
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  - Social Engagement: We acknowledge the need to more consistently track when and where opportunities for students to introduce and present their experiences to each other occurs.

The program intends to continually address the importance of design in its long-range planning by reviewing and assessing the outcomes of design courses and the overall design sequence through assessment and the continual review of the sequence by the Design Curriculum Committee. An important aspect of our curriculum is the strong Building Technology spine. The design sequence will continually evolve to align itself with the knowledge of the students from the building technology program along with the professional field of architecture.

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.

Program Response:

Narrative

As architects we strive to protect the health, safety, and welfare of the public and believe we need to design better buildings to accomplish this ethical charge. Every full-time faculty member is a licensed architect and along with the department is committed to environmental stewardship as a professional and ethical responsibility. To advance our students in the AEC (Architecture, Engineering and Construction) industry, City Tech instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate the impacts of climate change responsibly by leveraging economies, advanced building performance, adaptation, and resilience principles in their work and advocacy activities. Listed below are opportunities the department provides:

Descriptions of opportunities

- Industry Partnerships: A global need for skills and strategies to curb the effects of climate change is increasing. Fostering relationships with industry partners is crucial to provide exposure for our students to current developments in the profession.
  - Passive House Network: Recent developments have yielded a partnership between City Tech and the (PHN) Passive House Network to further our

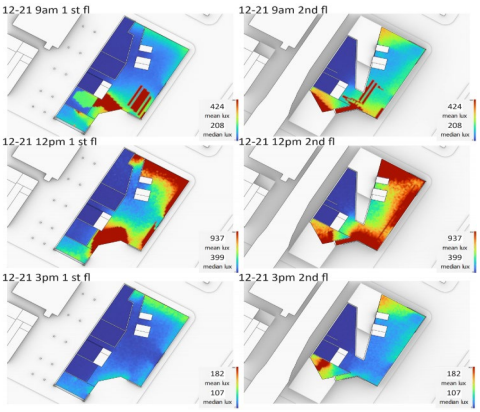
commitment to environmental stewardship and to provide pathways for student certification opportunities. Passive House lesson planning has been integrated into our curriculum as modules across multiple courses and student membership to the organization has been offered to interested students.

- ULI - Urban Land Institute has worked with us to incorporate Urban Plan into our design curriculum. Our urban setting along with our strong tilt toward sustainability, influenced the new curriculum to further embrace the ideals of dense sustainable living. The ULI Urban Plan curriculum now includes an Eco-district as part of the project process.

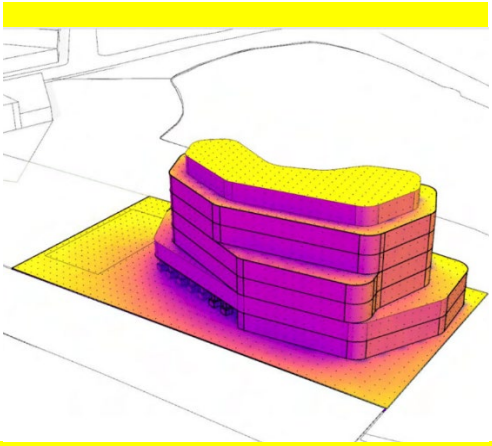
- New Required Courses: We have further advanced the commitment of our department to environmental stewardship, sustainability, and resiliency by elevating two courses to be required classes, rather than elective courses. The choice of ARCH 3550- Building Performance Workshop or ARCH 3551- Sustainability, History and Theory have been adopted by the faculty as required courses. The chancellor's report showing ARCH 3550- Building Performance Workshop or ARCH 3551- Sustainability, History and Theory as required for BArch students, effective Spring 2023, can be found here NYC_Tech_AURD_Jun_2022 (cuny.edu).

- Curriculum Integration: Buildings of excellence go well beyond current standards and strive, through innovation, to create more sustainable, resilient communities, buildings and livelihoods for the people and businesses that use them. Design is the essential tool to create buildings that are high performance in all aspects of energy use, livability, and resiliency, and can actively respond to the long-term environmental impacts of climate change. In essence buildings do not have to look different; they need to perform differently to address the challenges of our time. Throughout the curriculum the students are introduced to methods and industry standards for addressing the pressing needs of the planet. Those elements are further integrated into courses and special topics studios, enabling practical application to student projects as well as reinforcing professional vocabulary needed in the marketplace.
    - For the first time in Spring 2022, all sections of ARCH 4812- Architectural Design VIII, adopted energy modeling as a key component of the curriculum and tasked students with quantitatively assessing the environment of the design process. The adoption was successful with some identified room of improvement.

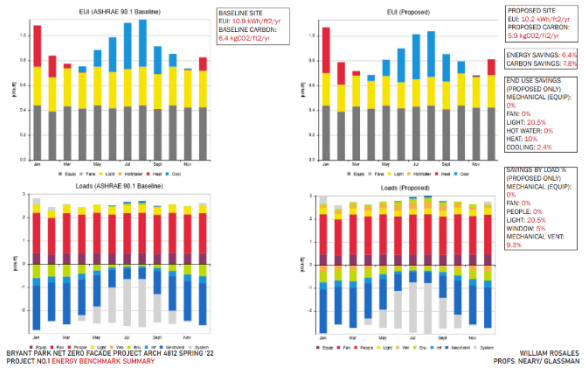
Student Examples from ARCH 4812- Architectural Design VIII- Spring 2022



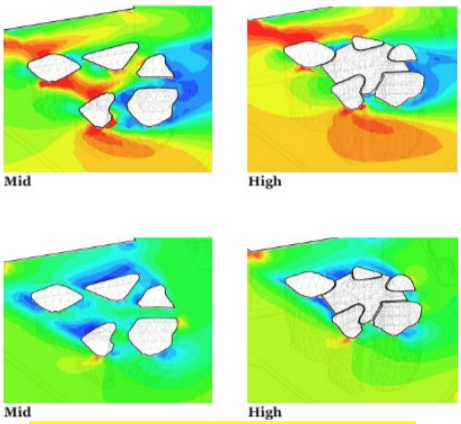
Indoor daylighting simulation from Theunissen & Rogers' studio



Solar radiation study from Azaroff's studio



Energy Benchmark Summary from Neary's studio



Wind simulation from Kim' studio

Outcomes

- **To inspire active and engaged citizens**
  - Outcomes Sought:
    - We aim to develop graduates prepared to be active, engaged citizens, able to understand what it means to be professional members of society and to act ethically on that understanding of environmental justice, equity in society and sustainability in practice.
  - Outcomes Assessed:
    - The final term paper required in the newly required ARCH 3551- Sustainability, History and Theory course is yet to be assessed, but is the culmination of semester-long coursework that embodies environmental stewardship. Students must posit arguments and solutions for society through the lens of environmental justice, equity and sustainability. (See course Notebook ARCH3551 final paper requirements)

- Current Status:
  - The final term paper required in the newly required ARCH 3551- Sustainability, History and Theory requires students to discuss current problems to cities and society brought on by climate change and human related activities through research. Students must posit solutions that address time scales, ecological interests, and social systems to be successful.

- **To build a firm foundation of resilient and sustainable methods and apply these to course work**
  - Outcomes Sought:
    - We seek to demonstrate that the students can develop research agendas and apply climatic conditions of today and into the future to design processes. We further seek to enable students to gain a firm foundation of resilient and sustainable methods and apply them to course work.
  - Outcomes Assessed:
    - Assessment of environmental research applied to design is evident in the course notebooks of the classes listed below. In each case, the key research elements rely on environmental inputs and various scales of time. Sun, wind, water, sea level rise, extreme heat, shocks, and stresses that are natural and man-made are part of the key research parameters, while a deep understanding of human and physical geographies are additional research elements that play a key role in attaining the department outcomes listed above.
      - ARCH 4712- Architectural Design VII
      - ARCH 4812- Architectural Design VIII
  - Current Status:
    - Further outcome assessment is planned with newly approved courses that embrace similar research trajectories with scientific methods and historic precedents along with emerging topics.
      - ARCH 3551- Sustainability, History and Theory (yet to be assessed for historic precedents)
      - ARCH 3550- Building Performance Workshop (yet to be assessed for scientific methods)
    - Similar environmental analysis modules to those being used in ARCH 4812- Architectural Design VIII, are now being considered to expand and broaden this value into other design studios.

- **To foster and maintain an ethical sensitivity and approach to stewardship of the environment**
  - Outcomes Sought:
    - We seek to foster and maintain an ethical sensitivity and approach to the stewardship of the environment as future architects, while building confidence and capacity in our students to tackle the wicked problems of our world and challenges facing society.
  - Outcomes Assessed:
    - Understanding the soft and hard geographies, physical and social, enable students to understand complete parameters of place. In addition, students gain a sense of who we are designing for and who we serve in our ethical charge for health, safety, and welfare of the public.
      - SWOT analysis in ARCH 4712- Architectural Design VII and ARCH 4812- Architectural Design VII

- Health Safety and Welfare Assignment ARCH 4712- Architectural Design VII
- Demographic and neighborhood analysis ARCH 4712- Architectural Design VII and ARCH 4812- Architectural Design VII
  - Including future projections of climate impacts
  - Environmental concerns and impacts
- Precedent research in ARCH 4712- Architectural Design VII and ARCH 4812- Architectural Design VII

- Further ethical sensitivity to these subjects will be assessed in the newly required course ARCH 3551- Sustainability, History and Theory, semester research assignment. The assignment requires in depth research and examination of a city, technical building, movement related to the subject, or significant figure that has impacted the field. Outcomes are assessed by a rubric set forward in the course notebook. (See ARCH 3551 Course Notebook)

- Current Status:
  - Both ARCH 4712- Architectural Design VII and ARCH 4812- Architectural Design VII are required courses and assignments reflect these areas and are assessed accordingly

Long-term planning for the Department of Architecture Technology includes expanding awareness, practice, and access to the essential tools our students need to achieve competency and have a positive impact on ecological stewardship and help to curb the long-term effects of climate change. Building a resilient, sustainable, and equitable future for our communities starts with future architects and design professionals we are shaping at City Tech.

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.

Program Response:

Narrative:

City Tech offers a diverse, multicultural learning environment. Diversity, equity, and inclusion are central assets of our program and our culture at City Tech. Students and faculty come from more than 138 countries and speak over 85 languages. Venerable characteristics of the department are its demographic composition, comparatively low tuition, and respectful learning environment. This creates a wealth of students eager and motivated to enter and engage the profession. Including them in the discourse and practice of architecture in New York City can positively impact the well-documented imbalance of representation in the profession.

The department further recognizes the value of our students varied background, experiences, and stories. We measure results of our efforts by verifying student participation and surveying their ‘pre’ and ‘post’ experience. Collecting this information, we can see that progress is being made by affording opportunities for students to expand their skillsets, increase exposure to the profession and become more competitive in the marketplace. Utilizing mentorship and pre-internship programs we are making substantive progress towards increasing fairness, social justice, and equity in architecture education. Furthermore, we deepen students' understanding of diverse cultural and social contexts through the following opportunities:

Descriptions of opportunities

- External Engagement: We engage a diverse set of external industry representatives and community stakeholders in the design studios. The Architectural League mentorship program, which matches student with designers and architects, often promotes conversations about quality of life and tools to balance work-school-life. Mentors come to support their mentees directly in the department during project reviews. It has often been noted by these mentors, that our teaching faculty push students to obtain a high quality of work and this may result in incomplete assignments. Knowing the demands on our student's time and recognizing that many of these students' posses the perquisite knowledge to move forward in our curriculum, we take a supportive stance of issuing Incompletes, so the students can remain with their cohort and in sequence. After the end of each semester, this is evidenced by the large number of Grade Update forms that are submitted to the Department Chair as students complete their assignments.

- Exploring Perspectives: Students are encouraged to research and present their cultural backgrounds, experiences, and perspectives and to translate that understanding into the design of unique built environments that equitably support and include people of different backgrounds, resources, and abilities

- Encouraging Expression: We utilize peer and professional mentorship programs, structured internships, student clubs and student run publications to create space for expression and exploration.

- Designing for Change: Offering required design studios that address and advocate for current social, cultural, environmental, and economic issues

- World Architecture: Offering history / theory courses that explicitly study buildings from all over the world. By celebrating the range of student cultures and drawing direct connections to their current studies, a respectful learning and teaching environment is created. Class sizes are kept small, so faculty can utilize multi-modal teaching techniques in their classroom. It is common for faculty to take students on a spontaneous tour of a nearby building or arrange a guest lecturer to present a unique perspective to the students. The students' cultural backgrounds help them to be respectful and mindful of the rituals, practice, and opinions of their colleagues. Faculty advocacy and encouragement of diversity reinforces the positive and respectful environment.

- Career Paths: Empowering students with financial literacy by offering a newly executed business minor at the college, accessible to all architecture students. The department is working to increase the number and magnitude of scholarship & grants offered to students to further reduce their personal financial circumstances and allow them to make better employment choices after graduation. Providing specialized technical courses, the department enables students to consider multiple career pathways into the profession. Courses in digital fabrication, preservation technology and BIM are recommended based on a student's interests and academic strengths.

- Creating Student Voices: Developing our students' voices academically, professionally, and socially so that they can act for social justice in our urban community. Building an alumni network is instrumental to providing current students insight into the professional working environment after graduation. Alumni that participate in town-halls and licensing seminars reinforce lessons learned in the classroom and offer support to current students regarding licensing and practice. Currently the alumni network is managed by department faculty, as this provides direct access to academic programs and internships.

- Scaffolding the Higher Education Pipeline: The department recognizes that equity requires an expansion of effective pre-college experiences for program applicants while maintaining connections with graduates. These pathways require continuous collaboration between academic and professional partners. Memorandums of Understanding (MOU) were created with 10 public Technical High Schools, to ensure access to the department is secure and communication about the profession is maintained. The Department of Architecture has an articulation agreement with the Department of Engineering Technology at Queensborough Community College (QCC) to create a pathway for two-year associate degree students. The demographic of these programs reinforces the diversity at the department. This ensures students have informed and structured access to an affordable professional degree program. Program information sessions are circulated to these partner programs to provide clear information on application requirements and professional pathways. There are currently no transfer agreements in place with four-year colleges or graduate degree programs.

Outcomes

- **Expose students in partner high schools and colleges to resources**
  - Outcomes Sought:
    - Expose students, in partner high schools and colleges, to resources for discussions of design practice and history impacting urban morphology.
  - Outcomes Assessed:
    - Enrollment in the newly developed Arch 1101 – Introduction to Architecture for high school's student is offered at no-cost through the College Now program.
    - Articulation agreements with partner programs: High Schools and Community Colleges
  - Current Status:
    - The ARCH 1101 summer program in Summer 2022 was a success. 23 students enrolled from partner public high schools. The summer session collaborated with the African American Studies Department and Design Advocates, a group of architects and designers collaborating to serve the public good. Field trips to historically relevant sites included: African Burial Ground, Seneca Village, Tenement Museum, Irish Hunger Memorial and a public housing project. Students' final projects were short form videos combining their thoughts, drawings with narration. This program will be run again in Summer 2023.

- **Financial literacy**
  - Outcomes Sought:
    - Encourage students to gain financial literacy by participating in the Business Minor offered at the college.
  - Outcomes Assessed:
    - Number of students enrolled in the Business Minor.
  - Current Status:
    - Architecture students signing up for the business minor is gathering momentum. Faculty advisers in the architectural department need better familiarity with the requirements to support students considering this option.

- **Participation in NOMA**
  - Outcomes Sought:

        - Encourage student participation in NOMAs.
    - Outcomes Assessed:
        - Number of students signed up for NOMAs and AIAS.
    - Current Status:
        - AIAS has developed quickly as students see a direct connection with faculty members in leadership positions at the AIA (Professor Illya Azaroff). AIAS , NOMAS and Arch Club members have met with faculty advisers and the Department Chair to determine scope and agenda to differentiate each entity and make that clear to the student body. NOMAS requires some additional support to get mobilized and a faculty adviser is still being selected.

- **Expose students to regional and international design issues and practices**
    - Outcomes Sought:
        - Expose students to current discussions about regional and international design issues and practices from firsthand sources.
    - Outcomes Assessed:
        - Number of students attending the newly established discussion series in partnership with BKLYN AIA and KPF.
    - Current Status:
        - The 2022- 2023 discussion series is currently being set up with the support of AIA Brooklyn and KPF. The intent of the series is to present designers and stakeholders in conversation about large ideas and local responses, rather than a long form lecture. Encouraging questions and discussion is an important part of this effort. Attendance will be taken to track student attendance.

- **Develop student confidence**
    - Outcomes Sought:
        - Develop student confidence by partnering them with mentors of similar backgrounds.
    - Outcomes Assessed:
        - Number of students matched in the Architectural League Mentorship Program.
    - Current Status:
        - The Architectural League Mentorship program remains a strong component of student support for the department. The program has tripled in size since it began and now includes Kean College and City Colleges School of Architecture. The mentor matches at the department have been consistent at 25-30 matches a year. The matches are based on student and mentor participation questionnaires and include information about personal background and languages spoken.

Long range planning includes curated exhibitions of multi-cultural practices and structures, panel discussions and debates on culturally relevant topics, a review of precedent case studies in design studies to ensure a diverse array of architects are being studied, and hosting community representatives to present local issues and plans.

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.

Program Response:

Narrative

Advanced curricula in both the design studios and lab electives, as well as several extracurricular activities, are focused on research in sustainability, resiliency, performative design, high performance building systems and augmented and virtual reality (AR/VR). Students develop confidence in approaching research questions on significant current topics where technology meets architecture. The students work collaboratively to propose new ideas and environments that follow analysis of information from multiple sources and respond to multiple parameters. We achieve this by the following opportunities:

Descriptions of opportunities

- Coursework: Courses including ARCH 4812- Design VIII, and the electives, ARCH 3570- Lighting and Acoustics, ARCH 3550- Building Performance Workshop, and ARCH 3590, 3690, and 4791, the Computation and Fabrication sequence, that involve long-term collaborations with professors affiliated with HOK Facades, Arup Acoustics, and the Brooklyn Navy Yard. These partnerships bring real–world knowledge and approaches to the classroom. Other electives are, ARCH 3631- Advanced Materials Workshop takes advantage of a special academic Material ConneXion (https://materialconnexion.com/) library and database access, to gain knowledge of this resource for innovative materials that is curated by material scientists, and ARCH 4709 which focuses on Virtual and Augmented Reality.

- Research: Maintaining initiatives that complement the research-based curriculum offered to students, including such programs as the Emerging Scholars, Honors Scholars, and the Undergraduate Research Scholars, where students work in small groups directly with a professor on a research project that is shared in a juried college-wide public poster presentation near the end of each semester. Research topics take advantage of recent developments in software or hardware development and are often derived in collaboration with practitioners that work with advanced technologies. Students participate in a B. Arch Thesis through a two-semester long research project in ARCH 5112 and ARCH 5212.

- Student Organizations: Clubs based in the Department of Architectural Technology offer opportunities for exploration of architecture-related ideas with the multi-departmental Sustainable Technology Association, as well as the Digital Fabrication Club. The Sustainable Technology Association explores ways to analyze, design, and manage ways to improve the environmental and ecological conditions in the world around us. Explorations of systems development have included embedded energy and materials, and Net Zero Energy buildings. The Digital Fabrication Club has designed and fabricated several pavilion structures for international competitions and the College Gala.

- Digital Media Specialists- Specialists in digital media provide a series of workshops on 2D and 3D modeling, rendering, energy modeling, BIM, and GIS, as well as several special topics workshops that currently include Embodied Carbon Façade Design, and Revit Parametric Integration.

Outcomes

Broadening experiences that provide a global perspective and knowledge of the architectural profession and innovations in the field make up part of the long-term planning for the Department of Architectural Technology. Outcomes seek focus on an infusion of research-based knowledge and research approaches as part of the student experience through:

- **Research- based architectural technology practitioners**
  - Outcomes Sought:
    - Having research based architectural technology practitioners teach several courses each semester (typ. 4-5 courses)
  - Outcomes Assessed:
    - Number of courses with research-based knowledge taught by architectural technology faculty and practitioners
  - Current Status:
    - The number of innovation focused workshops, lectures, and practitioner/professors creating curriculum has maintained a target level over the past years.

- **Workshop Series**
  - Outcomes Sought:
    - Having six or more workshop series each semester that focus on innovation topics
  - Outcomes Assessed:
    - Number of workshop series each semester that focus on innovation topics
  - Current Status:
    - Access to the workshops and courses and lectures is open to all students -- including those not in the professional degree. We work to continually increase the number of students attending these workshops.
- **Lectures**
  - Outcomes Sought:
    - Having 25 - 50% of the weekly Architecture Club lectures by architects and engineers address topics related to Knowledge and Innovation
  - Outcomes Assessed:
    - Number of the weekly Architecture Club lectures by architects and engineers address topics related to “Knowledge and Innovation” topics
  - Current Status:
    - We are aiming to increase the attendance at the workshops to consistently have a minimum of 10 - 15 students by increasing student awareness of these opportunities.

- **Research and innovation driven thesis projects**
  - Outcomes Sought:
    - Having the design studio sequence culminate in a research and innovation driven thesis project based on student interests involving local practitioners and faculty expertise.
  - Outcomes Assessed:
    - Review among all full-time faculty of the B. Arch students’ thesis projects to ensure a consistent level of expectation for student projects
  - Current Status:

- The program intends to continually address the importance of knowledge and innovation in its long-range planning by reviewing and assessing the outcomes of student individualized research through assessment and review by departmental faculty. An important aspect of our curriculum is developing critical thinking that will allow the students to excel in graduate programs or in the profession after graduation. The final thesis project of the B. Arch program will not only serve as a guide for the earlier students, but to gauge the comprehensive understanding of knowledge and innovation skill of the students through research and design.

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.

Program Response:

Narrative:

At City Tech we strive to instill in our students an understanding of the arts of leadership, collaboration, and service; at essence, the ability to motivate people to act together to define and achieve common goals.

The ethical practice of architecture requires recognition of the impact of design, planning and construction on the environment and community. Architectural education must endeavor to instill and build awareness and dedication to responsible practice for the public good. Our students are keenly aware of the social and economic challenges faced by them and others in their neighborhoods and communities. This awareness is a foundation upon which to build an increasingly broad understanding and dedication to the responsibilities they will take on as professionals. Our design curriculum includes work with specific communities in New York City to address important urban challenges. Our program highly values community resilience and emphasizes it in multiple courses. Recent and current events impacting our urban community are used as points of departure in lectures, discussions, and assignments.

We foster the development of professional competencies (NACE career readiness competencies) by providing as many and as wide a variety of opportunities for students to understand and practice the collaborative, inclusive, and engaged leadership that is at the core of architectural practice.

We incorporate these learning goals by providing opportunities to:

- Develop leadership and collaboration competencies
- Understand professionalism and professional ethics
- Interrogate examples of culturally competent, inclusive, and equitable practices

Description of opportunities

I. Embedding learning lessons in the curriculum of the program:

- Collaborative Projects: Across the curriculum, students participate in team-based projects that supplement their individual work. Collaboration involves merging individual ideas into unified concepts, disseminating workflows among team members and managing time efficiently. All students in the program have opportunities to develop leaderships skills and to gain experience with collaborative team dynamics (see PC6 narrative and assessment).

- Interdisciplinary Learning: A signature of City Tech's general education curriculum is the requirement that all graduating bachelor degree students complete at least one Interdisciplinary (ID) course. Defined as a course that focuses on questions, problems, and topics too complex or too broad for a single discipline or field to encompass adequately; such studies thrive on drawing connections between seemingly exclusive domains. These courses are typically team-taught by faculty or outside lecturers from different disciplines. While students may choose from a wide variety of Interdisciplinary Courses, Architectural Technology faculty have both developed and taught courses that encourage our students to study issues from multiple points of view. The ID course ARCH/LIB2205ID Learning Places pairs the study of Urban Spaces in NYC with library research techniques, and offers architecture students an opportunity to work collaboratively in multidisciplinary teams with students across the college to research the complex and dynamic social and physical issues facing New York City including social injustice, power and politics driving development and planning, gentrification, and segregation, deteriorating public housing, and environmental degradation. The team research project offers students the opportunity to practice leadership roles in the planning and execution of the team project.

- Partnering with the Community: Place-based learning is a foundational component of the college's general education pedagogy. Advanced studios and electives extend place-based learning beyond field trips and site visits to the actual engagement of community stakeholders in the institutions and agencies that serve the community. For several years now, the seventh-semester urban design studio has worked with community liaisons (Chinatown Partnership, Brooklyn Tech Triangle, NYCHA - New York City Housing Authority and Industry City) to guide students' project work. Community stakeholders have facilitated team projects as "clients", providing a real-world experience as students develop programs and design projects that fulfill their "clients" needs. These experiences ask students to listen, understand their clients' needs, work towards consensus, and communicate their solutions both graphically and orally in a community-based forum.

- Urban Land Institute UrbanPlan: "UrbanPlan aims to develop land use professionals—developers, planners, architects, investors, and policy makers—who are more sophisticated and effective when they enter the workforce. Urban Plan moves students from a theoretical and ideological understanding of their discipline to the practical realities and demands of the development team and process. In addition, the module is a challenging team building exercise and introduction to ULI and key leaders in the industry." This module was included in all sections of ARCH 3612 Design VI beginning in Fall 2020, was used as a reference in ARCH 4712 Urban Design (Spring 2022) and will be piloted in ARCH 4712 Urban Design (Fall 2022) (see PC6 narrative and assessment, and ARCH 4712 Urban Design Course Notebook).

II. Creating opportunities for leadership participation in college-based organizations

- Architecture Club: The Architecture Club has been integral to the Department since its inception. Providing leadership opportunities, this faculty-guided student-led organization sponsors guest speakers, holds fundraisers and provides student activities to promote a greater appreciation for the field of architecture. The club sponsors international travel to significant architectural

works abroad and local travel that makes use of New York City and its environs as an extension of the classroom (see Architecture Club website).

- Study Abroad Program: Beginning in winter break of 2014, the program periodically offers students opportunities to travel abroad with architecture faculty to study environmental concerns and participate in community-based service projects (see ARCH 3900 Study Abroad Course Notebook).

- TECHNE: An annual publication presenting student and faculty work from across the architecture curriculum, in 2022, TECHNE entered its sixth year of publication, serves the critical role of documenting and disseminating the work of our faculty and students. Under faculty guidance, the student editorial team chooses a theme relevant to current architectural discourse, solicits submissions from faculty and students, edits the submitted work and formats and distributes the publication (see past issues of TECHNE).

- Peer Mentor program: The Perkins Peer Mentoring program provides opportunity for mid- and upper-level architecture students to acquire training and experience in leadership roles as peer mentors, embedded in the first-year studios. There are a variety of peer mentor programs across campus and the college has begun an initiative to bring peer mentors and program coordinators together regularly for training and networking, to raise the profile of these important leadership and service roles.

- Professional Organizations: Students and faculty participate in a range of activities sponsored by the American Institute of Architects (AIA), the Society of American Registered Architects (SARA), and the Steel Institute of New York. Members of the full-time faculty have served as past presidents of local chapters of both the AIA and SARA and continue to serve as members of local executive councils, connecting students with opportunities for participation in organizations, conferences, and professional activities outside the university community.

III. Providing opportunities for students to learn about leadership, collaboration, and approaches to ethical practice from experience, observation, and professional mentoring:

- Internship Program: Our internship program gives our students professional working experience while enrolled in our program and has provided a bridge to full time employment. The elective internship class (ARCH 4900) fosters peer-to-peer leadership opportunities as students share reflections of their early professional experiences and support one another (see ARCH 4900 Internship in Architectural Technology). A list of internship opportunities and resources is maintained here: (https://openlab.citytech.cuny.edu/architecture-jobs/)

- Pre-Internship Program: This unique and growing program provides a scaffold into professional life for students who may otherwise have no access to professional mentors within their family and community circles. Students sign up for a talk series with architectural firms which are typically scheduled once per month over the semester. At completion of the talk series, students submit resume and portfolio for competitive application for a summer internship with the firm. The program creates an effective intern selection process for the studios, establishes dialogue between students and practitioners, preparing interns for transition into full time hires.

- The Architectural League of New York Mentorship Program: The League Mentorship is an annual program organized in partnership with the New York City College of Technology (City Tech), the Spitzer School of Architecture at City College of New York (CCNY), and the Michael Graves College of Architecture & Design at Kean University. The League matches design professionals with architecture students for nine months of one-on-one advising, relationship building, and mutual learning. Over the course of the program, mentors meet regularly with their students, offering them guidance as they prepare for careers in architecture and design. To facilitate these connections, the League organizes studio tours, panel discussions, and networking events.

- The World Cities World Class University (WC2): This network brings together top universities located in major world cities to respond to the challenges and opportunities facing urban areas. By providing a forum for scholars and practitioners from a range of disciplines and from across the globe, the network creates opportunities for interdisciplinary and cross-border cooperation. The network's areas of focus are research, knowledge exchange, staff and student mobility and supporting urban policy makers in leveraging the expertise held within universities. There are six themes which explore cultural, environmental, and political issues. The WC2 Network invites undergraduate students from participating universities to join an interdisciplinary, collaborative, and virtual project. Students can expand their networks, gain skills in online intercultural collaboration and explore the topic of a post-COVID future from multiple thematic lenses. The college utilizes a competitive selection process to choose representatives of the college to attend the symposia. The students for all the member universities meet and form research teams that explore global issues of sustainability and propose solutions. During these exercises, the students are challenged and utilize leadership, organizational and communication skills to explore, develop and advocate for the design solutions.

Outcomes

- **Connect students with experienced practitioners**
  - Outcomes Sought:
    - Connect students with experienced practitioners who can provide firsthand examples of leadership, collaboration, and community engagement in the industry
  - Outcomes Assessed:
    - ULI UrbanPlan: (see PC.6)
  - Current Status:
    - ULI UrbanPlan:
      - Train additional faculty in the new curriculum
      - Refine integration into the ARCH 4712 Urban Design Studio

- **Foster connections among professionals and students from diverse backgrounds**
  - Outcomes Sought:
    - Foster connections among professionals and students from diverse social, economic, and cultural backgrounds
  - Outcomes Assessed:
    - Architectural League Mentorship program: pre- and post-participation surveys, student reflections
  - Current Status:
    - The Architectural League Mentorship program remains a strong

component of student support for the department. The program has tripled in size since it began and now includes Kean College and City Colleges School of Architecture. The mentor matches at the department have been consistent at 25-30 matches a year. The matches are based on student and mentor participation questionnaires and include information about personal background and languages spoken.

- **Increase access to quality internships**
  - Outcomes Sought:
    - Increase potential for access to quality internships that transition into full time hires.
  - Outcomes Assessed:
    - Internships: grades and student reflections in ARCH 4900 Internship course
    - Pre-Internship program: pre- and post-participation surveys, student reflections
  - Current Status:
    - Internships: Continues to maintain and foster relationships with local architectural practices
    - Pre-Internship Program:
      - Expand the type of studios participating to address more student interests (fabrication, preservation, etc.)
      - Coordinate dates so more students can participate, and participate in multiple programs
      - Expand the program to include students earlier in the program, students 2nd year and up

We continue our longstanding commitment to embedding collaborative teamwork, real-world community projects, and interdisciplinary studies in the curriculum, and these activities are explicitly supported and embedded in college-wide programs and priorities. Likewise, co-curricular activities such as the student club and publication, professional organizations, peer mentor programs, and especially the pre-professional internship and mentorship programs remain robust and growing. In the near and longer term, we must focus on re-energizing those programs most dependent on face-to-face interactions and travel – study abroad restarted in summer 2022, student clubs are benefitting from the expanding presence of students on campus.

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.

Program Response:

Narrative

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. To this end, the Department of Architectural Technology provides broad educational experiences,

foundational skills, and integration of ideas and practical applications that foster lifelong learning.

Broad Educational Experiences:

A significant advantage our department leverages is its physical location in downtown Brooklyn and near lower Manhattan that serve as a dramatic backdrop for the context and challenges of an architect's cultural, social, environmental, and economic role. Walking tours and field trips are an integral feature of the history, design and building technology courses. Discussions of building technology in-situ triggers a discussion of history and socio-cultural contexts which influence urban morphology. The range of cultures represented in the student body make connections to these narratives impactful.

As the faculty develop new curricula, electives, and specialty tracks, it increases engagement with institutional and industry representatives. The student-run Architecture Club, along with AIAS and NOMAS are instrumental to bringing practitioners, researchers, and scholars to the department, making direct and personal connections with those engaged in lifelong learning. This ensures that students experience an array of opinions and perspectives on the role of architects in an urban context.

Descriptions of opportunities

- Local Field Trips: Local sites are used in design studios to afford students the opportunity to make repeated and extensive site analyses and detailed inventories. History courses conduct walking tours of neighborhoods to view material technologies, like the cast iron district in Manhattan, or culturally relevant sites, like the African Burial Grounds in lower Manhattan or Greenwood Cemetery in Brooklyn.

- Manufacturers & Fabricators: The Brooklyn Navy Yard is an active hub for advanced manufacturing and fabrication. There are many companies which create construction building materials and designers that use digital fabrication tools to create sophisticated assemblies. Many of these shops welcome students from the department on guided tours to showcase their processes and products.

- Museums & Galleries: The city is unparalleled in its offerings of exhibits to students. Many cultural institutions allow for free admission to students. Some require a nominal fee for student groups. Faculty accompany students to galleries at the Guggenheim, MOMA, Metropolitan Museum, Skyscraper Museum, the Modulightor Building (formerly the location of Architect Paul Rudolph's design studio), the Center for Brooklyn History, and the Brooklyn Museum.

- Hardscape and Landscape: It is common for upper-level design studios to make detailed studies of the flow of people and resources through the densest areas of the city. They observe and take notes on devices which guide, funnel and limit movements. There are many accessible parks which provide contrast to these hardscapes, but of note are the Brooklyn Bridge Park, a work in progress, and the Highline. Both provide students opportunities to consider urban edges and boundaries with bodies of water being rehabilitated.

Foundational Skills:

The Association of American Colleges and Universities (AAC&U) provides a national standard for describing and assessing lifelong learning. This rubric includes the following

sub-categories: curiosity, initiative, independence, transfer, and reflection.[3] The Department of Architectural Technology developed pedagogical strategies for all of these and integrated them throughout the curriculum. Lifelong learning foundational skills are most explicitly integrated into the early curriculum. Below are examples of how this is address in ARCH 1231- Building Technology I.

Pedagogy/Learning Goal #1. Inquiry through Place-based Learning

Making frequent use of New York City as a learning laboratory, the first building technology course (ARCH1231) centers on inquiry through place-based learning, giving students a foundation of learning to look and observe carefully, fostering curiosity, and analyzing building tectonics. It models self-directed and independent learning where the students can begin to pay attention to the built environment, they experience every day in a new way on their own, taking the initiative of making their day-to-day experience of the built environment a part of their life-long learning. This pedagogy leverages the opportunity for students to generate knowledge rather than be mere receivers of knowledge, something they appreciate in their reflections on the impact on their learning. The learning in the field is then intentionally transferred to the drawing exercises. This process, accessed and reinforced by metacognitive reflection, contributes to the foundation for lifelong learning in the program. Students regularly reflect on how these activities inspire them to look and observe differently in and out of the classroom. They also reflect on how they can transfer knowledge from the field into the classroom work. Other courses, including History of New York ARCH 3522 make similar use of inquiry through place-based learning.

Qualitative Assessment: Sample Reflections from ARCH 1231, Professor Montgomery, Fall 2019:

STUDENT A:
This reflection will focus on the structural walk we went on during Class 12. During this walk, we admired many buildings that used structural components. These components may include trusses (a series of triangular structural frames to resist against tension and compression. They are connected by posts, beams, and rafters to support and transfer loads), braced frame (a structure used to withstand strong winds and earthquakes), shear wall (a thick wall used to resist lateral loads), rigid frame (a structure designed to resist movement and transfer loads through its many joints), and vaults (an arched structure in the ceiling). These are all incorporated to the floor system; a horizontal plane with four posts. This walk gave us a better understanding of the structural elements in a building. During this walk, we admired other building and city structures that used many structural components. We discussed about the types of structural units that we observed; we mainly saw brick, wood, steel, and concrete being used in buildings of different ages. These structural units helped the building reach lateral stability (the act of using the imposing forces on the structural members to maintain the position of the building). As we went on this walk, it helped me see the multiple uses of the materials; how they help prevent the forces of tension and compression.

STUDENT B:
For our second trip to Federal Hall, we were instructed to sketch a section. A section is an important piece of Architecture. It shows us the relationship between spaces, thickness of the wall or ground, and details that can tell us a lot about the structure. The

[3] AAC&U, "Foundations and Skills for Lifelong Learning VALUE Rubric," accessed June 15, 2022, https://www.aacu.org/initiatives/value-initiative/value-rubrics/value-rubrics-foundations-and-skills-for-lifelong-learning.

part of Federal Hall we sketched included columns, a balcony, stairs, a wall that divided the spaces and entrances. Through careful observation, and after I was finished, I've realized that the little details make a big difference. Features that are in the far back will get drawn lightly. Any part of the structure which the section is being cut through will get pochade. This is the only exception for poching. Small details, such as the brick or columns, show the viewer the relationship to size as well. After sketching a section of Federal Hall, I am excited to start drawing sections.

STUDENT C:
On Friday October 18th we have visited the highline which in my opinion is a great place to study about structural elements of buildings because of the new construction that takes place there. There are many buildings under construction that does not have yet completed the envelope, so the structural elements such as columns and beams are still exposed and it was easier for us to understand the structural grid system of these buildings. In addition to the buildings under construction we also looked at the existing buildings. Looking at some of the older existing building we were able to see how did the building technology moved forward, as these older buildings were not properly protected against weather, moisture and temperature as the current standards require. The thing that struck me the most was the beginning of highline as I did not know that the part of highline was literally cut out. This was actually helpful for our trip as we were able to see the beams that support highline in section.

Qualitative Assessment: Sample Reflections from ARCH 3522, Professor Montgomery, Fall 2019:

STUDENT A:
Experiencing and studying New York City architecture out of the classroom really helped in many different ways. Starting from the very beginning when I found out that the classroom was going to be held outside rather than inside really got me excited to come to class. Looking back to my old architecture history classes, I was never really as interested in the subjects we were going through and learning about the way I was in this class. In the majority of the history classes, I've taken a lot of the students in the class would usually end up falling asleep halfway through and not really taking interest in the lectures given in class, especially because it was 2 1/2 hours of almost nonstop lecturing. Being able to actually be active during the class time and learning at the same time helped me memorize a lot more than sitting in a classroom for so long. In regards to the writing assignments that we had to complete each week, it was much easier to complete them because I was able to recall more of the facts and discussions made while on these trips to these architectural sites. Like Professor Montgomery had said in the first class, Classes like New York City architecture history should be about learning and gaining interest into these subjects to help us in the further future whereas taking tests doesn't really help learn it just tests your memorization skills rather than the knowledge retained during these class trips. Overall, I do believe studying New York City architecture outside of the classroom is much more helpful than staying inside of the classroom. By visiting the sites, it creates images in your head that will stay stuck with you, which means you won't have to memorize these events, it'll just become a natural thought or memory that isn't forced to be recalled like in tests. This also helped a lot with the final research paper and learning to describe buildings with your own voice.

STUDENT B:
Before I even enrolled for this class, my friends told me that this specific history class for NYC Architecture, the professor would take the students on field trips to visit and explore buildings. I was already looking forward to it when I placed that class in my schedule.

When my journey began with the class, I enjoyed it very much, from day one. I appreciated the fact that we went out of the four walls to learn more about the architecture of the city I live in. I know for sure, I wouldn't have learned as much if I were sitting in the dark room, tired from the classes before. If anything, going out in the cold and sometimes, the rain, would wake me up. It's a more exciting feeling to be literally in front of the building we are talking about. To learn, analyze, and appreciate the history and architecture of it. This was also impactful because it was helped me more in my assignments and paper. All the materials that I grasped from the trips, I put into words for my work in the class. I'm grateful to have knowledge of the architecture of NYC.
Students should get this opportunity to experience this class. I believe there's a loss of attention when it comes to this matter. The fact that students have to stay in a classroom to learn about the history of the architecture that is sitting right outside the windows is also a loss of education. Students actually want this, and I think they will appreciate this kind of learning.

STUDENT C:
I believe that studying the architecture in New York City was impactful in that it allowed us to experience the city structures with our own eyes instead of looking at a photograph of it inside the classroom. For me, it widened my experience of observation when it seeing specific buildings up close, studying them, understanding their purpose, and interacting with them. A person can learn a lot from a building just by standing inside it, near it, or by looking at it from a far; you have a sense of perception and are able to interpret the structure for yourself. During this class, I felt like I could immerse myself into the spaces we visited. Despite the many inconveniences of convening to a selected building and all the possible circumstances that could happen due to delays and weather, this class was considerably enjoyable, an experience like no other.

Pedagogy/Learning Goal #2. Concept Mapping for Active Reading and Reflective Learning

Concept mapping is introduced to students in their early courses, especially ARCH 1231 Building Technology I which is the first reading intensive course that deals with technical concepts. Concept mapping is a pedagogical approach that helps students identify, organize and visualize key concepts discussed in a class or a reading. This is a critical foundational skill that builds learning independence and metacognitive reflection on the learning process. This is especially important for text-based learning, which a key modality for lifelong learning in architectural history and theory.

Qualitative Assessment: Sample Reflections from ARCH 1231, Professor Montgomery, Fall 2020:

STUDENT A:
Concept mapping helps readers visualize information. It is a tool that summarizes a reading by putting movement into it. The design of a concept map is proper to the person that is making it. It is a very personalizes instrument because everyone has a different way of learning, of seeing and understanding information. I think that it is a very good way to organize information. It's like turning the way that you understand things from your head to a physical form and it actually gives more space in your head to try to understand new concepts.

STUDENT B:
I realized that concept maps are visual representations of information and its really useful for everyone. They can take the form of charts, graphic organizers, tables, Venn Diagrams etc They are especially useful for students like us who learn better visually,

although they can benefit any type of learner. In other words, knowing the big picture makes details more significant and easier to remember and explain.

STUDENT C:
I feel that concept mapping allows you to broaden your thinking of the material. It takes it from a level of listing information, to forming a connection to what you are reading. I have tried to do some concept mapping in my notes, but it has been more of a mapping of details of information rather than an encompassing map of majority of the information in a section. I think it will help interweave similarities and differences in information. Also, for presentations I think it will help to give more interest and open it more to discussion.

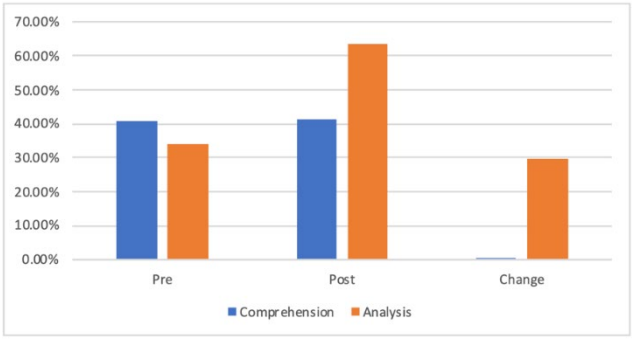
Pedagogy/Learning Goal #3. Note-taking for Active Reading and Reflective Learning

In a number of courses in the early curriculum, the pedagogy emphasizes the foundational skill of reading and note-taking. This learning is modeled and reinforced through seminars that include discussion of self-directed and independent learning. As part of the notetaking, concept mapping is applied to help students place the topics of discussion in context and see relationships between them. The student notetaking is tracked at a fine-grain level in the first course, holding students accountable for their engagement. Student reflections of this practice are used to monitor and access the learning goal. In their reflections, students give evidence of the positive impact on their learning and their metacognitive awareness of learning processes. Some students begin taking initiative and going beyond the base requirements of the weekly reading and note-taking. In addition, student reading effectiveness in the discipline is accessed through a pre and post semester reading exercise and writing response. Students regularly show improvement in their reading effectiveness. This pedagogy opens students to both text-based learning for self-directed, independent continuation of learning but also metacognitive awareness of the importance of engagement and curiosity with learning processes.

Sample Quantitative Assessments: Reading Effectiveness Assessment Pre-Post Quiz

2021 Spring ARCH 1231 READ Assessment

	Comprehension	Analysis	
Pre	40.69%	34.03%	n=72
Post	41.07%	63.66%	n=61
Change	0.38%	29.63%	



Sections Participating:
ARCH 1231 Prof. Christo
Prof. Loo
Prof. Montgomery

Outcomes

- **Develop knowledge from the range of architectural disciplinary concepts**
  - Outcomes Sought:
    - Develop knowledge from the range of architectural disciplinary concepts presented in courses.
  - Outcomes Assessed:
    - Review student notebooks, observe student participation in class discussions, and review student applications of disciplinary concepts in drawing and writing assignments.
- **Ability to draw inferences from course material**
  - Outcomes Sought:
    - Use the texts assigned in courses as well as background knowledge from within the discipline to draw inferences from the material.
  - Outcomes Assessed:
    - Use a pre and post written exam to assess students' development and achievement over the course of the semester.
- **Apply information learned**
  - Outcomes Sought:
    - Apply information from the readings within the discipline.
  - Outcomes Assessed:
    - Review student applications of disciplinary concepts in drawing assignments

Current Status

Students are regularly showing improvement in assessments seeking to measure foundational skills for lifelong learning. Faculty are encouraged to monitor and enhance their teaching practices and engagement with the students to model and foster the value of lifelong learning. Many architectures faculty participate in a general education seminar offered each academic year that provides a laboratory to share and test these practices and provide models, mentorship, and support from experienced faculty.

Long range planning includes expanding the department lecture series to incorporate cultural histories and design justice initiatives, modify the format of typical lecture presentations to include multi-faceted panel debates and increase student participation at established cultural institutional events.

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.

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.

Program Response:

Throughout its history, the Department of Architectural Technology has been dedicated to developing the capacity of students to succeed in the workplace. As the nature of our profession changes, the department has moved from hand drafting to digital technologies and from simple to complex design projects. Increasingly, we have focused on the soft skills of analytical thinking and written and verbal communication. The department is a bridge between academia and the profession. To ensure that all students understand the path to becoming licensed as an architect in the United States and the range of available career opportunities, the program disseminates information to the student through a series of lectures and modules in required courses and advisement sessions. Below are descriptions of each activity and its assessment:

Activity Descriptions:

PROGRAM CRITERIA OBJECTIVE 01: How the program ensures that students understand the paths to becoming licensed as an architect in the United States the following activities are carried out:

1. **ARCH 1101_INTRODUCTION TO ARCHITECTURE**

   Introduction to Architecture provides students with an overview of the knowledge, skills, and responsibilities of architectural and related practice. It is a required course; students enroll in this class during the first semester of their first year. Through a short lecture and discussion module, this class introduces the students to the many paths to becoming a licensed architect in the United States. Students are regularly made aware of the educational background and the professional work experience requirements which are evaluated by the licensing authorities to determine when an applicant qualifies to sit for the licensing exam. Description of the assessment measures and benchmarks:

   - Assessment Measure: Successful Course Completion
   - Benchmark: 80% of the students complete the course with a C grade or higher
   - Evidence: Course Instructional Materials and College Grade Reports from the office of Assessment

2. **ARCH 4861_PROFESSIONAL PRACTICE**

   Professional Practice provides an overview of basic business practices found in an architectural office. Applying the principles, understanding the reasoning, and offering examples in everyday office situations. The course provides a comprehensive look at architectural practice, with emphasis on the management of firms and projects. Alternate careers in the building industry, such as construction management, sustainability consultant, and real estate consultant are also explored. The course is designed to help the student with an understanding of the everyday realities of practice and to help prepare for licensure and successful careers. This is a required course typically taken during the fourth year of the program. Professional Practice provides students with a detailed overview on licensure and alternate careers through a vigorous series of lectures.

   - Assessment Measure: Evaluate understanding of licensure requirements with selected questions on exams
   - (Grade C or higher)
   - Evidence: Course Instructional Materials and course Coordinator Grade Reports for selected questions

3. **ADVISEMENT SPINE**

A robust Advisement Spine consisting of three formal required advisement sessions has been developed to keep students informed and current about program and career options. All the information is distributed via Blackboard – our college's Web-based virtual learning and management system. Paths to licensure are specifically addressed during advisement session two. During the students' 4th semester the second required advisement session is held in all ARCH 2412_ Architectural Design IV courses. The B. Arch Program Director visits all sections. During this session information regarding licensure paths, requirements, and guidelines is distributed and discussed.

- Assessment Measure: Survey documenting participation
- Benchmark: 80% of eligible students attend B ARCH| B TECH Advisement 02 sessions as scheduled in the curriculum
- Evidence: Advisement Module presentation materials + attendance log documented by survey participation

4. LICENSURE WORKSHOP

During the fall of their final year of study, B. Arch Students are required to participate in an Architecture Licensure Workshop with the department's dedicated NCARB Advisor. This is an hour-long information session/workshop including topics such as:

  - Paths to licensure and requirements
  - Creating an NCARB record

- Assessment Measure: Survey to establish an understanding of NCARB and paths to licensure
- Benchmark: 80% of the students attend the session
- Evidence: Licensure module Student Survey

PROGRAM CRITERIA OBJECTIVE 02: How the program ensures that students understand the range of available career opportunities the following activities are carried out:

1. ARCH 1101_INTRODUCTION TO ARCHITECTURE

Introduction to Architecture provides students with an overview of the knowledge, skills, and responsibilities of architectural and related practice. Through discussion and project-based activities, students develop an understanding of how the career paths and practices match their interests and talents.

- Assessment Measure: Written Student reflections after lecture
- Benchmark: 80% of the students complete the course with a C grade or higher
- Evidence: Course instructional Material including samples of student reflections

2. **ADVISEMENT SPINE**

As mentioned in the previous section, a robust Advisement Spine has been developed to keep students informed and current about program options within the department and the application process and guidelines to the B. Arch program. In each of the advisement session career opportunities are presented.

Advisement 01

During the students' 3rdsemester an advisement session is held in all ARCH 2312_ Architectural Design III courses. The B. Arch Program Director visits all sections to review and distribute general information about the program options and how these can lead to different career opportunities.

Advisement 02

During the Students' 4thsemester an advisement session is held in all ARCH 2412_ Architectural Design IV courses. The B. Arch Program Director visits all sections to review and distribute detailed information about:

- Program options
- Potential career paths
- B. Arch application guidelines for advanced standing students
- Licensure paths, requirements, and guidelines.

At this time, all students are required to sign-up for a one-on-one advisement session with a full-time faculty member to discuss their options and help them plan and map a trajectory based on their career goals.

Advisement 03

Once students are officially admitted to the B. Arch Program students are required to meet with an advisor to individually review their degree audit and determine a plan for the successful completion of the program in a timely manner. These students will continue to meet with their advisors on a regular basis.

- Assessment Measure: Survey documenting participation
- 80% of eligible students attend these sessions as scheduled in the curriculum
- Evidence: Advisement Module materials and Individualized reviews of Degree Progression

PC.1 Assessment Cycle: Every 2 years at the end of the academic year
PC.1 Assessment Summary:

For 2021-2022 cycle, the assessment results revealed that the students met the 80 % benchmark except for the Licensure Workshop.

Improvement Plan

The B. Arch program co-directors met with the key personnel noted in the assessment plan to discuss the assessment results and strategies to improve the outcomes for the following two-year cycle. After reviewing the assessment results and course activities and materials, the following observations were made and next steps were outlined:

ARCH 1101 – Intro to Architecture
Observations:

- ARCH 1101: Intro to Architecture maybe too soon in the curriculum to assess the understanding to licensure and career paths since it is a first-year course.

Next steps:

- ARCH 1101: Intro to Architecture will continue to introduce the material but understanding of the knowledge will be assessed in ARCH 4861: Professional Practice course through a survey or worksheet.

ARCH 4861- Professional Practice

Observations:

- The Assessment of student knowledge of the licensing process was evaluated through selected exam questions in the FA 21, and it was observed that this was not an effective way for the students to demonstrated understanding of the subject. As a result, the following semester the understanding to the path of licensure was assessed with a Licensure Worksheet.
- Currently the understanding of career path options is not being assessed in this course but is covered. Since this course is usually taken during the students' third or fourth year of the program, it makes sense to assess it at this juncture.

Next steps:

- Continue to develop the Licensure Worksheet to better track the students' understanding of the licensure process.
- A survey will be developed and deployed to document and track student understanding of career path options

Advisement Spine

Observations:

- The advisement spine has been a successful strategy for distributing information and sharing knowledge about the different career opportunities, but the current assessment measures used "participation/ attendance" only documents exposure and does not measure understanding. During the advisement sessions surveys are being distributed, moving forward the PC.1 criteria will be assessed using the survey responses instead of attendance.
- The current survey tracks mostly knowledge and less understanding.
- Although faculty meet regularly with students to discuss career plans during Advisement 03 there is little documentation of these discussions.

Next steps:

- Develop a new assessment plan to track understanding.
- Add and revise survey questions to better assess understanding.
- Develop a strategy for documenting student discussions during individual Advisement 02 and 03 meetings.

Licensure Workshop

Observations:

- Even though this was a required extracurricular activity for all 4th and 5th year B. Arch students, attendance was very low at 38%
- After the workshop a survey was distributed to all the students (present and absent) to assess their knowledge and understanding of the licensure process. The survey results demonstrated that 80% felt confident about the licensure process, 81% were familiar with NCARB process.

Next steps:

- Continue to offer the Workshop and highly encourage students to attend but not make it a requirement. The survey revealed that the in-class modules and required Advisement Spine are successfully presenting the material.
- A survey will continue to be conducted and required for all 4th and 5th students to continue to track their understanding of career path options and the licensure process.
- Develop the survey to further assess and document the students' understanding.

It is important to note that in addition to the required activities note above the college offers a myriad of non-required resources to compliment, expose and inform the students to the range of career options and paths. To mention a few:

- Mentorship Programs
- Internship
- Lecture Series
- Invited speakers through the architecture Club
- Access to Lectures and Programs offered by both the AIA NY + Center for Architecture and the Architectural League of New York
- Workshops

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.

Program Response:

The architectural design process is the convergence of a myriad of factors that manifest themselves in the built environment. Through design we oscillate between conceptual intentions, pragmatic needs, formal desires, creative problem solving, and innovation.

The role of the design process is central to the curriculum of the B. Arch program and is supported by a sequence of eight required consecutive studios that build in complexity, resolution, and sophistication. The fifth and final year of the program, culminates with a thesis research project where students have agency over the selection of a research design topic. Each semester has been developed and carefully crafted to expose students to different project typologies, scales, settings, and discourse, while simultaneously engaging a multiplicity of methods and strategies for arriving at meaningful and cohesive formal and aesthetic architectural design solutions. As the sequence progresses, the integration of building systems, sustainable practices, structure, building technology, and materials evolves and is woven into the design process.

Taking advantage of the fact that the college is in New York City, studio projects typically use its rich urban setting as a canvas. Students are charged with understanding and researching the complex surrounding environment, historical context, and contemporary socio-economic and cultural forces and to consider them as catalysts that inform and manifest into current and relevant design provocations, requiring them to take a critical stance on how the design process can contribute to shaping the built environment.

A Design Sequence Committee maintains and assures the significance and flow of each design studio. The committee is composed of all studio course coordinators. Additionally, faculty from other courses are often included in the conversation encourage collaboration and build links across the entire curriculum. The committee meets on a bi-annual basis to discuss, evaluate, and asses the content, objectives, progression, and relevance of the design studio sequence within current architectural discourse and the profession. At these meetings, syllabi, assignments, and student work samples are reviewed and evaluated.

Design Studio Sequence Overview:

- **Year 01:** Introduces students to the foundations of architectural design, increasing their ability to perceive visual cues, create visual design, formulate concepts, and render ideas in two and three dimensions. Students learn a combination of hand and digital

skills to aid in the creation and interpretation of three-dimensional constructs and space. Notions of balance, order hierarchy, scale, form making strategies, and inhabitation are tested through an iterative process with a gentle introduction to context and program.
    - ARCH 1112 Architectural Design I Foundation I + Visual Studies I
    - ARCH 1212 Architectural Design II Foundation II + Visual Studies II

- **Year 02:** Introduces small- to medium-scale institutional project typologies. The year focusses on the synthesis of conceptual intentions driven by socio-cultural drivers, pragmatic needs, and formal explorations. The sequence builds in complexity by rigorously addressing program development, organization, and site integration. The introduction of structural systems and building envelope are leveraged as design opportunities.
    - ARCH 2312 Design III
    - ARCH 2412 Design IV

- **Year 03:** Introduces large-scale residential and commercial project typologies. Courses build on knowledge from the previous two years and focuses on the synthesis of conceptual intentions driven by economic and regulatory drivers. The first semester addresses adaptive reuse of buildings and involves the redesign and expansion of existing structures and introduces interior design, including FFE, as part of the design development process. The second semester examines the significance of public housing and integrates the health, safety, and welfare of the community at large.
    - ARCH 3512 Design V Adaptive Reuse Studio
    - ARCH 3612 Design VI Public Housing Studio

- **Year 04:** Introduces large-scale urban interventions and is the most intensive and comprehensive year of the sequence. It focuses on the synthesis of conceptual intentions influenced by sustainable practices, resiliency, and environmental drivers. The first semester requires students to look at the urban scale and imagine the impact of design through master planning. The second semester is an intensive exercise on building integration through high-rise building design. During this semester the students incorporate as part of the design process environmental control systems, building envelope systems, structural systems, and life safety systems.
    - ARCH 4712 Design VII Urban Plan Studio
    - ARCH 4812 Design VIII Special Topics

- **Year 05:** Students are given agency over the selection of a design thesis topic. During the first semester, students work closely with a faculty advisor to assemble and evaluate comprehensive research on a pre-approved topic. The second semester focuses on integrating theory and practice. Students work under the guidance of a thesis advisor to develop and present work showcasing their professional and technical competency through a design proposal.
    - ARCH 5112 Architectural Design IX Thesis Research:
    - ARCH 5212 Architectural Design X Thesis

Activity Descriptions:

PROGRAM CRITERIA OBJECTIVE 01: How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which the design processes integrate multiple factors.

1. **DESIGN CURRICULUM COMMITTEE**

The collection of studio courses leverages many factors as part of the design process. Each studio prompt in the sequence has been developed to consider and integrate multiple criteria and requirements as part of the design process. The Design Curriculum Committee examines project briefs and assignments to ensure that students are exposed, consider, and integrate multiple factors as part of the design process that shapes the built environment.

- Assessment measure: Design Studio Sequence Assessment Survey
- Benchmark: 80% of the Committee agrees or strongly agrees the criteria is being met
- Evidence: Selected Survey questions and Meeting Minutes

PROGRAM CRITERIA OBJECTIVE 02: 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 different settings.

1. **DESIGN CURRICULUM COMMITTEE**

The studio sequence mines the rich and diverse context of New York City to expose students to a multiplicity of settings. Project sites are strategically selected with many criteria in mind including neighborhood density and scale, demographic make-up, natural and manmade features, access, environmental impact, and socio-economic and cultural relevance. Each studio in the sequence address variations within this criterion. As part of the design process, students are required to document and analyze the project context and respond to such through their design agenda. The Design Curriculum Committee examines project briefs and assignments to ensure that students are exposed to, consider, and integrate different settings as part of the design process that shapes the built environment.

- Assessment measure: Design Studio Sequence Assessment Survey
- Benchmark: 80% of the Committee agrees or strongly agrees the criteria is being met
- Evidence: Selected Survey questions and Meeting Minutes

PC.2 Assessment Cycle: Every 2 years at the end of the academic year

PC.2 Assessment Summary:

For the 2021-2022, cycle all outcomes met or exceeded the 80% Benchmark. Notably there is room for fine tuning in all the areas. The committee was most critical in the areas that pertain to:

- comprehensive array of project sites/contexts
- comprehensive array of project typologies
- comprehensive array of project scales and scope

Improvement Plan

Based on the survey results and discussions recorded during the meeting minutes the Design Sequence Curriculum Committee agreed that the next steps for the commencing two-year cycle and improvement plan will include the following:

- Develop and deploy a more rigorous and specific assessment method for targeting the areas noted above.
- The committee will invite a larger pool of faculty to participate in the evaluation process such as all faculty teaching design studio courses and those who have expertise in particular modules/areas that are included and in the projects.

- The committee will hold meetings to specifically address and discuss the integration of additional project site typologies and or contexts. As documented in the Committee's Meeting Minutes from June 23, 2022, ARCH 1212: Design 02 has been identified as a course where this can be addressed.
- The committee will hold meetings to specifically address and develop a strategy for integrating additional project scales and typologies. As documented in the Committee's Meeting Minutes from June 23, 2022, the transition of project scales between ARCH 2412 Design IV and Arch 3512 Design V maybe too large. Additionally, the project scale and typology between ARCH 3512 Design V and Arch 3612 Design VI were identified as too similar. The course coordinators for these three courses have agreed to meet and discuss these overlaps and use them as an opportunity to put forward proposal forward to the committee to address them and respond to the scale and project type concerns.
- The committee will continue to meet on a regular basis to continue to assess we are meeting PC 2 criteria.

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.

Program Response:

Our program has two series of required courses that address ecological knowledge and responsibility. The first series of courses are seminar classes that are technology-oriented, in which students gain knowledge and theory on ecological stewardship, design, and sustainability while getting exposure to the tools and methods used to assess building performance. These courses are ARCH 3550_Building Performance Workshop and ARCH 3551_Sustainability History and Theory, ARCH 3531_Building Technology IV, ARCH 1250_Site Planning. The second series of courses are design studios that emphasize criteria in which students apply and synthesize the sustainable and ecological design knowledge and strategies they learned in the seminar courses to their design projects. These courses include ARCH 4812_Architectural Design VIII and ARCH 4712_Architectural Design VII.

Activity Descriptions:

PROGRAM CRITERIA OBJECTIVE 01: Gain knowledge and theory on ecological stewardship, design, and sustainability through seminar courses, while getting exposure to assessment tools and methods.

ARCH 1250 SITE PLANNING

Students are introduced to the application of the fundamental techniques of site planning principles and the use of topographical maps and models. This course will explore the importance of site development as it relates to architecture and sustainable site development.

Description of the assessment measures and benchmarks:

- Assessment Measure: Successful Course Completion. Students complete a term project of site inventory/analysis/design to establish an understanding of the site and its impact on ecological stewardship.
- Benchmark: 80% of the students demonstrate proficiency with a C grade or higher.
- Evidence: Course Instructional Materials and College Grade Reports from the office of Assessment

ARCH 3531 BUILDING TECHNOLOGY 4

Students are introduced to quantitative reasoning and information literacy, which is fundamental skills to move forward in integrated learning. As a part of the wider range of subjects in the course, students use their REVIT model for basic energy analysis. The model is further used to assess the design change and its impact on carbon footprint, focusing on the window-to-wall ratio as the main design variable to achieve a 5% reduction in energy use.

Description of the assessment measures and benchmarks:

- Assessment Measure: Selected Rubric Criteria: Building Performance analysis. As a part of the larger term project that uses BIM modeling students establish a basic understanding of a design's impact on the overall energy use of a building
- Benchmark: 80% of the students demonstrate proficiency with a C grade or higher.
- Evidence: Lecture and Assignment

ARCH 3550 or ARCH 3551

Starting the Fall of 2022 Students must take one of two sustainability focused courses as a requirement.

ARCH 3550 Building Performance Workshop- Students learn the theoretical foundation and metrics on environmental sustainability at building scale. The subjects include solar geometry, heat transfer in buildings, thermal properties of building materials, occupant comfort, vernacular techniques, passive heating, natural ventilation, and urban microclimate. The learnings are substantiated with workshops and hands-on materials, by using computer simulations, including climate analysis, daylighting for light level and visual comfort, passive design for carbon footprint reduction and occupant comfort. Hand-held environmental sensors are utilized for field surveys, regarding heat loss and microclimate.

Description of the assessment measures and benchmarks:

- Assessment Measure: Through a semester-long term project, students establish a skillset of energy modeling to achieve sustainable practice in daylighting and energy use while reinforce the information literacy and data analysis.
- Benchmark: (Not required a course at this time. Starting Fall 2022 both courses will be required and part of future assessment)
- Evidence: Course Instructional Materials

ARCH3551 Sustainability History and Theory- Students engage in semester-long projects of research of cities and buildings that are considered sustainable and research what constitutes sustainability along with aspects of environmental and material resource use. The required reading is Cradle-to-Cradle, a book that defines the systems of the ecological environment. Students read a report on each chapter as part of the base information and have weekly exercises that explore current topics of environment, policy, Resilience economy related to sustainable environments.

Description of the assessment measures and benchmarks:

- Assessment Measure: Students complete a term project, writings, and exams to establish an understanding of ecological knowledge and being able to describe it.
- Benchmark: (Not required a course at this time. Starting Fall 2022 both courses will be required and part of future assessment)
- Evidence: Lecture and Assignment

PROGRAM CRITERIA OBJECTIVE 02: Application and synthesis of knowledge and strategies to sustainable and ecological design.

ARCH 4712 ARCHITECTURAL DESIGN 7

Students engage in site research that includes climatological and ecological elements with future projections of heat, rainfall and flooding are part of the basic schematic process for sustainable cities and neighborhoods. A SWOT analysis exercise and an assignment for sustainable/resilient strategies are also required. The design response for both courses engage in research to inform design solutions. These may not be ubiquitous across the sections. Specific to design VII site research includes types of flora that are approved and thrive for city projects, specifically NYCHA projects. NYC Resilient Design Guidelines are used as a reference. Furthermore, as part of the design process students are required to research the geographies of cultural demographics, age, income, race, and language to understand design goals and responses.

● Assessment Measure: Successful Course Completion. Students complete a term project to establish an understanding of ecological concepts and their impact on the urban environment.

- Benchmark: 80% of the students demonstrate proficiency with a C grade or higher.
- Evidence: Course Instructional Materials and College Grade Reports from the office of Assessment

ARCH 4812 ARCHITECTURAL DESIGN 8

Students adopt environmental sustainability as one of the major considerations for large scale commercial buildings. Depending on the instructor and available resources, quantitative tools and methods are adopted to analyze and design a built environment toward a healthier, lower energy and more comfortable environment, emphasizing the role of facade and building. Across all sections, the precedents research and design reviews are in place for critical design syntheses toward ecological impact of buildings.

Description of the assessment measures and benchmarks:

- Assessment Measure: Selected Rubric Criteria: Building Performance analysis. Students complete a term project that Integrates energy modeling into design process to learn how ecological knowledge could be integrated and contributing into the wider architectural discourse.
- Benchmark: 80% of the students demonstrate proficiency with a C grade or higher.
- Evidence: Lecture and Assignment

PC.3 Assessment Cycle: Every 2 years at the end of the academic year

PC.3 Assessment Summary:

All sub-criteria were met with the 80% goal for the 2021/22 Academic year.

The B. Arch program co-directors will meet with the key personnel noted in the assessment plan to further discuss the assessment results and strategies to improve the outcomes for the following two-year cycle. Currently, the following observations and next steps were outlined:

In conversations with the B. Arch Program Co-Directors and the curriculum committee it was determined that ARCH 3551 or/and 3550 should become required courses for the students to have a rigorous understanding of how future architects mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities. A proposal has been presented to college council and was

approved, starting the 22/23 academic cycle students must enroll in and successfully complete their choice of either of these two courses in order to graduate with a B. Arch degree. Additionally, the curriculum committee will develop an assessment plan to pay special attention regarding the students' performance in the courses and how they may affect other courses, especially upper design studios in the sequence. The instructors have been and will be constantly discussing the curriculum updates with the aforementioned key personnel. It is important to note that even though ARCH 3550 and 3551 were not required courses for the 2021/2022 academic cycle, the B. Arch Students were encouraged, through their academic advisement sessions with the program's co-directors, to take these courses to fulfill their elective requirements. As result, the majority of student have had exposure. In surveying the 2022 graduating cohort, 14 out of 15 graduating students successfully completed either ARCH 3550 or 3551.

The assessment additionally revealed that Building Tech IV showed improvement after the first introduction of energy concepts and modeling after barely meeting the assessment goal. The course coordinator will continue to assess and finetune the module.

Similarly, Arch 4712: Design 7 will continue to assess and refine the module.

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.

Program Response:

History and Theory of architecture are taught at City Tech to take advantage of the college's unique location in a thriving and ever-changing urban metropolis whose vast diversity is represented in the cultural backgrounds of the students matriculated at the College. Our program seeks to inculcate the students with the diverse range of intellectual and geographic sources of architectural ideas that uncover how those practices are brought to bear on existing and future formations of urban society.

History Courses
There are three required history courses for students enrolled in B. Arch and B. Tech programs at City Tech. The first two survey the evolution of architecture through its technical innovation and how this accompanies social changes and traditions within individual world cultures. The third course requires students to explore their New York City home as a repository of human history as it is written within the physical environment, focusing on the political, social, and technical forces that have shaped the urban context over time.

Theory Courses
The theory classes consider both formal and sociological concepts that have engaged architectural thinking throughout the ages with a specific focus on "modern" times from the Enlightenment to contemporary trends and practices. Readings, assignments, and in-class discourses frame the range of formal imperatives that dominate particular periods and cultures and explore the role of architecture in shaping human behavior.

Activity Descriptions:

PROGRAM CRITERIA OBJECTIVE 01: How the program provides students with a solid foundation for understanding architecture as a humanistic and technological endeavor framed by diverse social, cultural, economic, and political forces, nationally and globally.

1. **ARCH 1121_A HISTORY OF WORLD ARCHITECTURE TO 1900**

This course is a historical survey of architecture from early civilizations to the Industrial Revolution. Architecture is examined as an expression of the culture and life of a society. Class sessions study architecture from around the world within its social, temporal, and spatial contexts. While the history of Western architecture is covered from ancient Egypt to the Enlightenment, a special focus is directed to the architectures of the Far East, South Asia, Africa, pre-Columbian Latin America, the Islamic World, and elsewhere to provide a comprehensive overview of the richness and diversity of world architecture as a cultural artifact.

- Assessment Measure: Pass rate for the course. Professors use a combination of reading notes, short papers, quizzes, exams, and oral presentations to assess students' historical knowledge, vocabulary, and ability to apply principles to architectural analysis.
- Benchmark: 80% of the students pass the course with a 'C' or better
- Evidence: Course Instructional Materials and College Grade Reports from the office of Assessment

2. **ARCH 2321_A HISTORY OF ARCHITECTURE 1900-PRESENT**

This course is a comprehensive study of modern architectural movements from the 1900's to the present day. Architects and their buildings are explored in relationship to their cultural, artistic, philosophical, historical, and technological contexts.

- Assessment Measure: Pass rate for the course. Professors use assignment Rubrics that assess students' understanding of the conceptual, aesthetic, and technological background of contemporary architecture, ability to recognize the major architects of the 20th century and be familiar with their work, use the analytical terminology of architectural history, and demonstration of quality analysis of the works studied.
- Benchmark: 80% of the students pass the course with a 'C' or better
- Evidence: Course Instructional Materials and College Grade Reports from the office of Assessment.

3. **ARCH 3522_A HISTORY OF NEW YORK CITY ARCHITECTURE**

This course is a historical analysis of the city's infrastructure, real estate development, municipal planning, and key buildings. This course traces the pathway of American history from a village to a city, which is the commercial and cultural hub of the nation. Dynamic socio-determinants emerging because of improvements and growth in technology, transportation, infrastructure, real estate, commerce, housing, and recreation. In our built-up urban environment, appreciation and knowledge of historic buildings is essential for the architect. Recognizing period styles and forms allows the architect to design new buildings in context. More importantly, understanding past construction technologies and materials enables the architect to adapt and reuse existing buildings for current programs. Rehabilitation of the old saves today's resources and promotes sustainability.

- Assessment Measure: Pass rate for the course. The course focuses on the development of a research paper which assesses students' understanding of a contemporary building in the context of a dense historic urban neighborhood.
- Benchmark: 80% of the students pass the course with a 'C' or better

- Evidence: Course Instructional Materials and College Grade Reports from the office of Assessment

PROGRAM CRITERIA OBJECTIVE 02: How the program provides students with a solid foundation of correlation of the theories of architecture and the practice of architecture across diverse social, cultural, economic, and political spectrums, nationally and globally.

1. **ARCH 4722_THEORY I: THEORY OF TECHNOLOGY IN ARCHITECTURE**

   This course considers the idea of a "temporal concept of architecture" – that theories of architecture conform to the contemporaneous discourse within a culture at a particular time, and that as this discourse evolves and changes, what is believed to be an authentic architecture for that culture changes accordingly. This course considers further that shadowing this temporal flow is the influence of ever-emerging technological advances that shape human understanding - the technology that is the driving force behind architectural thought and practice since the Enlightenment. In this course students explore through the writings of theoreticians and historians of architecture the role theory plays in the creation of architecture across history, approaching the understanding of architecture as a discourse between the author and the artifact, be it the architect and the building at one scale or a society and its urbanism at another.

   - Assessment Measure: Students demonstrate a solid understanding of the correlation between ideas and concepts of architecture and the practice of architecture across varied cultural spectrums at different times in history
   - Benchmark: 80% of the students pass the course with a 'C' or better
   - Evidence: Course Instructional Materials and College Grade Reports from the office of Assessment

2. **ARCH 4822 THEORY II_ARCHITECTURAL THEORY APPLIED**
   This course applies design theory to form an independent vision based on precedent and critical reasoning. Students learn to conduct research and assemble a unique reference collection of architectural theory and design case studies as a basis for application to design courses.

   - Assessment Measure: Pass rate for the course. Assignment Rubrics that assess students' understanding of the parallel and divergent histories of architecture and the ability to connect theory to the diverse needs, values, behavioral norms, and cultures of architectural works
   - Benchmark: 80% of the students pass the course with a 'C' or better
   - Evidence: Course Instructional Materials and College Grade Reports from the office of Assessment

PC.4 Assessment Cycle: Every 2 years at the end of the academic year

PC.4 Assessment Summary: For 2021-2022 all outcomes met or exceeded the 80% benchmark objective.

Improvement Plan

Observations:
Tracking the students in the theory courses, ARCH4722 and ARCH4822, all of whom are in the Bachelor of Architecture program, the assessment results reveal that every student performed to the expected benchmarks except for one student who did not complete

ARCH4822 and who eventually withdrew from the program. The majority of the students matriculated in the three history courses, ARCH 1121, ARCH 2321 and ARCH 3522 are Bachelor of Technology students who performed at varying levels of competence, particularly in the first-year course in the sequence, ARCH 1121 History of World Architecture. All faculty were veterans of teaching this course and most reported significant levels of disengagement and under-preparation as compared with prior semesters, an observation shared by many faculty across campus likely a result of pandemic disruptions in the high schools. All sections in this assessment were taught online. CUNY policy does not allow faculty to require cameras, although they can be recommended, which further contributed to disincentivizing engagement. With students returning to the classroom this year, faculty are noticing greater attendance, preparation, and participation in the history courses.

Next Steps:

General
Course coordinators for the history courses must continue to assess their course sections to assure that they are taught by qualified faculty and that the material covered is consistent across all the sections. While it is understood that in the early years there will be attrition to other majors or to the workforce, the department must nevertheless strive for 100% of the students achieving at least a proficiency in the course. Returning to the classroom is the first step.

ARCH 4722 and 4822
With the introduction of the two seventh-semester theory courses currently offered to the B. Arch students, the B.Arch. program directors must continue to assess and evolve the syllabi to lead to seamlessly integrating the courses. For the next two-year cycle, the Theory I and II professors are adjusting the course plans so that Theory I will survey the history of theory in architecture from the Renaissance to late Modernism, setting the stage for the Theory II course to cover contemporary thinking in architecture. In addition, the department chairman is looking to open the theory courses to the Bachelor of Technology students as an elective.

ARCH 1121, 2321 and 3522
For the three history courses, continuing the return to regular field trips and recruiting faculty with training as academic historians will be priorities as we seek to keep content and methodology fresh. Regarding the high withdrawal rates in ARCH 1121, while some measure of attrition is unavoidable at an open-access public college, one step within our control would be to place more emphasis on assisting students in choosing the right major even prior to enrolling in the program. City Tech's current Title V grant project is undertaking several initiatives to create informational resources and experiences intended to address this gap. Additionally, to further scaffold the student's success in these courses the ARCH 2321 course professors will liaise with the Architectural Technology specialist librarian to strengthen the students' digital research and writing skills.

It is important to also note that the coordinators for all three courses have agreed to meet and develop a strategy for standardizing the content and method of assessing in all sections being taught. Currently, although course objectives are the same there is some variation in the final deliverables and course content.

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.

Program Response:

The Bachelor of Architecture Program prepares students to engage and participate in architectural research, test, and evaluate innovations in the field through a curriculum based in advanced building science and taught by leading practitioners. The students study the state of contemporary building systems and assembly technology during the integrated design studio ARCH 4812_Architectural Design VIII, using this as the basis to develop their own building systems related to their thesis design problem. The students work in the core classes culminating in the year-long Thesis Studio where the students research their own solutions to their own architectural problems. In the thesis year, students explore a complex problem of their choice, define their own program, and develop their design process and research to formulate creative solutions. In ARCH 5112_Architectural Design IX, the students spend the first half of their thesis developing a research problem for a chosen site and program based on their own interests. In ARCH 5212_Architectural Design X, the students use the first semester content as the basis for applied research in the form of an architectural project. The two-semester research project is documented in an individual publication and presentation of the year's work.

Activity Descriptions:

PROGRAM CRITERIA OBJECTIVE 01: How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

1. **ARCH 4812_ARCHITECTURAL DESIGN VIII**

   Students adopt environmental sustainability as one of the major considerations for large scale commercial buildings. Depending on the instructor and available resources, quantitative tools and methods are adopted to analyze and design a built environment toward healthier, lower energy and more comfortable environment, emphasizing the role of facade and building. Across all sections, the precedents research and design reviews in place for critical design syntheses toward ecological impact of buildings.

   - Assessment Measure: Successful Course Completion. Students complete a term project that Integrates the energy modeling into design process to learn how ecological knowledge and systems integration can contribute to the wider architectural discourse through research and custom design solutions.
   - (Grade C or higher)
   - Evidence: Course Instructional Materials and course Coordinator Grade Reports for selected questions

2. **ARCH 5112_ARCHITECTURAL DESIGN IX**

   Architectural Design IX is the first semester of a yearlong thesis studio working closely with a faculty advisor. Students assemble comprehensive research on a pre-approved topic. Research includes user needs, precedent studies, site analysis, along with social, cultural, historical, and technical implications of a proposed architectural intervention. Thesis research clearly focuses on the selected area of study presenting well-formed arguments to advance student approaches to architectural design and methodology. Students will prepare a comprehensive document that includes their research and analysis, a written project statement along with all design methodology as part of their final presentation.

   - Assessment Measure: Successful Course Completion. Thesis Faculty Advisers and guest Readers will analyze the final presentation and documentation of the

students' research in a variety of aspects to guide their final thesis decisions.
- Benchmark: 80% of the students demonstrate proficiency. (Grade C or higher)
- Evidence: Course Instructional Materials and course Coordinator Grade Reports for selected questions

3. ARCH 5212_ARCHITECTURAL DESIGN X

Architectural Design X is the second semester of a yearlong thesis studio working closely with a faculty advisor. Students will use the research from the previous semester's work to develop a project solution that addresses the questions raised in Design IX. Students will prepare a comprehensive thesis publication and presentation that includes their research and analysis along with the design solution.

- Assessment Measure: Successful Course Completion. Thesis Faculty Advisers and guest Readers will analyze the final presentation and documentation of the students' research in a variety of aspects to guide their final thesis decisions.
- (Grade C or higher)
- Evidence: Course Instructional Materials and course Coordinator Grade Reports for selected questions

PC.5 Assessment Cycle: Every 2 years at the end of the academic year

PC.5 Assessment Summary:

For 2021-2022 cycle, the assessment results revealed that the students met the 80 % benchmark.

Improvement Plan

As the first cohort of students have just graduated, the B. Arch program directors along with the Thesis Coordinator and Advisors, will meet and discuss the assessment results. In Spring 2022, the first group of students met the target, allowing the course coordinators to focus on improvements in the Design IX and X courses. The thesis developed as a means for students to lead the development in the research as well as the design that they produce, an area that is traditionally challenging to undergraduate students. In observing the results produced by the first cohort in Spring 2022, and our current work with students enrolled in Fall 2022, we have identified several similar directions the students want to focus on. They are interested in the countries from which they or their family originates, urban design problems, and environmental issues that affect people and sites. While some students opted for building scale projects or theoretically based explorations, the directions the student's interest takes them has been discussed by the thesis faculty and they are working on ways to incorporate this into the lectures and discussions. In addition, these issues will be discussed with lower-level studio professors with the goal of reinforcing student's abilities to identify, critically explore, and successfully develop solutions for similar conditions in earlier studios. Currently, ARCH 5112 and 5212 Thesis course content is being fine-tuned to help students better refine their research interests and intentions and scaffold the research phase in such a manner that allots more time for testing and iterating during the design phase.

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.

Program Response:

The Department of Architectural Technology at City Tech encourages cultural awareness and understanding within its diverse student body by developing collaborative skills and leadership among students. The curriculum has developed over the years to assure that collaboration is fully integrated into multiple courses and assignment types, and that students develop a broad understanding of the stakeholders, constituents, and project team members, and their roles and responsibilities in shaping the built environment. Below are descriptions of each activity and its assessment:

Activity Descriptions:

PROGRAM CRITERIA OBJECTIVE 01: How the program ensures that students learn how to apply effective collaboration skills to solve complex problems.

1. **ARCH 3531_BUILDING TECHNOLOGY IV**

   In ARCH 3531 Building Technology IV students work in teams to put together a Design Development set of drawings for a mid-rise building, providing an opportunity to practice and experience aspects of design collaboration and file sharing that would take place in a professional setting.

   - Assessment Measure: Assignment rubric addressing participation in the team projects
   - Benchmark: 80% of the students demonstrate proficiency with a C grade or higher to collaborate and share files for the good of the team
   - Evidence: Course Instructional Materials

2. **ARCH 4712_ARCHITECTURAL DESIGN VII_URBAN DESIGN**

   In ARCH 4712_Architectural Design VII_Urban Design, students work in teams. Students assume the responsibilities of leadership in directing the efforts of a group and determining priorities and establishing goals. Students work in teams in the development of a design manual with narrative summarizing solutions with justification to create a consensus program/solution

   - Assessment Measure: Assignment rubric item addressing participation: Urban Design Manual
   - Benchmark: 80% of the students demonstrate proficiency with a C grade or higher
   - Evidence: Course Instructional Materials

PROGRAM CRITERIA OBJECTIVE 02: How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts

1. **ULI WORKSHOP EMBEDDED IN ARCH 4712_URBAN DESIGN OR ARCH 4861_PROFESSIONAL PRACTICE**

ULI's UrbanPlan is a 15-hour project-based learning curriculum developed for universities – engaging both undergraduate and graduate students. Over the course of the UrbanPlan unit, students take on roles and form teams to respond to a Request for Proposals for a fictitious site which consists of vacant land and several existing buildings. They must reconcile the often-competing agendas and consider tradeoffs to create a well-designed, market-responsive, and sustainable project. Each team creates a financial pro forma and a physical model of their plan and presents their proposal to a mock City Council that awards the development contract to the winning team. UrbanPlan is supported by trained ULI volunteers who are professionals in all disciplines of land use and development, who are selected for their depth of experience and knowledge. During the Fall 2021 semester, ARCH 4712 develop the structure of the course to integrate the ULI unit and produced and ran assignments inspired by it. The module is being refined this Spring 2022 and will be fully deployed during the Fall 2022 semester.

- **ARCH 4712_URBAN DESIGN**

  Students' projects address the following:

  - Demographic evaluation
  - Meeting with Representation from the various stakeholders: Govt, community, owners, users
  - Program review of Stakeholders criteria
  - Meeting with engineering faculty to create feasible engineering/ sustainable/ resilient solution

  - Assessment Measure: Assignment Rubric addressing participation in the UrbanPlan Workshop
  - Benchmark: 80% of the students demonstrate proficiency with a C grade or higher
  - Evidence: Course Instructional Materials

2. ARCH 4861_PROFESSIONAL PRACTICE

Students' assignments and in-class discussions address the following:

- Selection/management of A/E Teams
- Identify stakeholders, their criteria
- Building project consensus /Project goals / schedule milestones
- Ethical responsibilities to social political economic needs/criteria

- Assessment Measure: Assignment Rubric - exam questions and case studies
- Benchmark: 80% of the students demonstrate proficiency with a C grade or higher
- Evidence: Course Instructional Materials and Selected exam question

PC.6 Assessment Cycle: Every 2 years at the end of the academic year

PC.6 Assessment Summary:

For 2021-2022 cycle, the assessment results revealed that the students met the 80 % benchmark except for ARCH 4861 Professional Practice Fall 2021.

Improvement Plan

Observations:

The room for improvement was found in consistency of delivery across sections, in refinement of delivery for the UrbanPlan workshop and the ARCH 4861 Professional Practice case study assignment. Spring 2022 was the first semester that UrbanPlan was integrated into ARCH 4712 Urban Design studio, having run previously in the prior semester studio ARCH 3612 Design 6. ULI will be rolling out an updated curriculum in fall 2022 and we look forward to engaging faculty in the updated training. Additionally, ARCH 4861 Professional Practice faculty noted that during COVID regulation it was particularly challenging to run the Community Board Module as many students hesitated or opted out of attending board meetings for their neighborhoods.

Next Steps:

The B. Arch program directors meet and discuss the assessment results and strategies to improve the outcomes for the following year. Below is a list of suggestions for improvement.

General #1: Standardize rubric/reflection for the effectiveness of leadership and collaboration in the team project assignment in ARCH 4712 Urban Design.

General #2: Revise ARCH 4712 Urban Design course schedule to incorporate the UrbanPlan exercise early in the semester; standardize rubric/reflection across sections.

General #3: Revise ARCH 4861 case study assignment to allow students reluctant to attend public meetings to choose an alternate case study, live-streamed, or video meeting.

Outcome #1: Improved reliability of the assessments.

Outcome #2: Early student engagement with an opportunity to apply lessons from the Urban Plan exercise to term projects.

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.

Program Response:

The Department of Architectural Technology at City Tech employs four strategies to create a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation. These are long standing strategies that faculty recognize as creating optimal conditions for improved performance and engagement by the students. Each of these are reviewed and assessed on an annual basis by the Department Chair, program directors and the department appointments committee.

Activity Descriptions:

PROGRAM CRITERIA OBJECTIVE 01: How the program creates an environment in the classroom and studios to encourage sharing, engagement and to support innovative thinking. An active learning environment is created when instructors and students engage in an open

dialogue channeling technical, historic, and aesthetic knowledge towards a discovery of shared experiences and context for the lessons. Students are encouraged to interact and support each other to discuss and solve problems.

1. **DESIGN STUDIO REVIEWS**

   Since most of our students have never participated in a project review or discussion, these courses are a critical step to establishing the tone and format for sharing work, presenting experiences, and engaging each other in a constructive dialogue. Experienced instructors are aware that a course objective, beyond technical, is to inspire a positive and respectful learning environment drawing together lessons being learned in other courses.

   - Assessment Measure: Open Final Review Participation
   - Benchmark: 80% of design studios are participating in open final reviews
   - Evidence: Final Review Schedule

PROGRAM CRITERIA OBJECTIVE 02: How the program fosters sharing, engagement, and innovation among its faculty, administration, and staff by sharing instructional resources, teaching techniques and strategies to improve course delivery across multiple sections.

1. **COURSE COORDINATION**

   Regular meetings between full time and adjunct faculty allow for shared teaching techniques and refinement of course materials to address student engagement and comprehension. At regular coordination meetings full time faculty work to build camaraderie between instructors. The discussion of course objectives and context raise course delivery standards. Resource sharing and course manuals ease course-prep burden on adjunct faculty allowing more attention dedicated to an active learning environment and improved student learning outcomes. This is particularly important for first year courses.

   - Assessment Measure: Course Coordination meetings schedule
   - Benchmark: 80% of course coordinators are holding these meetings once a semester
   - Evidence: Chart of course coordinators and meeting dates

PROGRAM CRITERIA OBJECTIVE 03: How the program ensures an environment that encourages optimism, positivity, respect, sharing by bringing students and faculty together to highlight achievement and opportunities.

1. **TOWN HALLS**

   Regular town hall meetings for all faculty and students create a forum for a broad-based discussion of existing and proposed programs, curriculum modifications and physical plant changes. Bringing the department together allows for students to ask questions directly to the Department Chair, Program Directors, and faculty members. Student and faculty achievements are highlighted. The nature of these meetings is respectful, and students surveyed report the meetings are "*useful and helpful*".

   - Assessment Measure: Student Participation
   - Benchmark: Demonstrate an increase in student participation numbers and participation survey results
   - Evidence: Schedule of Town Hall meetings, Agendas and Attendance.

PROGRAM CRITERIA OBJECTIVE 04: How does the program encourage engagement and innovation to promote exploration, research, and lifelong learning.

1. **INTEGRATION OF GENERAL EDUCATION OBJECTIVES**

   Gen-Ed skills are essential for a positive and respectful academic environment. Students need encouragement to use reading, writing and research assignments to grapple with relevant current events and develop their voices. Opportunities to present issues from their community or country of origin is another means to consider the impact of architecture on the environment. In ARCH 1231_Building Technology I, faculty implement a special program on reading effectively in the disciplines. It focuses on improving learning-culture and study techniques of first-year students. Students provide positive feedback on the significance these techniques have on their learning experience and to the engagement they feel from faculty helping them succeed.

   - Assessment Measure: Integration of General Education objectives into course syllabi.
   - Benchmark: 80% of courses list Gen Ed learning objectives on course syllabi
   - Evidence: Course outlines demonstrating integration of gen-ed objectives.

PC.7 Assessment Cycle: Every 2 years at the end of the academic year

PC.7 Assessment Summary:

For 2021-2022 cycle, the assessment results revealed that the department met the 80 % benchmark with the exception of participation in open reviews and participation on Town Hall meetings.

Improvement Plan:

Observations:

1. Open review Participation and Town Hall Meetings - As shown in graphs above there is limited participation in design reviews and town hall meetings. This is a reflection of a growing sense and adoption of a studio culture by students and faculty in spite of the many logistical challenges of a commuter program and pandemic wrought complexities. There is room for improvement in the format and content of town halls to increase participation.

2. Course Coordination - The department does a good job of ensuring that course coordination meetings are being held but the documentation of such meeting is sporadic and could be improved.

3. Integration of Gen Ed Objectives - The Department actively participates and finetunes the integration of Gen-Ed course objectives. In reviewing the course syllabi, it became evident that not all courses are following the template established by the department thus making it harder to track the inclusion of Gen-Ed objectives.

Next Steps

1. Open review Participation and Town Hall Meetings - The Department's digital media team meet and discuss strategies to improve communication methods and outreach to students and faculty. Below is a list of suggestions for improvement:

General #1: Final Reviews – Improve communication and information on visiting critics and studio content. Promoting student final projects online along with visiting critics profiles draws attention to the quality of projects and caliber of reviewers.

General #2 Town Halls – Improve methods for students to submit questions and comments in advance of the meetings. Enabling student leaders to present student issues and events helps attract.

2. Course Coordination – The B Arch Co-Directors met with the department Chair and agreed to developing and establishing a protocol for assessing and documenting individual course coordination meeting.

3. General Course Objectives integration into course syllabi – In order assesses the distribution and integration of General Course Objectives the Arch Co-Directors, in conjunction with the General Education Liaison, will schedule and run a two-part workshop: Part 1 will focus on ensuring that the syllabus template is being used across all courses, and Part 2 will focus on the distribution of course objectives across the entire curriculum.

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.

Program Response:

The Department of Architectural Technology deepens students' understanding of diverse cultural and social contexts by engaging external industry representatives and community stakeholders in the design studios. To translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities, students research and present their cultural backgrounds, experiences and perspectives facilitating their development of unique design approaches and camaraderie with their peers. The activities and assessments are collected and reviewed on an annual basis by the course coordinators and then a broad overview conducted periodically by the super jury process.

Activity Descriptions:

PROGRAM CRITERIA OBJECTIVE 01: How the program deepens students' understanding of diverse cultural and social contexts.

1. ARCH 1121-HISTORY OF ARCHITECTURE TO 1900

This historical survey of architecture covers the period from early civilizations to the arrival of the Industrial Revolution. Architecture is understood as an expression of the culture and life of a society, and each class session considers architectures from around the world within their social, historical, and spatial contexts. While the history of Western architecture is covered from the Egyptian to the Enlightenment, a special focus is directed to the architectures of the Far East, South Asia, Africa, pre- Columbian Latin America, the Islamic World, and elsewhere to provide a comprehensive overview of the richness and diversity of architecture as a cultural artifact.

- Assessment Measure: Research paper about a selected building which measures a student's ability to describe and contextualize its diverse cultural and social context.
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignment

2. **ARCH 3522_HISTORY OF NEW YORK ARCHITECTURE**

   From its founding in 1624, New York City has welcomed diverse groups of people. While exploring the development of the city's architecture and infrastructure, the trials and contributions of diverse immigrant groups are studied. This course includes discussions of the effect of social, cultural, political, and economic factors on architecture.

   - Assessment Measure: Research paper addresses the social context of New York City's morphology and measures a student's ability to describe and contextualize diverse cultural and social contexts contributing to the urban built environment.
   - Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
   - Evidence: Assignment

PROGRAM CRITERIA OBJECTIVE 02: How the program translates student understanding of diverse cultural and social contexts into built environments that equitably support and include people of different backgrounds, resources, and abilities

1. **ULI WORKSHOP "URBAN PLAN" IN ARCH 4712_DESIGN VII_URBAN DESIGN**

   The design studio is dependent on active listening skills and informed responses to create a space for testing ideas and developing vision. The URBAN PLAN workshop and planning exercise is a tool utilized to provide students with metric-based insights of challenges facing local communities and development groups. This development simulation gives students a firsthand opportunity to consider community perspectives against financial and social directives.

   - Assessment Measure: Assignment rubric evaluating development proposals and participation in Urban Plan Review
   - Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
   - Evidence: Student Work

2. **ARCH 2312_ARCHITECTURAL DESIGN III**

   In this design studio students choose a social, economic, environmental, or political topic of interest. They then design both a place to protest and a community center where the public, can advocate for, and learn more about the topic.

   - Assessment Measure: Final project rubric demonstrating an understanding of social contexts
   - Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
   - Evidence: Lecture, Assignment, Student Work

3. **ARCH 2412_ARCHITECTURAL DESIGN IV**

   In this design studio students choose a cultural topic to research and explore and design a museum influenced by, and dedicated to, this culture.

   - Assessment Measure: Final project rubric demonstrating an understanding of cultural contexts
   - Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
   - Evidence: Assignment, Student Work

PC.8 Assessment Cycle: Every 2 years at the end of the academic year

PC.8 Assessment Summary: For 2021-2022 all outcomes met or exceeded the 80% benchmark objective. The assessment results reveal that students met the expected benchmarks. Research and discussion of social equity and inclusion are of significance to the students in the department. The room for improvement was found in increasing their synthesis of history, current events. and advancing their ability to communicate this through increasingly sophisticated visual methods

Improvement Plan

The B. Arch program directors and course coordinators for the assessed courses met and discussed the assessment results and strategies to improve the outcomes.

Below are plans for improvement that would support the program criteria and the assessed assignments:

General #1: In-person attendance of exhibits and lectures. There is currently a very positive opportunity for students in the department to participate in a number of events hosted by the Architectural League of New York, Dark Matters University Network, NOMAs and AIAs. These enable student to have exposure to the language and application of ideas on equity. By encouraging attendance, the department simultaneously promotes inclusivity.

General #2: Develop a network for student to make field visits to areas of the city in greatest need to develop an “aesthetic of responsibility”. This may include visits to food pantries, homeless shelters, and public psychiatric facilities.

General #3: Encourage a wider use of GIS mapping tools. These applications enable students to quickly visualize data to get an understanding of urban environmental justice issues.

General #4: Curricular and non-curricular activities related to social equity and inclusion are dispersed throughout our program. We would like to find create a spine that ties the various activities together.

ULI Inspired Workshop “Urban Plan” in ARCH 4712- Design VII- Urban Design: ULI’s Urban Plan curriculum was supposed to be implemented starting in Spring 2022 but since ULI curriculum changes were planned for Summer 2022 it was decided that the Spring 2022 sections of ARCH 4712 would engage in a workshop inspired by the ULI curriculum but not engage ULI directly. In fall 2022 ARCH 4712- Design VII- Urban Design will begin to engage in ULI’s Urban Plan using their new curriculum.

ARCH 2312- Design III and ARCH 2412- Design IV: We acknowledge that transfer students who receive credit for these courses may meet all other required criteria except for demonstrating an understanding of diverse cultural and social contexts and the ability to translate that understanding into a built environment. To that end the course coordinators will discuss how to integrate similar opportunities in the upper-level courses.

A plan for implementing these changes will be formulated in the 2022-2023 academic year.

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.

Program Response:

The Department of Architectural Technology at City Tech has developed its curriculum to include an understanding of the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities. The sequence of studio courses investigates projects ranging from small to urban scale. Human health, safety and welfare are discussed and integrated in all upper-level studios. ARCH 4712_Architectural Design VII- Urban Design focuses on synthesizing this criterion and actively incorporates previous studio and lecture coursework to tie together topics of urban planning, architectural design, environmental sustainability, health, safety regulations and historic preservation.

Architectural Design VII unpacks the urban design process and introduces students to methods and strategies to design healthy and smart cities. It explores both the theoretical and pragmatic aspects involved in this process. The semester-long project concentrates on the design of a large urban development and community enhancements. Student tasks include developing a building and land use program, public space design, building massing, and community engagement areas. As a starting point for structuring and constraining their own design process, students conduct case study research on mixed-use projects and examine historical precedents from a curated list. Students are required to develop solutions which specifically address issues of urban public health, wellness, sustainability, and resiliency. In this process, the following six goals are used as parameters for the design development of the project:

1. Create and reinforce a sense of place and character for the neighborhood.
2. Ensure that all proposed public spaces are accessible and enjoyable for all.
3. Design with care and pay attention to details at every scale.
4. Ensure that the public realm is comfortable and feels safe.
5. Understand how governmental regulations and building codes are used to ensure the health, safety, and social welfare of the neighborhood.
6. Address the impacts of climate change and incorporate resilient design.

Through this process students develop a broad understanding of the impact architectural design has on human health, safety, and welfare and allows them to imagine how the built environment can contribute to the way we experience buildings and cities. Below are descriptions of each activity and its assessment.

Activity Descriptions:

STUDENT CRITERIA OBJECTIVE 01: How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at the scale of a city or neighborhood.

1. **ARCH 4712_DESIGN VII: URBAN DEMOGRAPHIC STUDY**

   Students conduct an urban demographic study to understand and contextualize the assigned project site. The assignment deliverables include a narrative, a statistical data collection and analysis, and a photographic study. The data collection and analysis may include but is not limited to the following categories:

   - Income
   - Education

- Marital Status
- Employment
- Home Ownership
- Public health/Safety
- Infrastructure: transportation, energy, water /waste management
- Geographical location/ land use

- Assessment Measure: Urban Demographic Study: Assignment rubric assessing understanding of demographics and its impact on design decisions
- Benchmark Objective: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Student Work

2. ARCH 4712_DESIGN VII: LAND USE PLAN

Students engage in a land use planning exercise that considers the interests of stakeholders such as residents, landowners, developers, municipalities, and other professionals. The assignment deliverables include a narrative and land use plan for the site. The proposals must incorporate a list of land use components conforming to the governing regulations, and simultaneously, meets the goals of a sustainable mix use community.

- Assessment Measure: Assignment rubric assessing an understanding of land use plans and regulatory context and their impact on design decisions
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Student Work

3. ARCH 4712_DESIGN VII: MASTER PLANNING REPORT/STUDY

Students develop a long-term planning document that provides a conceptual layout to guide future growth and development. The master plan should demonstrate outcomes that have a positive impact on the built environment. Additionally, the proposal must consider human health, safety, and welfare at multiple scales. Assignment deliverables include an Urban Design Report and Master Plan proposal.

- Assessment Measure: Assignment rubric assessing student's ability to integrate human health, safety, and welfare into large-scale masterplan
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Student Work

STUDENT CRITERIA OBJECTIVE 02: How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at the scale of a building.

1. ARCH 4712_DESIGN VII: DEVELOPMENT OF ARCHITECTURAL SOLUTIONS

Using urban design procedures and recommendations, that the students develop, students will develop a preliminary building design to demonstrate the viability of the criteria. Assignment deliverables are an architectural design proposal including plans, elevations, renderings, and a supporting narrative.

- Assessment Measure: Assignment rubric assessing student's ability to integrate

human health, safety, and welfare into the design of a building
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Student Work

2. ARCH 4712_DESIGN VII: CASE STUDIES

The students will present a series of urban case studies and summarize their impact and contributions to city design and development. The case studies will include a critical analysis of how these projects address issues of human health, safety, and welfare at multiple scales, from buildings to cities.

- Assessment Measure: Assignment rubric assesses ability to analyze built projects and how they address issues of human health, safety, and welfare at multiple scales.
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Student Work

SC.1 Assessment Cycle: Every 2 years at the end of the academic year

SC.1 Assessment Summary: For 2021-2022 all outcomes met or exceeded the 80% benchmark objective.

Improvement Plan

In ARCH 4712- Design VII- Urban Design Studio students are taught that the built environment reflects the social, political, and economic structures of our society. Students learn how they can shape the urban environment using their design skills and the laws and codes of government to positively impact the human health, safety, and welfare at multiple scales, from buildings to cities.

The school has taken the following formal efforts to strengthen the assessed measures:

- The school is working with the Urban Land Institute (https://newyork.uli.org/get-involved/urbanplan/) and has integrated a formal workshop in the urban design course curriculum, which simulates many of the tasks associated with our five assessed measures. The workshop is a formal simulation of an urban design project moving through the stages of the urban design process from demographic neighborhood review and land-use to the development of master plans. The students meet and make presentations to outside professionals who review the students' work and act as teachers and critics of the process.
    - "ULI's UrbanPlan is a 15-hour project-based learning curriculum developed for universities - engaging both undergraduate and graduate students. Over the course of the UrbanPlan unit, students take on roles and form teams to respond to a Request for Proposals for a fictitious 11.75 acre site which consists of vacant land and several existing buildings. They must reconcile the often-competing agendas and consider tradeoffs to create a well-designed, market-responsive, and sustainable project. Each team creates a financial pro forma and a physical model of their plan and presents their proposal to a mock City Council that awards the development contract to the winning team. UrbanPlan is supported by trained ULI volunteers who are professionals in all disciplines of land use and development, who are selected for their depth of experience and knowledge. " Urban Land Institute

- We provide additional technical tools and training in software to better support our students ability to assemble and create demographic surveys and land-use diagrams which help them assess the social, economic, and political character of their project sites and identifies issues and conditions which evolve into goals and outcomes for their design projects.
    - We have incorporated a 10-session workshop in the use of ARCGIS. ARC Geographic Information System (GIS Software) is designed to store, retrieve, manage, display, and analyze all types of geographic and spatial data. GIS software will help students produce maps and other graphic displays of geographic information for analysis and presentation. Utilizing the skills developed in workshops taught by adjunct faculty, will further student understanding of demographics, existing site conditions, and graphic representation.
- To further strengthen student understanding of urban design and its impact on social, political, and economic systems, the school plans to introduce students to stakeholders associated with the process. We plan to arrange for studios to visit public agencies, professional organizations, and real estate partners to study examples of urban design in NYC. The class will conduct formal field trips to areas in New York City to study real life case studies and examples of master plans and architectural solutions. This experience will be coordinated with modules in ARCH 1221- History of World Architecture to 1900 and ARCH 3522- History of NYC Architecture New York City.

These changes will be formulated in the 2022-2023 academic year.

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.

Program Response:

The professional practice criterion is met in ARCH 4861- Professional Practice. This course is designed to help students develop an understanding of the ethics and responsibilities of a practicing architect and an understanding of the steps towards licensure. An overview of basic business practices and contracts is discussed in the context of everyday office situations. There is an emphasis on researching established firms and their projects.

Activity Descriptions:

STUDENT CRITERIA OBJECTIVE 01: How the program ensures an understanding of the ethical issues involved in the exercise of professional judgment in architectural design and practice, the role of the AIA Code of Ethics in defining professional conduct, and the responsibilities of the architect to reconcile the needs of diverse stakeholders.

1. DISCUSSIONS AND WRITTEN REFLECTIONS

Typical situations faced by the architect are discussed with the entire class and small groups and students are required to write individual reflections.

- Assessment Measure: Community Board Case Studies: Assignment Rubric
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignment

STUDENT CRITERIA OBJECTIVE 02: How the program ensures an understanding of the architect's responsibility to the public and the client as determined by regulations and legal considerations involving the practice of architecture and professional service contracts.

1. **EXAMS: LICENSURE REQUIREMENTS**

Evaluate understanding of licensure requirements with selected questions on exams

- Assessment Measure: Selected questions about licensure requirements on exam
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Exams

2. **EXAMS: PROFESSIONAL SERVICE CONTRACTS**

Evaluate understanding of professional service contracts with selected questions on exams.
Description of the assessment measures and benchmarks:

- Assessment Measure: Selected questions about professional service contracts on exam
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Exams

PROGRAM CRITERIA OBJECTIVE 03: How the program ensures an understanding of the basic principles of business practices within the firm, including project management, financial management and business planning, marketing, business planning, marketing, business organization, and entrepreneurialism

1. **EXAMS: BUSINESS PRACTICES**

Evaluate understanding of business practices with selected questions on exams.
Description of the assessment measures and benchmarks:

- Assessment Measure: Selected questions about business contracts on exam
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Exams

2. **PROFESSIONAL RESUME**

Evaluate ability to prepare a professional resume responsive to firm needs and applicant's abilities and goals.

- Assessment Measure: Assignment Rubric
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignment

SC.2 Assessment Cycle: Every 2 years at the end of the academic year

SC.2 Assessment Summary: All outcomes met or exceeded the 80% benchmark objective except Discussions and Written Reflections which in Fall 2021 fell short of the benchmark, and in Spring 2022 just met the benchmark.

The criterion for Measure 1. Discussions and Written Reflections is an assignment that requires students to submit a series of reports over the course of a few weeks. Many students did not submit all the reports, and many were also poorly written or did not demonstrate a complete understanding of the material. Based on discussions with the students, the material the assignment is based on is beneficial, even though many of the students did not submit all the

required reports. The course coordinator will make improvements to these assignments by conducting weekly assessments of the students' work to monitor progress and understanding.

A plan for implementing these changes will be formulated in the 2022-2023 academic year.

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.

Program Response:

The department strives to have a strong sequence of both design and building technology studios that promote creative problem solving while addressing user requirements, regulatory requirements, site conditions, and accessible design. The students research, analyze, evaluate, and generate solutions to these issues through design solutions and construction documentation. Projects typically use New York City as a canvas, encouraging students to understand the surrounding environments using building and zoning codes and regulations. Below are descriptions of each activity and their assessment:

Activity Descriptions:

STUDENT CRITERIA OBJECTIVE 01: How the program ensures that students understand the fundamental principles of life safety and accessibility through 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 is addressed in the following courses:

1. **ARCH 3612_ ARCHITECTURAL DESIGN VI**

Students demonstrate an understanding of travel distances and number of exits on a typical floorplan in a residential building by preparing an egress diagram for their final design project.

- Assessment Measure: Egress Diagram: Verification that each student has included an egress diagram in their final presentation delineating the required egress and travel distances.
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignments, Examples of Student Work, and Lectures

2. **ARCH 3531_ BUILDING TECHNOLOGY IV**

Through the design and documentation of a mid-rise building students must demonstrate a basic understanding of life safety and accessibility regulations.

- Assessment Measure: Accessibility Diagrams and Life Safety Calculations: Assignment rubric demonstrating an understanding of the fundamental principles of life safety and accessibility regulations
- (Grade C or better)
- Evidence: Assignments, Examples of Student Work, and Lectures

STUDENT CRITERIA OBJECTIVE 02: How the program ensures that students understand the fundamental principles of 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 is addressed in the following

courses:

1. ARCH 3612_ ARCHITECTURAL DESIGN VI

Students investigate the zoning of the site and the allowable envelope through group site analysis

- Assessment Measure: Zoning Analysis: Verification that students have included the correct zoning documentation specific to the site they are working on
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignments, Examples of Student Work, and Lectures

2. ARCH 3612_ ARCHITECTURAL DESIGN VI

Students investigate and document the existing land use of the neighboring areas through group site analysis

- Assessment Measure: Land Use Map: Verification that the students have included accurate land use maps in their site analysis
- (Grade C or better)
- Evidence: Assignments, Examples of Student Work, and Lectures

SC.3 Assessment Cycle: Every 2 years at the end of the academic year

SC.3 Assessment Summary: For 2021-2022 all outcomes met or exceeded the 80% benchmark objective although some students in ARCH 3531- Building Tech IV did not meet the requirements for demonstrating an understanding of the fundamental principles of life safety and accessibility regulations. These students were mostly students who did not pass the course.

Although we met our target, we would still like to improve the number of proficient students in the BTech IV course. This is a challenging course that is the culmination of the BTech sequence. The course coordinator has met with the faculty teaching the course and reviewed the assessment results. It was decided that more time would be spent reviewing how to do the basic life safety calculations that are required for the assessed assignments. We can do this by reducing the amount of time lecturing on topics the students have already read about and taken notes on and spending more time reviewing how to integrate the required life safety criteria into student projects. These changes will be formulated in the 2022-2023 academic year.

Design VI has many topics that need to be covered while allowing students to complete a substantial design project. We are looking at clearer lectures that cover the specific topic of egress and travel distance – especially as it relates to the NYC Building Code. The topic of land use will be further developed to include more site visits and observation of the various land uses adjacent to the site. This will allow students to see how land use diagrams are implemented and what the results are in the context of the neighboring area adjacent to the site of their project. These changes will be formulated in the 2022-2023 academic year.

The zoning diagram assignment has been better formatted to include a template for use by the students that will better reinforce the relationship of zoning codes, zoning setbacks and the zoning envelope. This should provide students with a clearer understanding of the rules related to zoning when creating their massing studies. The change will be implemented starting in Fall 2022.

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.

Program Response:

The B. Arch curriculum at City Tech centers around exposing students to both the design and technical aspects of architecture. The building technology studios are at the core of our curriculum. Students are required to take four sequential building technology studios that each focus on a different building material and its associated systems, technologies, and assemblies. Each course reviews established systems and exposes students to emerging systems currently being researched or deployed in the profession. In each studio students are asked to study the characteristics of different building materials and assemblies, such as performance, economics, and aesthetics, and how these aspects affect decision-making in the design process. Students are then asked to apply their knowledge about the materials and assemblies being studied through the design and development of technical documents for buildings at various scales. Below are descriptions of each activity and their assessment:

Activity Descriptions:

STUDENT CRITERIA OBJECTIVE 01: How the program ensures that students understand the established systems and technologies and the methods and criteria architects use to assess those technologies against the economics and performance objectives of projects is addressed with the assignments below:

1. **ARCH 1121_BUILDING TECHNOLOGY I: STUDENT READING NOTES**

   Building Technology I provides a foundational examination of the building envelop in the context of a masonry urban building with historic significance, through readings and discussions, the students apply their knowledge to the design, development of technical drawings. Students are presented with lectures and reading assignments that address the following:

   - Building Materials + Life Cycle
   - Concrete + Reinforcement
   - Masonry (Brick/CMU)
   - Wall Systems
   - Masonry Walls
   - Masonry Arches + Lintels
   - Masonry Wall Sections
   - Masonry Wall Bonding
   - Stone Masonry
   - Moisture & Thermal Protection
   - Flashing
   - Wall Flashing
   - Masonry + Stone Veneer
   - Thermal Insulation + Materials
   - Insulating Walls + Moisture Control
   - Windows

- Assessment Measure: Assignment Rubrics demonstrating an understanding of established systems and technologies with a focus on masonry construction
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignment and Student Work

2. ARCH 2331_ BUILDING TECHNOLOGY II: STUDENT READING NOTES

Building Technology II develops students' understanding of light wood frame construction, foundation design, and high performance (including Passivhaus) building construction. Students then apply this technical knowledge to, development, and technical documentation of a single- or double-unit residential house. Students are presented with lectures and reading assignments that address the following:

- Structural Grids
- Concrete
- Site boring samples
- Foundation construction
- Properties of wood
- Wood Framing (including:)
    - Joists
    - Beams
    - Advanced framing
- Wood wall Assemblies (including:)
    - Foundation connections
    - Openings
    - Waterproof membrane
    - Air barriers
- Basic heat recovery ventilator layout
- Enclosure assembly R value calculation

To demonstrate an understanding of these established systems, technologies, and assemblies used in the building construction students then take notes that are submitted for grading and complete a final examination.

- Assessment Measure: Assignment Rubrics demonstrating an understanding of established systems and technologies with a focus on wood construction
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignment and Student Work

3. ARCH 3531_ BUILDING TECHNOLOGY IV: STUDENT READING NOTES

Building Tech IV focuses on concrete construction, advanced glazing systems, and masonry and concrete cladding. Students then apply this knowledge in the design, development, and technical documentation of a mid-rise concrete framed structure. Students are presented with lectures and reading assignments that address the following:

- The Design and Construction Process
- The Properties of Concrete
- Concrete Framing
- Roofing
- Glazing Assemblies

- Properties of Exterior Walls
- Cladding with Masonry and Concrete
- Interior Finishes

To demonstrate an understanding of these established systems, technologies, and assemblies used in the building construction students then take handwritten notes that are submitted for grading.

- Assessment Measure: Assignment Rubrics demonstrating an understanding of established systems and technologies with a focus on concrete construction
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignment and Student Work

4. ARCH 2431_ BUILDING TECHNOLOGY III: ASSEMBLY STUDIES

Building Tech III focuses on steel construction, glass curtain wall and opaque façade systems. Students build their knowledge starting with small studies of structural steel frame construction, then develop case studies of a small to medium size steel frame building that is documented through the drawings of a set of construction documents and then complete detailed studies of façade systems.

Students are asked to develop details and visualize their understanding by drawing 4 related views of each condition, 1 plan, 2 elevations or sections, and 1 axonometric- all with appropriate annotation. Components are modeled 3 dimensionally using BIM software and are presented both fully assembled and in various stages of assembly.

Presented in a jury environment as part of a combined graphic and oral presentation, emphasis is placed upon the student's ability to demonstrate an understanding of the primary role of each component (structural, waterproofing, thermal, fireproofing), their assembly and the sequence of construction.

- Assessment Measure: Assignment Rubrics demonstrating an understanding of established systems and technologies with a focus on steel construction
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignment and Student Work

STUDENT CRITERIA OBJECTIVE 02: How the program ensures that students understand the established and emerging assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design and performance objectives of projects is addressed with the assignments below:

1. ARCH 1231_ BUILDING TECHNOLOGY I: TECHNICAL DRAWINGS

Building Technology I is an introduction to basic materials of construction and the fundamental principles of orthographic projection and architectural drafting. The coursework includes documenting existing conditions, development of a plan, elevation, section, and assembly details supported by text-based study of material properties and applications. This course prepares students for further exploration of building technology, technical documentation, and understanding of structure, materials, and building assemblies.

The technical drawing assignment focuses on the design of the exterior wall assembly for

the case study building, utilizing masonry as the primary material. Each student develops a system for the exterior wall, documents it in two and three dimensions, and annotates its components to demonstrate their role in the assembly. The case study building context for the drawing assignment allows students to explore high performance issues within the laboratory of a 19th century load bearing masonry structure.

- Assessment Measure: Assignment rubric for the technical documentation of a masonry cavity wall section
- (
- Evidence: Assignment and Student Work

2. ARCH 2331_ BUILDING TECHNOLOGY II: TECHNICAL DRAWINGS

In Building Technology II students apply their understanding of light wood frame construction and high-performance building assemblies, in the technical documentation of a one or two-unit residential building. The completed drawing set includes a high-performance wall section from roof ridge to foundation footing. The set includes illustrations of a case study project with a 3D wood framing model.

- Assessment Measure: Assignment rubric for the technical documentation of a passive house
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignment and Student Work

3. ARCH 2431_ BUILDING TECHNOLOGY III: TECHNICAL DRAWINGS

In Building Technology III students apply their understanding of established and emerging systems, technologies, and assemblies of building construction, gained through lectures, readings, research and the production of analytical drawings and technical documentation of steel frame buildings. Students are introduced to Revit building information modeling and work to complete technical studies and documentation of steel assemblies and a low-rise steel frame building. Research and presentations occur in teams while students individually leverage this knowledge in the production of their own drawings. Drawings require a demonstration of familiarity with structural, thermal, waterproofing, and fireproofing requirements of buildings and an understanding of basic code, zoning, regulatory, and building performance requirements.

- Assessment Measure: Assignment rubric for the technical documentation of a curtain wall section
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Assignment and Student Work

4. ARCH 3531_ BUILDING TECHNOLOGY IV: TECHNICAL DRAWINGS

In Building Technology IV students apply their understanding of established and emerging systems, technologies, and assemblies of building construction gained through lectures, readings, and research assignments, in the design and technical documentation of a mid-rise concrete-framed mixed-use building. Students use Revit and work in teams to produce technical documents for a building that must fulfill programmatic, structural, and basic code, zoning, regulatory, and building performance requirements while demonstrating a

knowledge of select building assemblies.

- Assessment Measure: Assignment Rubric for the technical documentation of a mid-rise building
- (
- Evidence: Assignment and Student Work

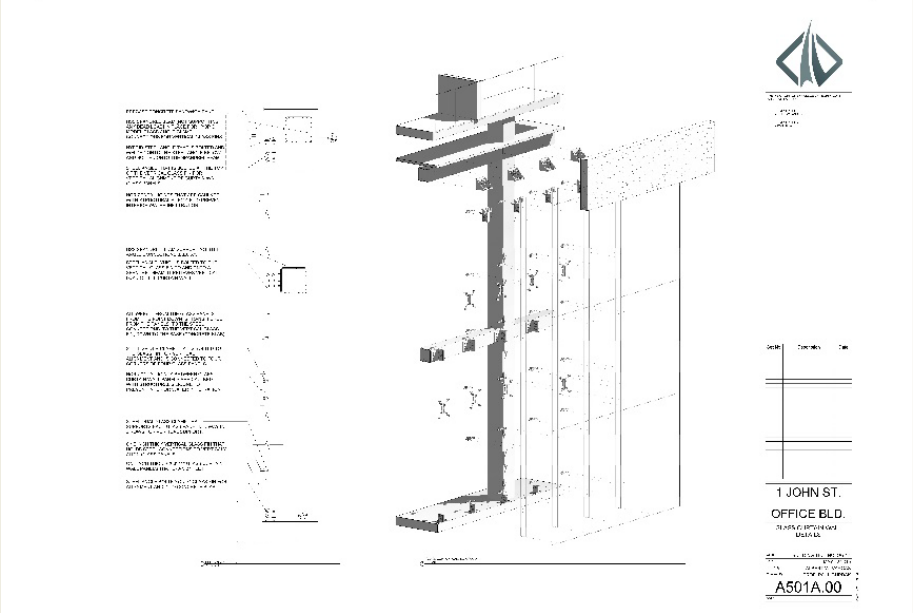


Image above: Building Technology IV course work by B. Arch candidate, Albert Vargas

SC.4 Assessment Cycle: Every 2 years at the end of the academic year

SC.4 Assessment Summary: For 2021-2022 all outcomes met or exceeded the 80% benchmark objective. Some of the individual criterion that comprised each measure fell short of the benchmark. Notably the timeliness of the submission of Student Notes in ARCH 3531- Building Tech IV and the Façade and Materials Studies in ARCH 2431- Building Tech III.

Improvement Plan

In ARCH 1231-Building Tech I, the General Education Learning Outcomes are focused on foundational learning skills that support student intellectual engagement and critical thinking. The ongoing centering of this foundation in text-based learning shows efficacy both in assessment of student work and in the qualitative assessment of student reflections on their learning. This approach to general education learning outcomes can be taken to the next level by enhancing the student engagement with text by introducing collaborative annotation assignments using tools like Perusall (https://www.perusall.com). Using this tool, students can leverage peer interaction to learn from each other and support their sense of being a community of learners. This tool will be introduced over the course of the next 2-3 semesters as the faculty develop a proficiency in the application and administration of this tool.

The Student Criteria for Technical Documentation (SC.4) assessment shows the students are meeting the current faculty expectations for this first technical course in the curriculum. Critical to taking the student performance to a higher level is the experiential learning of building assemblies at either construction sites or visiting specialized showrooms where systems and

assemblies can be studied first-hand. To facilitate this, faculty across the department will share opportunities for student site visits to construction sites each semester while also compiling a list of showrooms of suppliers that are willing to offer students access with presentations and close up exposure to mockups of assemblies.

The additional course specific learning outcome for planimetric orthogonal drawing can be enhanced by improved exposure to best-practice examples and improved drafting facility in the studio labs. Faculty will collect classic examples of construction drawings for digital and hardcopy display in the studio lab for student reference but also inspiration for the quality and readability of drawings based on line weights and drawing conventions. The other course specific learning outcome is focused on student understanding and application of fundamental rules of thumb of structural principals. This outcome can be improved by implementation of simple lab experiments using common objects and materials where students can experience structural performance. Faculty will collaboratively develop a toolkit of materials and experiments that can be easily implemented in the studio lab to enhance the discussion of the principals as well as student curiosity and engagement.

In ARCH 2331- Building Tech II, in addition to the challenges of switching from virtual to in-person, we have also had the challenge of a turnover of teaching professors. This has made coordinating and developing uniform assessment more challenging. The coordinator is developing teaching aids, rubric explanations, videos, and additional support material to make assessment successful and uniform. Student reading notes is an area targeted for improvement. Reading notes are required to be submitted 4 times a semester. These notebook submittals have shown a variety of levels of development amongst the same students. To address this, additional note taking outlines and support material are under development. Use of computer drafting tools such as Rhino and AutoCAD still challenge students. Additional workshops and specific videos for assignments are being developed to support ARCH 2331 students in this area.

In ARCH 2431- Building Tech III, students are being introduced to Revit while producing the Façade and Materials Studies which most likely impacts the outcomes of the assignment. The department is working to strategically organize the department's Revit workshops to support the assignments in this course. Additionally, students enrolled in Building Technology III are typically enrolled in Design IV. Design IV is the first design class that asks students study the technical aspects of their façade designs. As a primary focus of Building Technology III is the development of façade studies, a positive synergy has developed between the two courses. It was observed that as the Façade Studies conducted in Building Technology III was the final assignment of the semester there was not enough time for the knowledge developed in these technical studies to feed back to student design projects. Starting in the Spring of 2022, the sequence of assignments in Building Technology III was modified to move the façade studies earlier in the semester to facilitate better support for student façade development in Design IV.

In ARCH 3531- Building Tech IV, student reading notes are required to be submitted in advanced of the corresponding lectures. Although not a problem in previous years, in the last two years many of the notes were submitted late. We suspect this was due to the switch to the online/ hybrid learning environment where the professors could not have as much one-on-one interaction with the students to enforce the timely submission of the notes. The coordinator has stressed the importance of using the students' notes as evidence in meeting the new NAAB criteria. Now that we are back in person, the timely submission of the notes will be emphasized with the students. All the instructors are aware of the situation and will work with the students to stress the importance of timely submissions moving forward.

For all the building technology studios, as we return to fully in-person learning we will look to reintegrate past methods and make new additions as follows:

- A return to local field trips to buildings under construction and manufactures showrooms.
- A return to hands on review of manufacturer mockups of building systems and materials.
- The new integration 3D printed models into student assignments

A plan for implementing these changes will be formulated in the 2022-2023 academic year.

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.

Program Response:

Our design studio sequence promotes creative problem solving addressing current urban and social issues. The students research, analyze, evaluate, and generate solutions for design problems, while incorporating building technology and sustainability. Our studio sequence over ten semesters teaches fundamental principles of design by studying a variety of building typologies, increasing in complexity and scale. Through varying methodologies, a design concept and conceptual form is explored and realized throughout the design sequence. Studio projects typically use New York City as a canvas, encouraging students to understand the surrounding environments, research historical context and precedents, and create social and economic impacts that envision the future. Below are descriptions of each activity and its assessment:

Activity Descriptions:

PROGRAM CRITERIA OBJECTIVE 01: How the program ensures that students understand precedents during the research portion of design studio exposing the students to different building typologies.

1. **ARCH 3512_ARCHITECTURAL DESIGN V**

   Architectural Design V requires students to explore, document and analyze precedents in architectural typologies related to the content of the course. Through a short lecture and discussion module, this class introduces the students to the many forms of documenting precedents. Students are regularly made aware of the connections between similar projects and research for their own.

   - Assessment Measure: Precedent Study: Students present their work to the class in a pin-up and midterm and final presentation
   - Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
   - Evidence: Student Work

PROGRAM CRITERIA OBJECTIVE 02: How the program ensures that students understand regulatory requirements, site conditions, and consideration of the measurable environmental impacts of their design decisions based on the specific site documentation and synthesis.

1. **ARCH 3612_ ARCHITECTURAL DESIGN VI**

Architectural Design VI requires the students to explore, document and analyze the site selection for their semester-long project. Through a short lecture and discussion module, this class reinforces the students to the many forms of documenting a site. While taking advantage of the rich environment of New York City, local sites are typically used in our studio courses affording our students the opportunity to make extensive site visits. Students are regularly made aware of the connections between the site and development of their project. The site analysis is completed as a team, looking at history, environmental impacts, transportation, commerce, zoning, adjacencies, density, and other site-specific elements.

- Assessment Measure: Site Analysis: Student groups present the synthesis of their site analysis and design solution in the form of a site strategy diagram during a pin-up, midterm, and final review.
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Student Work

PROGRAM CRITERIA OBJECTIVE 03: How the program ensures that students understand the development of an architectural program in the design studio.

1. ARCH 3512_ARCHITECTURAL DESIGN V

Architectural Design V reinforces the fundamentals of an architectural program as it relates to the content of the course. Through a short lecture and discussion module, this class presents the use, need for and importance of an architectural program. Through a series of drawings and diagrams students document their understanding of the program for their project and synthesize this understanding into their design solutions.

- Assessment Measure: Program Study: Students develop and present their completed programming documentation during a pin-up, midterm, and final presentation.
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Student Work

PROGRAM CRITERIA OBJECTIVE 04: How the program ensures that students understand the idea of accessible design as integrated into their design project. Whereas other courses cover technical drawings, this design studio integrates materials and fixtures and their selection into the design.

1. ARCH 3512_ARCHITECTURAL DESIGN V

Architectural Design V reinforces the fundamentals of accessible design to the students through the development of enlarged bathroom drawings. Through a short lecture and discussion module, the class is introduced to design of an accessible bathroom. Students then produce enlarged bathroom drawings for their projects that include a plan, elevations, material selections, and ADA compliant fixtures.

- Assessment Measure: Enlarged bathroom drawings that accurately integrate accessible design standards
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Student Work

SC.5 Assessment Cycle: Every 2 years at the end of the academic year

SC.5 Assessment Summary: For 2021-2022 all outcomes met or exceeded the 80% benchmark objective.

Improvement Plan

Through additional critiques and presentations both within the department and to invited industry partners, the faculty will continue to work to improve the design projects of our students. Now that we have gone through a full year of new assignments and student work assessment, as part of the transition to the new NAAB criteria, we have a better understanding of the results of the changes we have implemented and what we would like to improve. The student work that has been collected exemplifies the level of work that we have accomplished and can be used as a reference for both students and the faculty.

We have noticed that students still have a hard time understanding scale. There has been a lot of discussion among course coordinators about the need to reintroduce physical models as a required component of the curriculum. Many studios removed this requirement during the pandemic and the switch to online learning. Most of the course coordinators feel the need to require physical model making again to be used as a learning tool for design and acquiring a better sense of scale. Additionally, we have heard from our industry partners that physical model making is a critical skill that is beneficial for employment opportunities.

As we recognize that the integration of accessibility is also covered and documented in both ARCH 3531- Building Technology IV and ARCH 3510 Design V, finding synergies between the two classes should be explored. We acknowledge that ARCH 3531- Building Technology IV more holistically documents the integration of accessibility and life safety in the student work. To that end we know the objective is being met in the curriculum, but we will look to explore where the topic of accessibility can be more comprehensively integrated into the design studio sequence.

A plan for implementing these changes will be formulated in the 2022-2023 academic year.

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.

Program Response:

The Building Integration criterion is met in Architectural Design VIII. This course builds upon the knowledge and skills acquired in the core design sequence while integrating the topics of sustainability and building enclosure with performance evaluation. Students in the course are expected to incorporate their full knowledge of structural, mechanical, architectural, and technical expertise in the development of a building. Architectural Design VIII has been refined to meet the criterion, in which the assignments in the course have been developed to cover all aspects of the criterion and will be evaluated by using rubrics each semester.

Activity Descriptions:

1. **ARCH 4812_ARCHITECTURAL DESIGN VIII**

   The criterion, SC.6 Building Integration, is sub-divided into 6 sub-criteria, each of which is defined in the following paragraphs. Each sub-criteria informs the course structure and/or the development of assignments. There is a certain degree of freedom for each

instructor to emphasize certain aspects over others, depending on their expertise, but the core value of integrating all aspects is maintained in all section so of the course.

A: Environmental Control Systems
ABILITY to demonstrate the principles of environmental systems' design and how systems can vary by the environmental needs of occupants. This can include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

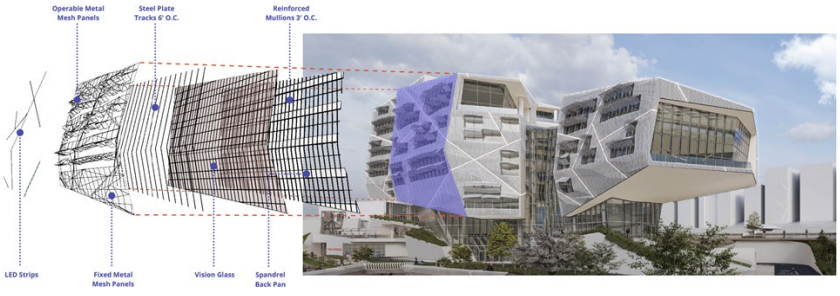
B: Building Envelope Systems and Assemblies
ABILITY to select and apply building envelope systems relative to the fundamental performance of a building. This can include weather protection, aesthetics, durability, material resources, energy, and comfort.

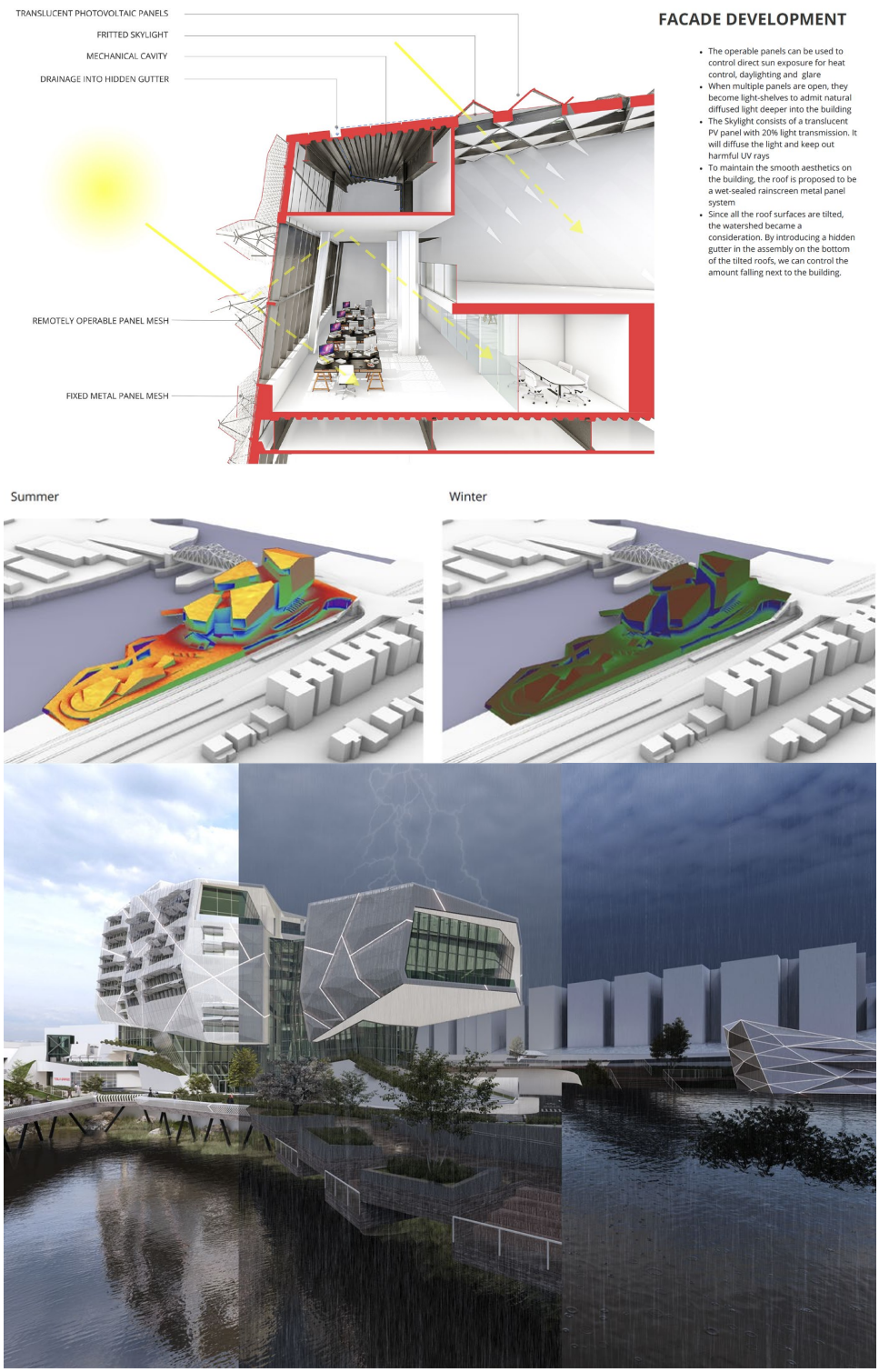
C: Structural Systems
ABILITY to demonstrate the basic principles of structural systems and their ability to withstand gravity, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

D: Life Safety Systems
ABILITY to design building safety systems consistent with the principles of life-safety standards and accessibility standards that meet existing codes and regulations.

E: Measurable Outcomes of Building Performance
ABILITY to analyze building performance and integrate the outcome to positively influence the design of a sustainable solution, especially in conjunction with two other sub-criteria: A) Environmental Systems and B) Building Envelope Systems and Assemblies.

F: Integrative Design
ABILITY to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.





Images above: Architectural Design VIII course work by B. Arch candidates, Oliver Hadi, Farai Matangira and Albert Vargas (Instructor: Prof. Jihun Kim) which won the AIA John A. Notaro Memorial Scholarship, Spring 2021 for design excellence in our next generation of architecture practitioners.

- Assessment Measure: Assignment rubric identifying each sub-criteria listed above.
- Benchmark: 80% of the students demonstrate proficiency (Grade C or better)
- Evidence: Student Work

SC.6 Assessment Cycle: Every 2 years at the end of the academic year

SC.6 Assessment Summary: For 2021-2022 all outcomes exceeded the 80% benchmark objective.

Improvement Plan

The instructors will pay particular attention to Measure 5: Measurable Outcomes of Building Performance and Measure 6: Design Integration, where they observed many students struggling. To improve Measure 5: Measurable Outcomes of Building Performance, the instructors discussed improvements, such as the consolidation of assignments and introducing building performance simulations earlier in the semester. This will allow students to spend more time learning and understanding building performance tools and strategies, rather than focusing on submitting assignments, and allow more time for, Measure 6: Design Integration, where students need to integrate their analyses into their design projects. These actions are reflected in a revised syllabus and schedule with fewer assignments. The instructors who engaged in the discussion were Prof. Jihun Kim, Prof. Illya Azaroff, Prof. Heidi Theunissen, Prof. Dan Rogers, and Uroosa Ijaz. The plan will be implemented starting in Fall 2022.

Course Information							NAAB SC (Grade in %)					
Term (Spring 2021)	Course_section (ARCH 4812-XX00)	Emplid (00000000)	Student_name (Last, First)	Degree Program (BArch or Btech)	Student Sample (Excellent/Fair/Poor)	Instructor (Last, First)	Environmental Systems	Building Envelope Systems and Assemblies	Structural Systems	Life Safety Systems	Measurable Outcomes of Building Performance	Integrative Design
Spring 2021	ARCH 4812-OL85	23707519	Amir,Tasfia	BArch	Excellent	Kim, Jihun	100	100	100	100	100	100
Spring 2021	ARCH 4812-OL85	14213962	Cancel,Daniel	BTech	Fair	Kim, Jihun	91	90	90	85	90	90
Spring 2021	ARCH 4812-OL85	13050921	Carrillo,Jesenia	BTech	Poor	Kim, Jihun	68	60	80	70	60	80
Spring 2021	ARCH 4812-OL85	23736055	Hadi,Oliver	BArch	Excellent	Kim, Jihun	100	100	100	100	100	100
Spring 2021	ARCH 4812-OL85	23687705	Lopez,Pamela K	BArch	Excellent	Kim, Jihun	100	100	100	100	100	100
Spring 2021	ARCH 4812-OL85	23708452	Matangira,Farai T	BArch	Excellent	Kim, Jihun	100	100	100	100	100	100
Spring 2021	ARCH 4812-OL85	23605239	Mightly,Kimmar	BTech	Fair	Kim, Jihun	82	90	80	85	85	80
Spring 2021	ARCH 4812-OL85	23604865	Mora Bello,Kimbe	BTech	Fair	Kim, Jihun	87	90	80	85	85	80
Spring 2021	ARCH 4812-OL85	23602747	Pearson,John	BTech	Fair	Kim, Jihun	88	90	80	85	85	80
Spring 2021	ARCH 4812-OL85	23694526	Rijo,Ineliz M (Ina)	BTech	Fair	Kim, Jihun	90	90	90	85	90	90
Spring 2021	ARCH 4812-OL85	23198099	Vargas,Albert W	BArch	Excellent	Kim, Jihun	100	100	100	100	100	100
Spring 2021	ARCH 4812-OL85	23674284	Wu,Mingjian (Jeff	BTech	Fair	Kim, Jihun	89	80	90	90	90	90
Spring 2021	ARCH 4812-OL85	23677186	Zhang,Tiffany	BArch	Excellent	Kim, Jihun	100	100	100	100	100	100

Example of the master rubric assessing each sub-criterion

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.

Program Response:

At its session on June 21, 2018, the Middle States Commission on Higher Education acted: To reaffirm accreditation and to commend the institution for the quality of self-study process and report. The next evaluation visit is scheduled for 2025 - 2026. See Appendix E for the most recent letter regarding City Tech's term of accreditation by the MSCHE dated June 22,2018

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.

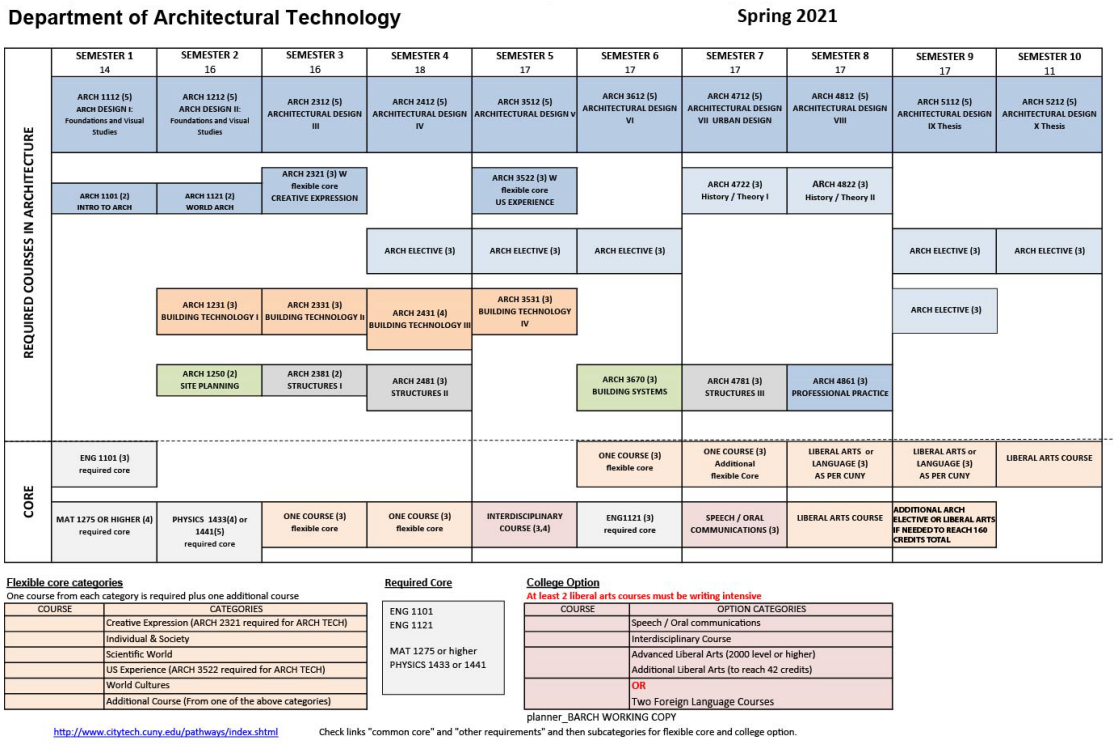
4.2.1 Professional Studies. Courses with architectural content required of all students in the NAAB-accredited program are the core of a professional degree program that leads to licensure. Knowledge from these courses is used to satisfy Condition 3—Program and Student Criteria. The degree program has 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 are required for all students.

Program Response:

Our B. Arch degree program is built on the strong foundation of our B. Tech program. The B. Tech and B. Arch programs continue to complement each other, the former working towards a high level of technological expertise and the latter preparing graduates for leadership in design, technical proficiency, administration, and management. Of the 160 credits required to graduate, 113 credits must be in the architectural discipline. Of those 113 credits, 92 are required courses and 21are for architecture elective courses. Once the change to make either ARCH 3550 or ARCH 3551 a required course for B. Arch students passes College Council, the required credits will become, 95 for required courses and 18 credits for architecture elective courses.

Below is a curriculum map showing all the required course for B. Arch students.



B. Arch Curriculum Map

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 and the minimum number of credits for general education required by their institutional regional accreditor.

Program Response:

In its distinctive commitment to providing a strong general education in the liberal arts and sciences along with specialized technical training, City Tech requires 42 credits in liberal arts out of a total of 120 credits for a baccalaureate degree. Beyond the specific requirements of their degree programs, all City Tech students experience General Education Common Core that encompasses the knowledge, skills, and values determined by the faculty to be essential for success in every degree program. Grounded in the liberal arts and sciences, and integrated into every major, Gen Ed at City Tech inspires students to make connections across disciplinary lines and enriches their understanding of the moral, civic, and creative dimensions of life. It is the foundation for our hallmark technological and professional programs of study.

City Tech's General Education Common Core enables students to meet CUNY's Pathways requirements while also meeting the degree requirements of their programs.

Of the 160 credits required to graduate from the B. Arch program, 44 credits must fulfil general education requirements. Additional information on General Education at City Tech can be found here:
http://www.citytech.cuny.edu/advisement/gen-ed.aspx

For transfer students, academic records are evaluated for transfer course equivalencies after a student has been admitted and has confirmed their intent to enroll at City Tech. With some limitations, students may be granted credit for courses completed at other accredited colleges and universities that offer courses comparable in credit and content to those offered at City Tech, provided satisfactory grades were received (i.e., "D" or better at any other CUNY unit; "C" or better at other institutions).

To earn an associate or baccalaureate degree at City Tech, students must complete a minimum of 30 credits in residence with 15 credits in the major department. The remaining credits needed to complete the degree may be transferred, provided they are approved for credit by City Tech.

Additional information on Transfer Credit Evaluation can be found here:
https://www.citytech.cuny.edu/registrar/credit-evaluation.aspx

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.

Program Response:

The B.Arch. curriculum integrates flexibility for optional studies by requiring 18 credits of architectural program electives and 18 credits of liberal arts and sciences electives. The credits allow students to enroll and apply credits toward minors such as the newly offered Business, Environmental Studies or Art History & Visual Culture Minors. B. Arch students may select architectural elective courses that align with specialty concentrations such as: Preservation Technology, Computation - Fabrication, Building Sciences, Sustainability & Resiliency, Project Delivery (Construction Mgmt.). The areas of concentration are calibrated to industry demand and specialized instruction available at the college.

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.

Program Response:

In addition to the B. Arch degree, the Department of Architectural Technology offers the following degrees:

- Associate in Applied Science in Architectural Technology
- Bachelor of Technology in Architectural Technology

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.

Program Response:

Total Required Credits to earn B. Arch: 160

Course #	Course Title	Credits
Semester 01		Total 14 Credits
ARCH 1112	Architectural Design I- Foundations and Visual Studies	5
ARCH 1101	Introduction to Architecture	2
ENG 1101	English Composition I	3
MAT 1275	College Algebra and Trigonometry	4
Semester 02		Total 16 Credits
ARCH 1212	Architectural Design II- Foundations and Visual Studies	5
ARCH 1231	Building Technology I- Masonry	3
ARCH 1250	Site Planning	2
ARCH 1121	History of World Architecture to 1900	2
PHYS 1433	General Physics I- Algebra Based	4
Semester 03		Total 16 Credits
ARCH 2312	Architectural Design III	5
ARCH 2331	Building Technology II- Wood	3
ARCH 2381	Structures I	2
Flex Core	Flexible Common Core Course	3
ARCH 2321	History of Architecture- 1900 to the Present	3
Semester 04		Total 18 Credits
ARCH 2412	Architectural Design IV	5
ARCH 2431	Building Technology III- Steel	4
ARCH 2481	Structures II	3

ARCH xxxx	ARCH Elective	3
Flex Core	Flexible Common Core Course	3
Semester 05		Total 17 Credits
ENG 1121	English Composition II	3
ARCH xxxx	ARCH Elective	3
ARCH 3512	Architectural Design V	5
ARCH 3522	A History of New York City Architecture	3
ARCH 3531	Building Technology IV- Concrete	3
Semester 06		Total 17 Credits
ARCH 3612	Architectural Design VI	5
ARCH 3670	Building Systems	3
ARCH xxxx	ARCH Elective	3
Flex Core	Flexible Common Core Course	3
COM 1330	Public Speaking	3
Semester 07		Total 17 Credits
ARCH 4712	Architectural Design VII- Urban Design	5
ARCH 4722	Theory I- Principles and Theories of Architecture	3
ARCH 4781	Structures III- Structural Systems	3
Flex Core	Flexible Common Core Course	3
LibArt	Liberal Arts Elective	3
Semester 08		Total 17 Credits
ARCH 4812	Architectural Design VIII- Special Topics	5
ARCH 4822	Theory II- Architectural Theory Applied	3
ARCH 4861	Professional Practice	3
LibArt	Liberal Arts Elective	3
LibArt	Liberal Arts Elective	3
Semester 09		Total 17 Credits
ARCH 5112	Architectural Design IX- Thesis	5
ARCH xxxx	ARCH Elective	3
LibArt	Liberal Arts Elective	3
ID	Interdisciplinary Course	3
Semester 10		Total 11 Credits
ARCH 5212	Architectural Design X- Thesis	5
XXX xxxx	ARCH Elective	3
LibArt	Liberal Arts Elective	3

4.2.5 Master of Architecture. The M. Arch. degree consists of a minimum of 168 semester credit hours, or the quarter-hour equivalent, of combined undergraduate coursework and a minimum of 30 semester credits of graduate coursework. Programs must document the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for both the undergraduate and graduate degrees.

Program Response:

Not applicable.

4.2.6 Doctor of Architecture. The D. Arch. degree consists of a minimum of 210 credits, or the quarter-hour equivalent, of combined undergraduate and graduate coursework. The D. Arch. requires a minimum of 90 graduate-level semester credit hours, or the graduate-level 135 quarter-hour equivalent, in academic coursework in professional studies and optional studies. Programs must document, for both undergraduate and graduate degrees, the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (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.

Program Response:

Not applicable.

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

Program Response:

In the Department of Architectural Technology, one full-time faculty member serves as a transfer credit evaluator. This faculty member has a comprehensive understanding of B. Arch courses and their learning objectives. After admission to the B. Arch program, transfer students have their transfer credits evaluated to determine course equivalencies. These students must provide copies of syllabi, course descriptions and writing samples or coursework for evaluation.

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**.**

Program Response:

Not applicable

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.

Program Response:

Transfer student applications are carefully reviewed by the B. Arch Admissions Committee. Students transferring into the program should have completed the coursework necessary to effectively start the third year of the program. If a student does not meet the required criteria, they will be given the opportunity to enroll in the B. Tech program instead and apply again as an Advanced Standing Student once they meet the criteria.

Below is a list of required and recommended coursework for transfer students to have completed to be considered competitive during the selection process.

Required General Education Courses
English Composition 1101
College Algebra and Trigonometry
General Physics I: Algebra Based

Required Major Related Courses
Intro to Architecture
Design I Foundations and Visual Studies I
Design II Foundations and Visual Studies I
Design III
Design VI
Building Technology I
Building Technology II
Building Technology III

Recommended Major Related Courses
Site Planning
Architecture History to 1900
Architecture History to 1900 to Present
Structures I
Structures II
Arch Elective

Once a student has been admitted to the B. Arch program, they are required to meet with a dedicated department transfer credit evaluator to assess course equivalency for architecture courses. At this time students are asked to provide additional evidence such as course, syllabi, portfolio and/or sample tests or assignments.

Admission Guidelines can be found on the department's website.
https://www.citytech.cuny.edu/architectural/architectural-barch.aspx

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.

Program Response:

City Tech is one of seventeen senior colleges of the City University of New York. CUNY is governed by a Board of Trustees that approves the Bylaws, which are the highest source of policy within the University. A Chancellor oversees all of the CUNY colleges. Each college has a Foundation Board, President, Provost, Vice President(s), Dean(s), Chairperson(s) and Director(s) of specialized areas (such as Registrar, Counseling, Advisement, Institutional Research, Student Services, Transfer, Financial Aid and other student, faculty and multiple staff support. On May 1, 2019, Félix V. Matos Rodríguez took office as the eighth Chancellor of the City University of New York (CUNY). Dr. Matos Rodríguez, who had been the president of CUNY's Queens College since 2014, is a dedicated champion of accessibility, inclusion, and excellence in higher education.

Russell K. Hotzler, PhD, became the eighth president of New York City College of Technology in August 2004, bringing a wealth of experience in higher education and a deep commitment to enhancing academic opportunities. Dr. Hotzler has been part of the CUNY system for over 40 years and has served as CUNY Vice Chancellor for Academic Program Planning. He works with the Board of Trustees, Chancellor, Vice Presidents, Deans, Chairpersons, and other constituents to assure that the college fulfills its mission in all areas.

Pamela Brown, PhD, is the Provost and VP for Academic Affairs at New York City College of Technology of The City University of New York. Prior to this position, Dr. Brown served for eight years as associate provost and six years as dean of the School of Arts & Sciences. Dr. Brown has a track record of creating initiatives to improve the retention and recruitment of students interested in careers in STEM fields. As dean, she helped obtain and oversee five grants from the National Science Foundation (NSF).

The college comprises three academic schools: Arts and Sciences, Professional Studies, and Technology and Design. The Department of Architectural Technology is housed in the School of Technology and Design, which also contains the following departments: Advertising Design and Graphic Arts, Computer Engineering Technology, Computer Systems Technology, Construction Management and Civil/ Engineering Technology, Electrical and Telecommunications Engineering Technology, Entertainment Technology, Environmental Control Technology and Mechanical Engineering Technology. The School of Technology and Design is led by Dean Gerarda Shields, PhD, PE. Prior to becoming dean in the Fall of 2021, she served as interim dean starting August 2019.

The day-to-day leadership of the Architectural Technology Department is the responsibility of the Chairperson. The Chairperson is elected by a majority of the full-time faculty in the department for three-year terms. Sanjive Vaidya, RA served as interim chair of the Architectural Technology Department in the 2015-2016 academic year and has been chair since August 2016. Various responsibilities such as curriculum development and review, faculty searches, personnel and budget, accreditation, and other advisory roles are delegated to departmental committees.

The College Council implements the concept of shared governance for the college. Composed of faculty, staff, administrators, and students, the College Council is responsible for overseeing the curriculum of the College and formulating student-related procedures. In addition, the Council makes recommendations about budget, buildings and grounds infrastructure, personnel matters, and governance-related rules and regulations.

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.

Program Response:

Full-time faculty members meet twice a month to review and report work done in committees, including steering, facilities, appointments, admissions, accreditation, scholarship, and curriculum. Committee participants include adjunct faculty, willing to offer their experience and expertise, in these regular meetings. Faculty meeting agendas are circulated in advance and meeting minutes are reviewed and voted upon before being submitted for record. Frequent topics for discussion include technology resources, industry engagement and curricula modifications.

Adjunct faculty and students are surveyed for input and opinions about changes that may impact the program. Major modifications to course curricula are subject to discussion and a recorded vote by full time faculty members, before being formally submitted to the College Council's standing curriculum committee for further review.

College Council membership reflects the various arms of the City Tech community. Faculty, instructional staff, and students are elected to serve on standing committees described in the City Tech Plan of Governance, thus ensuring that all groups on campus have a forum in which to be heard. All members of the City Tech community are invited to attend regularly scheduled Council meetings. The current College Council president is Professor Phillip Anzalone of the Department of Architectural Technology.

Upon approval by the curriculum committee, final curriculum submissions are presented at the College Council's general meeting for a vote. Approved curriculum changes are then sent to CUNY's Office of Academic Affairs where they are reviewed and voted on by CUNY's Board of Trustees. Pursuant to this process, the action is memorialized in the Chancellor's University Report (CUR).

Full time faculty, adjuncts and staff meet monthly to be apprised of developments and policies at the university, college, and department level. Adjunct faculty are offered opportunities to contribute and participate in these initiatives.

Town Hall meetings for all faculty and students create a forum for a broad-based discussion of existing and proposed programs, curriculum modifications and physical plant changes. Student leadership of the Architectural Club, NOMAS and AIAS report on the formation of their organizations and upcoming events. Bringing the department together allows students to ask questions directly to the Department Chair, Program Directors, and faculty members. Student and faculty achievements are highlighted. Students can ask questions anonymously during the online meetings and provide useful feedback on the efficacy of the Town Halls. The nature of these meetings is respectful, and surveys indicate the meetings are "*useful and helpful*".

The Council of Academic Affairs, led by the Vice President for Academic Affairs, Interim Provost Pamela Brown, meets bi-monthly, to review strategies and tools to support faculty and advance student concerns. The Department Chair of Architectural Technology attends these meetings along with Professor Barbara Mishara, Director of Advisement and Professor Shelley Smith,

Co-Director of the Center for Teaching Scholarship, Learning and Service also known as the Faculty Commons. These meetings enable interdisciplinary communication and implement programs that benefit students and faculty. This includes tools for student advisement and outreach, new student orientation programs, faculty assessment and opportunities to support research. The department chair along with Professor Mishara and Smith report back to faculty on relevant items discussed in this forum.

Chair Colloquium meetings, led by Interim Provost Pamela Brown, offers department chairs an opportunity to provide feedback to the Interim Provost on departmental management. This includes discussions on university and college policies, enrollment patterns and faculty assessment for re-appointment and promotion. Professor Shelley Smith, Co-Director of Faculty Commons, also attends these meetings as many Faculty Commons programs support the work of department chairs and faculty.

The college president's monthly Personnel and Budget Meetings (P&B) are attended by the Provost, Associate Provost and all department chairs. At this meeting the president provides a report on the college administration and budget and relays relevant information on college and university-wide initiatives or concerns. Ad-hoc committees present candidates for reappointment, tenure, promotion, and fellowship leave. The department chair reports back to the full-time faculty on issues pertaining to the Department of Architectural Technology.

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.

Program Response:

The long-range planning objective in our department is founded on the commitment that our students have the necessary skills to satisfy the ever-changing demands of the profession. To ensure we are addressing long-term objectives the department has formed and tasked a steering committee to review and engage in periodic self-assessment and reflectance that measure relevance in the marketplace. In addition, the role of the steering committee has expanded to outreach and organization of fundraising for the advancement and support of the student body. This is accomplished through a reconceived steering committee, course-coordination meetings, super-juries, town halls and targeted lectures and presentations to the entire faculty and students. The steering committee is responsible for crafting and implementing a unique vision for the long-term future of the department and setting a road map to achieve benchmarks along that path. The steering committee is nominated and confirmed by full-time faculty. Like all departmental committees, the committee chair reports back periodically to the full faculty on initiatives identified to advance and improve the program. The faculty meets twice each month. Department committees meet on days faculty meetings are not held. Committee chairs keep detailed meeting notes and are responsible for reporting progress and/or requests for assistance during faculty meetings. The department chair summarizes progress on long range planning, as it aligns with College and University initiatives, to the Dean via a Goals and Target Report submitted at the end of each academic year.

The former advisory board has been reconceived as the "Executive Council in Design Education and Engagement." Members are solicited from a diverse array of the building industry's associated fields and are tasked with building the profile and fundraising arm of the department, increasing experience, exposure, and employment opportunities for students. The steering committee works with the executive council on relevance to the marketplace through their engagement and support. Current members include a building industry attorney, a window

manufacturing company, and an architect from a well-known practice. By 2023 we envision 2-3 additional members and to bring representation from the city government.

As part of the department's long-range fundraising and visibility efforts for the steering committee has partnered with the AIA Brooklyn Chapter to create an annual event that connects industry leaders with the students and department overall. The executive committee of AIA Brooklyn meets monthly as part of the steering committee structure aimed at establishing this critical event. The first fundraising event will highlight student work, recent graduates and advance the departments fundamental goals of greater visibility and student support.

We have mechanisms in place to help us fulfill our current objectives and see the accreditation process as an opportunity to revisit our vision and establish new long-term goals. We have identified several areas where we must continue to advance our program:

- Enhancing a unique studio culture. Currently, most architecture students do not have dedicated facilities in which to do their work and must rely on home resources or the availability of space at school. Dedicated studio spaces for the B. Arch thesis students have been organized for Spring 2022 and additional dedicated space will ensure that students have full accessibility to the resources of the department and will facilitate student interaction.

- We have developed a strong program in building technology and digital fabrication; however, we see a need to provide additional instruction in architectural theory, history, and, in response to the diversity of our students, the study of architecture cultures outside of the Western tradition.

- We are fortunate to have invested in a Virtual Desktop Infrastructure (VDI) before the onset of the COVID crisis. At the start of the Pandemic in March 2020, we expanded our (VDI) to improve student access to digital tools while working remotely. Knowing that we planned to return to in-person teaching in the Spring of 2022, we began testing Apporto, a more robust and flexible platform VDI platform. Successfully tested in our graphic intensive and computational animation course, the department transitioned to the Apporto platform in the Fall of 2022. The VDI environment creates greater flexibility within classrooms and activates informal spaces while supporting online learning.

- Reassemble the Executive Council on Design Education and Engagement to be more diverse and to include varied professionals representing institutional authorities, community interests, and advocates, as well as technical and design professionals.

- Continue to improve our assessment methodologies.

- Develop and monitor the articulation agreements between NYC Career and Technical Education (CTE) high schools to bring their students into our AAS, B. Tech, and B. Arch programs. Establish similar articulation agreements with graduate schools to provide pathways to M. Arch degrees for our graduates.

- Establish our department as a community resource for neighborhood action to advance resilient, sustainable, and equitable communities through building, neighborhood assessment, planning, retrofitting, and analysis.

- Establish industry research and analyses facilities at the department. This may include building systems mock-up testing, fabrication, and simulations. Partnering with manufactures and industry partners is key.

- Conduct periodic “Super Jury” reviews that critically analyze the scope and breadth of the curriculum to the design profession that encompass work from all 5 years of the degree.

Super Jury outcomes measure relevance in the marketplace, skill competence and continuity in the product of work. Serves as a component of assessment and engagement of outside professionals.

- Enhancing jury culture and mentorship. Design Jury culture at City Tech is expanding with outreach to design professional organizations, city agencies, product manufactures and community groups. In the past two years, the Architecture League of New York, The American Institute of Architects, PHI - Passive House Institute, ULI - Urban Land Institute, Enterprise Green Communities, NYCHA - New York City Housing Authority, NY Department of City Planning, MOCR - Mayor's office of Climate Resilience, DOB -Department of Buildings, DDC - Department of Design and Construction, along with some of the most prestigious A&E firms in the city have had jurors to participate in the review process of student work. The use of online learning platforms has increased the pool of jurors noting participation from architects and allied professionals from around the world. Leveraging technological adaptation to a long-term vision of engagement will enhance the jury culture over time.

- We have spent the last year rearranging our curriculum and establishing a system of assessment to align with the 2020 NAAB Conditions. We are working towards streamlining this process so that it meets both NAAB's and the college's assessment requirements.

5.2.2 Key performance indicators used by the unit and the institution

Program Response:

To evaluate performance the program currently relies on several documents including the Goals and Targets annual report produced by the Chair that encapsulates committee work across the department. The Goals and Targets report is submitted to the Dean for review and ultimately underpins procurement requests, evaluation criteria and timelines of department goals, from immediate need to long-term plans. In addition, the required NAAB criteria is essential to ensuring the B. Arch program has strong foundational goals to build upon. Meeting these criteria will be addressed in the Goals and Targets report. As the program unfolds there will be greater opportunities to pinpoint indicators for growth and alignment with the college and institution.

Key performance indicators will include:

- NAAB criteria
- Assessment report from AIRE (See 5.3.2 Assessment Liaison)
- Review of faculty performance aimed at teaching effectiveness (See 5.3.2)
- Department Goals and Targets annual report (See 5.3.2 Department Chair)

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

Program Response:

Since the last NAAB visit in Fall 2020 the department has advanced on many fronts with several areas in development and others yet to be realized. In-spite of the pandemic and limited access to facilities, the department has met the goal of creating new faculty office spaces on the 8th floor bringing the full-time faculty together for the first time. The new offices provide a single

destination and promote greater interaction with students and adjunct faculty. In this new office space, additional computer stations are provided for our adjunct faculty.
The program goals are student-centric and focus on the following:

- degree completion
- career success
- knowledge creation
- new industry partnerships

Program dedicated studio space
The department met the goal to provide dedicated workspace for students in the Bachelor of Architecture Thesis studio. This is the first time at City Tech that students will have a dedicated space, desks, and resources to advance their work. The department recognizes that further advancement in this area is needed in the future.

Fundraising
The Steering Committee has established a partnership with AIA Brooklyn Chapter to advance the goal of holding an annual fundraising event to support student advancement. The first event will take place in the Fall of 2022. Event planning has been underway for several months.

Curriculum enhancement and marketplace relevance
Enhancing the curriculum through relevant industry partnerships and certifications is an essential ingredient to long range planning and enhancing student relevance in the marketplace. To advance those goals the Architecture Technology Department has partnered with the ULI-Urban Land Institute implementing Urban Plan education in the curriculum for the past 4 semesters. Going forward the plan is to expand the ULI curriculum across multiple studios and train additional faculty to deliver the course work.

New industry partnerships
A new partnership with the Passive House Institute (PHI) has been established. Current coursework and curriculum integration with Passive House curriculum and standards is underway, to be piloted in the Spring 2022 semester across several courses. The goal is to integrate Passive House into the curriculum and give the students options for certification, enhancing a graduate's value in the marketplace.

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

Program Response:

The strengths of the department include the dedicated faculty who continue to serve the institution and address student needs. We do a great deal with very little, relying on innovative thinking and faculty dedication and commitment to advance our student-centric goals. The affordable tuition (see 6.6.1) is seen as an additional strength for the department to provide equitable access to architecture education. However, the economic challenges that many of our students face needs to be bridged. Although we provide the lowest cost tuition for a five-year degree in the City of New York, attaining the funding for many of our promising students remains a challenge.

Advancing Learning Outcomes
We strive to improve learning outcomes by continuously improving our teaching. At the end of every academic year the department Appointments Committee writes annual evaluations of each full-time faculty member. The annual evaluation is based on a PARSE – (Professional

Activity Report and Self Evaluation) that is geared to setting faculty goals and evaluation of overall career trajectory. The PARSE consists of a record of teaching effectiveness, scholarship, research and impact on the institution and greater community. Once the faculty evaluations are completed a conference with each faculty member is conducted to assist in guiding growth and effectiveness.

Improving Effectiveness and Access
Embracing technology through online learning and the Virtual Desktop (VDI) have been a strength. Moving to these platforms has maintained access for our students over the course of the pandemic and has opened future opportunities for distance learning for working, non-traditional students. Advancing access to technology is a key goal of the long-range planning efforts for the department and is seen as an equity issue.

Opportunities rise as the visibility of the department increases
As our program has gained visibility more local offices and noteworthy firms have entertained creating internship programs and providing scholarships for our students. As the value of our degrees rise, our graduates will become a greater resource for the department by supporting our goals and efforts. We will work to build a strong alumni association to bring further resources, funding, scholarship, and partnership opportunities in the future.

New faculty
The Department Appointments Committee (DAC) has noted that through greater visibility of our program, we have an increasingly strong applicant pool to choose from. Applicants come from top firms, and are leading professionals, who are interested in filling adjunct faculty positions. New faculty members help to keep the curriculum current with industry practices.

Challenges and Strides
The challenges that the program faces continue from the prior report. Although we have made strides in some areas there are many additional resources and characteristics, physical and financial, that are hurdles yet to be overcome. Equipment and technology access for students are a constant challenge that stem from lack of resources and funding. The COVID crisis has impacted available funding CUNY wide. Funding the department to achieve its long-range plan and provide much-needed student support in all areas remains a challenge.

Space needs are an ongoing challenge for the department given the number of students and limited available space. Our goal to provide dedicated studio space, has a long way to go to be met.

5.2.5 Ongoing outside input from others, including practitioners.

Program Response:

As mentioned above, opportunities arise as the visibility of the department increases.

If there can be a silver lining to the pandemic, it would be our department's ability to engage a broad cross section of design professionals from around the world by use of technology. Through our design jury process and guest lecture series, geography is no longer a limiting factor. The result has been a greater visibility and voice for the students. Circumstances have also allowed for a broader examination of our methodology and work by influential, outside practitioners and thought leaders. Participation in the jury process has increased substantially not only with design professionals but with community stakeholders and governing bodies.

In addition to an impressive array of architects and allied professionals our guests over the last two semesters (Spring 2012 and Fall of 2021) include leaders and officials from New York City

Housing Authority (NYCHA), Mayor's Office of Climate Resilience (MOCR), RETI Center (community not for profit Red Hook), RISE coalition (community not for profit Far Rockaway), Department of City Planning New York, The Waterfront Alliance (NY-NJ), Municipal Arts Society (NYC) and WeACT (Community Advocacy coalition Harlem).

Several faculty members are part of leadership structures and serve on the board of directors of professional societies opening the doors to greater student awareness of lectures, exhibitions, and opportunities at the local AIA Center for architecture, the Architecture League of New York and the Society of American Registered Architects. Students are allowed to attend any of the events at the Center for Architecture, nearly 1200 events annually, at no charge.

The department is committed to continuing periodic super juries that examine the student work across the curriculum on a 5-year cycle.

AIA Brooklyn has brought their executive board to closely examine our structural needs and is assisting greatly in shaping an annual fundraising event aimed at achieving specific elements of our long-range planning. Executive board members AIA Brooklyn President Talisha Sainvil, AIA, Immediate Past President John Hathaway, AIA, Brooklyn Foundation for Architecture Ida Galea, AIA, Director David Cunningham, AIA, Secretary Jason Boutin, AIA, and Treasurer Jane McGroarty, AIA, have committed to elevating the Architecture technology program and partner with the department in creating the annual fundraising event. Their input on a variety of topics have been mutually beneficial.

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.

Program Response:

The department uses frequent methods of periodic self-assessment including ten-year self-assessments required by the college, curriculum review meetings to ensure that courses are aligned with the department's mission and vision, annual evaluations of all full-time faculty members, peer observations of full-time and adjunct to confirm that course content is being delivered as expected, Student Evaluations of Teaching (SETs) which are a college-wide assessment tool that documents student evaluations of teaching and provides direct and anonymous feedback to full and adjunct faculty, and the assessment of student learning outcomes. The data gathered from these assessments is used to inform strategic planning decisions by the department.

- Ten-year Self-Assessments: At the program level, CUNY requires non-accredited programs to conduct a self-assessment on a 10-year cycle, which the department has recently completed. This assessment requires a self-assessment report, review by the Provost's and Dean's office, a third-party reviewer assessment and report, and a proposal for adjustments and future initiatives. Copies of the documents of our recently completed review are available through the Chair's office.

- Curriculum Review Meetings: Frequent curriculum review meetings are held by program directors, course sequence coordinators, course coordinators, and teaching faculty to ensure that our courses are aligned with the department's mission and vision, meeting NAAB criteria, and staying current with industry standards and practices.

- Annual Evaluations: Evaluations of full-time faculty are performed annually by one of the five elected members of the Department's Appointments Committee. Criteria for evaluation is based on teaching effectiveness as demonstrated by teaching observations as well as student evaluations of teaching, scholarly production, including publications and research,

and service to the department, college, and university system. These evaluations are filed in the College's Institutional Staff Relations (ISR) office as part of the faculty member's permanent file.

- Peer Observations: Peer observations of all faculty teaching are also performed regularly. Tenured full-time and adjunct faculty with three-year contracts are observed once a year. All non-tenured and non-certificated faculty are observed once a year. Full-time faculty members are assigned to conduct these observations and submit reports that are maintained in personnel files.

- Student Evaluations of Teaching (SETs): Students evaluate a faculty member's teaching performance each semester. At the end of the semester, students anonymously complete Student Evaluation of Teaching forms. These forms are processed by the College's Assessment and Institutional Research (AIR) department. The results of the student evaluations are given to the department chairperson and the subject professor for review and dissemination to faculty. The results are included a faculty member's permanent file at the ISR office. SETS scores are reviewed each semester by the departments' appointments committee so that teaching deficiencies can be addressed and corrected.

- Assessment of Student Learning Outcomes: The department has also developed more formal and holistic approaches to student assessment that we implemented as our first cohort moved through the B. Arch program. These approaches included continuing the assessment of student reading through the college-wide Reading Effectively Across the Disciplines (READ) program, developing visual tools for assessment of student fluency with architectural drawings at a technical level and developing a "whole student" approach to assessment. This holistic approach includes documenting and reviewing a wide range of each student's activities in the classroom, including note taking, sketchbook work, reflection, design process and technical drawing and assessing these activities with comprehensive rubrics that are being more consistently used in all our courses. The data from these rubrics is then compiled into annual reports, that include improvement plans, and are reviewed and discussed by program directors, course coordinators, and the curriculum and appointments committees.

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.

Program Response:

The Department of Architectural Technology has developed a culture of assessment that has been codified so that it better serves the development and refinement of curriculum adjustments as well as teaching methodologies and program-level review. We currently assess at the program and course levels. Our assessment focuses on skills and knowledge specific to the discipline, but also general education skills and knowledge. This also includes interdisciplinary courses that faculty members in our department have helped develop, that are available to the full college community. The foundation of our program centers around open enrollment and the wide variation in college preparedness and learning styles of our student cohorts. This requires special attention to the teaching effectiveness of our courses and curriculum flow and has led us to pursue the following objectives and activities for assessment in our department:

- General Education Development: We actively participate in campus-wide assessment cycles focused on general education learning goals. The general college assessment plan is structured around a three-year cycle. The cycle begins with the selection of a Gen Ed student learning outcome and an assignment and rubric that will be the vehicle for the assessment.

Most recently, we focused on Civic Engagement in ARCH 4812 Architectural Design VII. This vehicle is piloted to validate the assessment. In addition, our faculty participates in college wide workshops allowing peer review and input into the assignment and the assessment strategy. The second year the adjusted vehicle is administered to a larger student population so a larger data pool can be collected and analyzed. In the third year, an improvement plan is developed and implemented.

- Assess Prior Knowledge and Skills Development: In our early courses, we assess student familiarity and fluency with orthographic architectural drawing, their general and discipline specific reading skills, note taking and information organization. We are continually developing new approaches to this assessment process. For example, we ask students to analyze architectural drawings to demonstrate understanding of components, elements, and systems depicted in the drawings, including structure, circulation, fenestration as well as spatial and architectural composition.

- Monitoring Course Pass Rates: We monitor courses that have significant rates of failure and review the course objectives and assignments for the appropriate level of challenge. We also review strategies for increasing support for students including workshops and one-on-one tutoring outside of the classroom. This monitoring has also led to new courses and shifts to the flow of the curriculum to focus more on foundation skills and understanding of the discipline for first year students.

- Periodic Faculty Course Review: Each academic year, the chair selects courses for review by the full-time faculty. The course coordinator prepares a presentation of the current objectives of the course, examples of student work at different levels, including high pass and low pass. This process allows the full-time faculty to assess the level of student performance in the course but also the relationship to other courses before and after in the curriculum sequence. This process helps avoid the silo effect of courses operating in isolation and reinforces the support each course can provide to the others that follow.

- Course Redesign: The college has encouraged faculty to be change leaders that seek to institute a culture of assessment, adjustment, and change rather than stasis and inflexibility. The college uses multiple venues for instituting this culture, including fellowships through the Living Lab Grant, mentioned above, as well as professional development seminars like Bridging the Gap organized by the Faculty Commons, participation on college wide and school committees like the Gen Ed Committee, Course Coordination Committee of the School of Technology and Design. Faculty from the Department of Architectural Technology are active participants across these initiatives and serve as facilitators for a number of them.

- Critical Course Assessment: The department periodically identifies specific courses that play a critical role in the degree programs for more specific examination.

- Program Outcomes Review: As part of the responsibility of the department to the college, we periodically review our Program Outcomes for each degree. If revision is required to reflect changes to the program or the curriculum, the outcomes are adjusted. Along with this review, the department chair and liaison develop a plan to assess the program level outcomes, with specific courses identified for assessment vehicle development. We are currently entering a new cycle of this assessment work, with the vehicle development that started in fall 2017.

- Professional Input and Review: The FUSE Lab project has led to the cultivation of direct relationships with technical staff and principals of leading Architecture and Engineering firms in the US and Europe. This includes companies like Transsolar, Buro Happold and Ove Arup. The FuseLab established an advisory board that allowed for direct input on course structure and technical content. Members sat on student reviews to better inform themselves about the program.

- NAAB Assessment: As described earlier in this report, we have also implemented a new framework to assess the NAAB PC, SC, and Shared Values. Each of these criteria has a designated faculty leader who is responsible for leading the vision, documentation, and annual assessment of the criterion. We will use the results of our annual program assessment to guide changes to the program for the following academic year.

5.3.1 The relationship between course assessment and curricular development, including NAAB program and student criteria.

Program Response:

As mentioned above our program is assessed at many levels. These assessments are crucial to the betterment of our program and the department remains committed to following our more robust assessment protocols. For the NAAB program and student criteria, our NAAB criteria leaders will collect assessment data from relevant activities and courses that is compiled into an annual report for each criterion. This annual report includes an improvement plan for the criterion that will be reviewed with the B. Arch Program Directors, Sequence and Course Coordinators, Curriculum, and Appointments Committee, and/or teaching faculty and activity facilitators. Annual meetings that include these faculty members will be held to discuss the results of the assessment report, potential improvements, and how to implement any changes.

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.

Program Response:

Department Chair: The chair is responsible for assuring the department assessment process is functioning as required. The chair assigns a faculty member as an assessment liaison and works with the liaison to plan strategically the department's assessment efforts.

Department Assessment Liaison: The college requires each department to have an assessment liaison that manages and monitors assessment activity in the department. This faculty member attends assessment coordination meetings at the school and college levels and works with faculty on assessment vehicles and data collection. This liaison's service allows the department to stay up to date on best practices and achieve the assessment goals of the college and the department.

Program Directors: The department recently established program director roles to coordinate and implement the B. Arch, B. Tech, and AAS degree programs. The directors are elected by the full-time faculty and serve three-year terms. Their role is to maintain the vision and integrity of each program through curriculum development, assessment, and oversight.

NAAB Criteria Leaders: Full-time faculty members serve as NAAB criteria leaders. They are responsible for maintaining the vision and assessment of the criteria. These leaders determine what course and activities should be used to meet the criteria and how the content will be assessed. Annual reports will be produced documenting the assessment of the criteria and plans for improvement. The first set of reports will be completed prior to our initial accreditation visit in Fall 2022.

Sequence Coordinators: Full-time faculty members serve as course sequence coordinators to ensure that the objectives and content of each course in the sequence are appropriate and aligned with the goals of the sequence. These coordinators meet annually to review the sequence goals and course content.

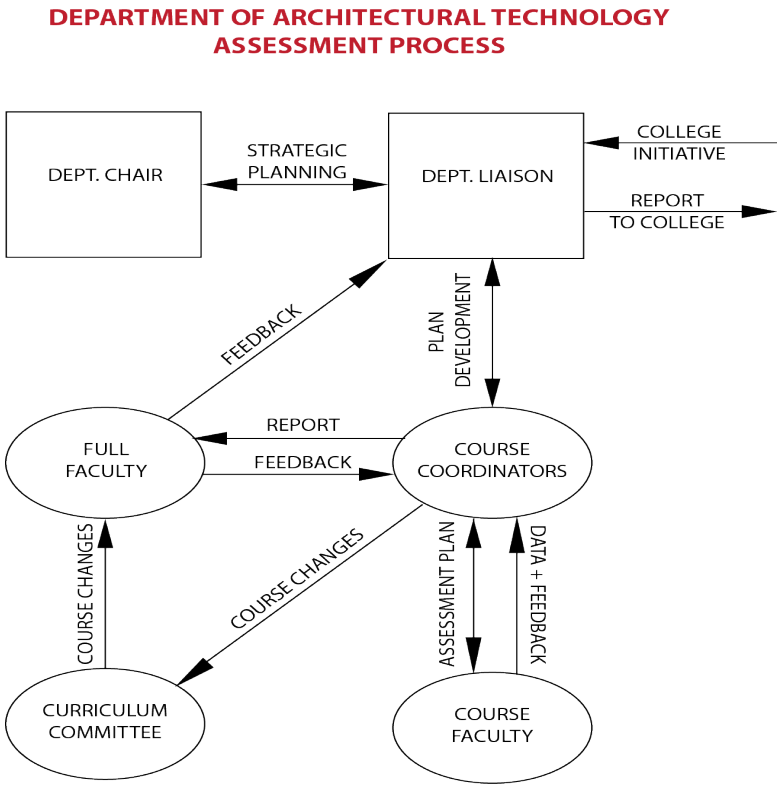
Course Coordinators: This role is critical in our department, as many courses have multiple sections, and a significant proportion of our faculty are part-time. The course coordinator is responsible to prepare and update course materials and to meet with the faculty each semester to review the course objectives, share insights and discuss challenges. The course coordinator is the conduit and manager of the assessment process for the course, spearheading the development of the assessment plan with the department liaison and then coordinating its implementation with the faculty. The course coordinator is responsible to collate the data and work with the liaison to develop a report which includes proposed adjustments to the course in the improvement plan. The course coordinator will also periodically make a presentation to the full-time faculty in faculty meetings to keep the group up to date on student performance, communicate challenges, and seek feedback. Additionally, the course coordinators must collect assessment data annually for any course scheduled to meet NAAB criteria.

Teaching Faculty: Faculty assigned to a course with multiple sections are responsible for working together to ensure reasonable consistency in the pursuit of the course objectives. For the college, during assessment cycles, these faculty implement the assessment vehicle and document the data, reporting back to the course coordinator. Course faculty must submit annual results for any course scheduled to meet NAAB criteria.

Curriculum Committee: This committee is responsible to review all significant course changes and vet them in the context of the overall curriculum for each degree program. The committee finalizes adjustments to the course outlines and presents them to the full faculty for approval.

Full-Time Faculty: The full-time faculty are responsible for approval of all course changes and to seek feedback and communicate changes from the part-time faculty. The full-time faculty also periodically review courses directly in faculty meetings and provide feedback to the course coordinator.

Diagram of Roles and Responsibilities for Curriculum Development



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.

Program Response:

Currently the department appointments committee is responsible for interviewing and hiring, adjunct and full-time faculty and adjunct college laboratory technicians (CLTs). The chair in coordination with course coordinators and appointments committee members, is responsible for teaching assignments. Together they review faculty teaching observations conducted by full time faculty and SETS (Student Evaluations of Teaching) for each instructor's assignment. We look to find the best match between academic and professional experience, curriculum requirements and student specific needs.

Each faculty member in the department of Architectural Technology has a professional background in addition to their academic experience, providing students with the benefit of real-world experience. There are 20 full-time faculty members in the Department of Architectural Technology. All are registered architects; 19 are registered in the United States and one in Costa Rica. All have advanced degrees and three have PhD's. At the time of this report, we have started a search for one new full-time tenure track faculty member.

The department has two full-time senior college laboratory technicians. Senior CLT, Emmanuel Joseph, manages all the technical and computational services. His team of adjunct CLT's work to update computer hardware, software, and peripheral equipment and senior CLT Felix Baez manages the department's operations, which includes classroom equipment and the purchasing process for new and replacement technical equipment and furnishings. His team of adjunct CLT's are responsible for classroom setup and instructional modalities requested by faculty. Along with the department's Facilities Committee, he has developed plans for space utilization and resource allocation.

There is one full time College Office Assistant (COA) who manages the front office daily operations. Ms. Tiffany Cardona serves as a consistent point of information and wayfinding for students and faculty. Working closely with the department chair, she maintains department records and collects and prepares required documents for submission to the Dean's office to manage faculty workloads and student academic actions.

A robust set of digital media and fabrication workshops and tutorials are provided to students and faculty each semester by a team of adjunct CLT's supervised by Professor Anne Leonhardt. Many of these CLTs are recent graduates of our program who are very familiar with our students and curriculum. These workshops and tutorials are recorded for online reference. Each workshop is structured for advanced registration and surveys so providers and faculty can verify attendance, participation, and feedback on instructional efficacy. The workshops are calibrated to support courses that require competency in digital tools and workflow processes. Further student and faculty support is provided by online one-to-one assistance by digital media adjunct CLT's. This has proven to be successful in allowing faculty to cover more design and technical content without stopping to focus on software skills. The workshops and one-to-one support allow for increased quality of student work and achievement.

Our part-time instructional staff of over 60 adjuncts hold prominent positions in city agencies, prestigious public or not-for-profit institutions, and with the region's leading private architecture, design, and engineering firms. Faculty maintain close ties to industry. This often leads to student internships and permanent employment.

The department's full-time faculty are increasingly balancing their teaching activities with their scholarship and creative activities. Many are engaged with publications and conferences focused on the scholarship of teaching and learning. Professors Chin and Hernandez-feiks are researching beginning design studio pedagogy and have presented at conferences such as the National Conference on the Beginning Design Student (NCBDS). Prof. Chin recently completed a book chapter on interdisciplinary teaching with Prof. Christopher Swift from the Humanities Department. Professors Bouratoglou and Dikigoropoulou developed a network of international critics to assist design students through virtual critiques throughout the semester and published their findings in the Athens Journal of Architecture in an article titled "Global Interactions into the traditional Design Studios through Blogs." Profs. Leonhardt, Aptekar, and Vaidya presented "Closing the Loop-Completing The Design/Analysis > Fabrication > Validation Cycle. The Impact of Digital Collaboration Tools on Interdisciplinary Teaching." at the International Association of Technology, Education, and Development (IATED), EDULEARN 13 conference in Spain. Prof. Mishara's research includes academic service learning, the history of New York City, and innovation and collaboration in architectural practice.

Some faculty are conducting historical research, including Prof. King's research into the early work of John Roebling, engineer of the Brooklyn Bridge, a topic he has published in journal articles and presented many times to the Society of Industrial Archeology (SIA) annual conferences. He has added to the historical record through contributions to the National Archives and consults with the National Parks service in the maintenance of Roebling's Delaware Aqueduct. Prof Smith regularly publishes on historic preservation including her article "Design and Building Construction in the Provincial Setting: The Case of the South Carolina Plantation House" in the South Carolina Historical Magazine in 2015. Prof. Montgomery, working through the research lab, The Building History Project, which he co-founded with Jeffrey Burden, PhD contributed to a monograph on the Bayt Farhi, an Ottoman era house in the Jewish quarter of Damascus that will be published this fall by the University of Oxford as part of the Manar al-Athar Monograph series. Prof. Beita Solano has published and presented at conferences on traditional Japanese design principles, most recently his presentation at the Architecture Design Conference at Mimar Sinan Fine Arts University, Istanbul. Prof. Duddy publishes regularly in peer-reviewed journals on theoretical topics that consider how epistemology, phenomenology, mathematics, and logic shape architectural thought. One of his articles appears in the anthology *Best Writings on Mathematics, 2021*, published by Princeton University Press. He is currently in conversations with a publisher for his book tentatively named "Pride, Politics, and Place: Public Architecture and Urbanism in Downtown Brooklyn," an investigation of American urban planning using Brooklyn as a case study.

A number of faculty have led research projects focused on design-build, fabrication, advanced materials, building performance, and construction techniques. Profs. Aptekar and King led the department's research and development of the City Tech entry into the US Department of Energy's Solar Decathlon Competition that placed well in the architecture and engineering categories in the 2015 competition. Prof. Anzalone has built twelve installations in nine different countries, as part of his exploration of advanced science and technology in architectural practice. He publishes and presents at conferences regularly on this topic. Prof. Kim studies and researches building performance and presented on the topic at the Passive and Low Energy Architecture Conference in Los Angeles, CA in 2016. Prof. Conzelmann has published reviews of contemporary New York City architecture and researches Passive House design. Prof. Edwards specializes in the design of television broadcast facilities and has led numerous prominent projects in this field, including work at Rockefeller Center for NBC, Madison Square Garden, and for PBS New York (Channel 13). Prof. Zagaroli focuses on providing technical assistance to not-for-profit organizations in developing neighborhoods, contributing to the rehabilitation of residential units as well as several community facilities.

Prof. Azaroff is a leader in research of resiliency and design for risk and reconstruction. He advises U.S. Federal Emergency Management Agency (FEMA) and the Alliance for National & Community Resilience (ANCR) on developing benchmarking for community resilience

planning, as well as with the City of New York and the U.S. Virgin Islands on their 2019 Hazard Mitigation Plans. He worked with the city of Houston on Vision 2020 Resilience initiative. He is serving on the New York Mayor Adam's transition team advising on sustainability and resilience. New York State Governor Hochul appointed him to the statewide Climate Impact Assessment. He is advising the Ministry of Dominica in the Caribbean on post-Hurricane Maria recovery strategies with the Kalinago people, and contributed to recently released, "Keep Safe!, guide to housing recovery for Island communities" by Enterprise Community Partners. Previously, Illya was a Technical Advisor to the Assistant Secretary for Preparedness and Response (ASPR) in Washington, DC, within the National Disaster Recovery Framework (NDRF). He has published numerous articles, presented at TEDxNYIT, and contributed to several reports on the topic while also leading the New York AIA Chapter's recovery efforts after Superstorm Sandy. More detailed information regarding faculty scholarly and creative activity can be found in through the link to the Faculty Vitae in the Supplemental Materials section below.

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.

Program Response:

Since 2015, Professor Barbara Mishara, a full-time assistant professor, has been the NCARB Academic Licensing Advisor for the Department of Architectural Technology. She regularly attends the biannual NCARB Licensing Advisor Summit and various local events and lectures that focus on staying up-to-date on the requirements for licensure. Additionally in 2019 she participated in the NCARB Scholars program and spent three days in workshops on the teaching of professional practice.

New York State has atypical requirements for architectural licensing and accepts our Bachelor of Technology degree to fulfill education requirements. NAAB candidacy status and revised New York State requirements changed our status, as well introducing new requirements. Barbara maintains a relationship with Robert Lopez, R.A, Secretary of the Architecture Board, NYS Department of Education.

Professor Mishara ensures that students have resources to make informed decisions on their path to licensure by keeping students, faculty and alumni informed of licensing requirements. She prepares, distributes, and posts handouts and lectures on the department's online advisement portal and provides individual consultations. Each semester she lectures to the student architecture club and professional practice classes about NCARB and licensing. Starting Spring 2022 Professor Mishara will also be conducting a workshop presenting the requirements for licensure that all fourth- and fifth-year B. Arch students will be required to attend.

5.4.3 Demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement

Program Response:

Professional development for faculty and staff is provided by the Faculty Commons, focusing on pedagogy and scholarship, grant writing, grant application assistance and research techniques, and iTEC, focusing on the use of instructional technology. Additional training is

provided by the Office of Faculty and Staff Relations on topics ranging from compliance courses to enhancement of administrative skills. Assistance with assessment training is offered through the college's department of Assessment and Institutional Research (AIR).

The Faculty Commons is a center for teaching, learning, scholarship, and service that coordinates professional development, grants, and assessment activities of faculty at New York City College of Technology. The Faculty Commons adopts a programmatic approach to professional development and operates as a faculty resource and think tank where members collaborate on a variety of projects to shape curriculum, pedagogy, and assessment. The current Co-Director of Faculty Commons is Professor Shelley Smith, PhD from the Department of Architectural Technology. Prof. King from our department provides two annual workshops on behalf of the Faculty Commons to help faculty to improve their teaching through the development of a Teaching Portfolio and on the use of the colleges EPARSE system which documents faculty records for teaching, service and scholarship.

Below is a list of Faculty Commons sponsored programs:

Nucleus: A Faculty Commons Quarterly showcases creative and scholarly faculty initiatives at City Tech undertaken through the Faculty Commons. Many of our faculty have been featured or have contributed articles to this publication.
https://issuu.com/facultycommons/stacks/fc616455db874b09b483a2e529826d9f

The Faculty Commons website houses up-to-date information about the Offices of Assessment and Institutional Research and Sponsored Programs. The professional development arm features a monthly calendar in which events that are sponsored by Professional Development Advisory Council (PDAC), Writing Across the Curriculum (WAC), Ursula C. Schwerin Library, Instructional Technology Center (iTEC), First Year Writing, Reading Effectively Across Disciplines (READ), First Year Programs, Summer Institute of Teaching and Learning, Bridging the Gap study-group inquiry based seminar, and more are open to part- and full-time faculty and staff. Faculty are encouraged to participate in First Year Learning Communities and General Education electives so they can learn how to communicate and structure interdisciplinary assignments, modules, and courses around questions about the human condition, its past, present and future impact. https://facultycommons.citytech.cuny.edu/

Open Lab is an online platform which is a place to learn, work, and share. It is the College's online community, in which courses, clubs, projects and people share their interests, talents, and academic work. This platform, which incorporates e-portfolio, is an increasingly significant tool for our day-to-day operation of our college. It provides a critical communication and coordination tool as well as a virtual space for interaction and learning.
https://openlab.citytech.cuny.edu/

Living Lab Faculty Fellows participate in the Living Lab's General Education Seminar which offers the opportunity to share a rich collegial learning experience with faculty members from other disciplines and to contribute to the success of this transformational project. "A Living Laboratory: Revitalizing General Education for a 21st-Century College of Technology" is a major initiative funded by the U.S. Department of Education's Title V programm. Launched in the spring of 2011, it re-envisions General Education at City Tech using the conceptual model of the college and our Brooklyn Waterfront location as a "living lab."

Faculty members are encouraged to attend professional conferences, with financial assistance from the Professional Development Advisory Council. PDAC is a committee of faculty representing most of the departments on campus which review applications for professional travel funding and makes funding recommendations. The individual schools may also add supplemental funds to support faculty travel for professional development. Applications which support and advance faculty scholarship aligned with the college mission are funded. The

funding rate approaches 100% of applications – most rejections are due to incomplete applications or funding requests outside of the fiscal year. Abstracts summarizing faculty professional travel are posted on the PDAC web pages.

Reading Effectively Across the Disciplines (READ) is a college-wide initiative that provides workshops and individualized faculty professional development, to support the adoption of strategies in classroom instruction and assignment design to improve student reading comprehension.

All full-time faculty are licensed architects with regular requirements for continuing education to stay current in the profession. Annual observations make note of faculty's active service in the college, university, and the profession. New faculty members are given 24 workload hours of release time to advance scholarship or research initiatives. Because most faculty are actively practicing in New York City, many serve on committees in professional organizations including the AIA New York Chapter. They help organize events for the architectural community in New York and bring the latest discussions and information to faculty and students. Some AIA New York chapter events have been hosted by City Tech, bringing experts to campus to discuss important developments in the design of the built environment. Several financial resources are available to faculty to support professional development and scholarship. They are outlined in section 5.7 Financial Resources below.

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.

Program Response:

Students enter with widely disparate levels of academic preparation, professional goals and personal circumstances. As an open access institution, City Tech's historic mission has been to offer opportunities for educational advancement to students regardless of financial circumstances or prior academic achievement. Several unique programs strive to support and enable students to achieve a college degree. Among these are:

- SEEK: The Percy Ellis Sutton SEEK (Search for Education, Elevation and Knowledge) program provides promising students with financial assistance beyond tuition, as well as a wide range of counseling and academic support services, including career and academic planning, personal counseling, a state- of-the-art computer lab, academic coaching and tutoring in many subject areas.

- ASAP: As a university wide initiative for community colleges, ASAP (Accelerated Study in Associate Programs) was started at City Tech in fall of 2015. It emphasizes enriched academic, financial, and personal support for students including comprehensive and personalized advisement, career counseling, tutoring, tuition waivers, MTA MetroCards and additional financial assistance to defray the cost of textbooks. City Tech is one of the senior colleges in the CUNY system to provide ASAP services to students who are working toward an Associate degree and a college where ASAP will focus heavily on students in STEM disciplines. The program has garnered national recognition, including a citation by President Obama for doubling the graduation rates of participating students.

- Peer Mentoring: A select number of female students receive compensation to support and tutor other female students. Currently this program is funded through a grant to the Construction Management/ Civil Engineering department. Our department has applied for independent funding to support and expand this initiative.

- The Learning Centers: Located across our campus, learning centers provide our students with free access to computers, software and tutoring in support of their studies. The Voorhees building, which houses the Architecture program, has an open computer lab which provides access to and support with all of the advanced software used in our curriculum. Architecture students are hired to work here to mentor other students.

- Departmental Workshops: Offered in support of our highly technical curriculum these workshops are coordinated with our curriculum offerings and provide students with access to tutors to facilitate the use of software, fabrication equipment, shop tools, and other technology.

- Online Tutorials: A library of Video and PDF tutorials created by faculty, staff, and grant initiatives provides additional support accessible both on and off campus.

- One-on-one help and Classroom Support: College Laboratory Technicians (CLT's) provide one-on-one and small group support to students on a regular schedule or by appointment. CLT's are typically hired from among our more advanced students and adjunct faculty.

- Design_Serv: As part of the Architectural licensing process (AXP) junior architects are required to complete experience hours within experience Setting 'A' or Setting 'O'. The Department of Architectural Technology was approved in January 2019 by NCARB as a "Community Based Design Center/Collaborative" within Setting 'O'. Junior architects may serve up to 320 hours as mentors to students within the design and technical studios.

- The Counseling Services Center supports the educational, emotional and career development of City Tech students by providing opportunities for skill development, counseling and referrals that address obstacles to success. Services include individual counseling for academic, career and personal challenges as well as crisis intervention. We also provide support groups, referrals to campus and community resources, campus outreach, workshops, and faculty/staff consultation. The Office of Veteran Support Services receives supervision and oversight from this office. During the pandemic, student counselors were invited to Town Hall meetings to familiarize students and faculty with their services and provide a brief guided relaxation exercise.

- City Tech's Professional Development Center (PDC) - support students and alumni by cultivating essential competencies necessary to make informed decisions to achieve their career goals. The PDC facilitates interaction among undergraduate students, alumni, employers, and organizations to create access and opportunities, which help students pursue their personal and professional objectives. Their work complements the online jobs and internships board maintained by Professor Ken Conzelmann.

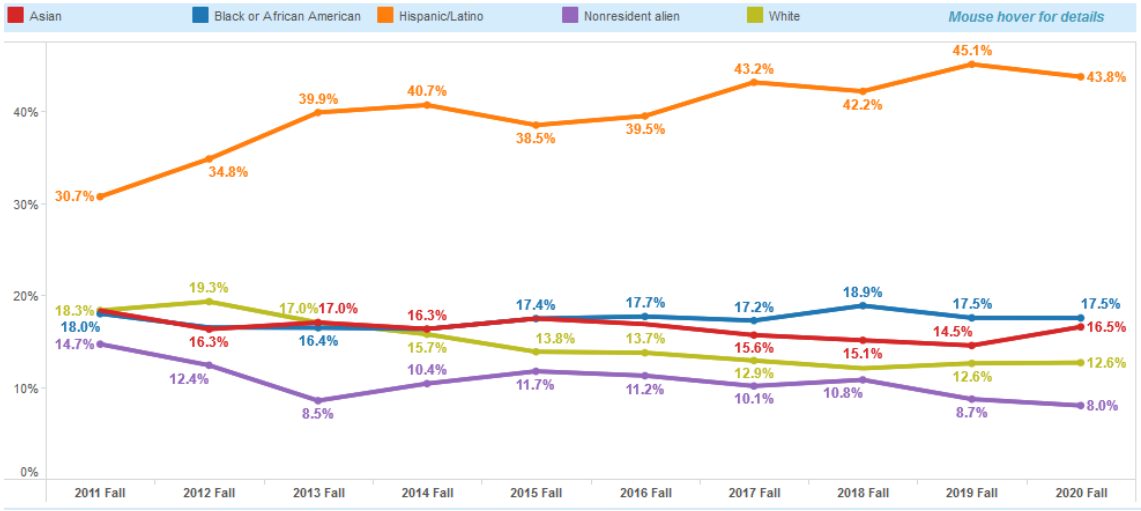
5.5 Social Equity, Diversity, and Inclusion

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.

Program Response:

Department of Architectural Technology Fall Enrollment by Ethnicity 2011-2020[4]



City Tech offers a diverse, multicultural learning environment. Diversity is a central asset of our program and our culture at City Tech. Students and faculty members come from more than 138 countries and speak over 85 languages. Of those responding:

- 43% of the students were born outside of U.S.
- 62.3% report a language other than English spoken at home
- 33% list their parents as college graduates
- 58% of the students report household incomes of less than $30,000
- 80% of incoming freshmen receive need-based aid
- 67% of continuing students receive need-based aid
- 25% percent work more than 20 hours per week.

The U.S. News & World annual survey report shows that City Tech has been among the leaders in the diversity of the students it serves among all Comprehensive Colleges/Bachelor's (North) for the past five years. This survey lists our college among the leaders in new student retention in colleges of its type. City Tech is a federally designated Hispanic Serving Institution (HSI).

The diversity of our students is fundamental to our program. Changes to our curriculum and degree programs are examined specifically for their potential impact on student diversity and access. The open enrollment policy allows students of all backgrounds a starting point in our department. Our goal is to help as many of these students as possible reach a level where they become eligible to apply for the B. Arch degree. We anticipate the need to adjust early curriculum and add further pre-college support mechanisms to improve access to the new degree program. A critical long-range goal is to ensure that access to the B. Arch program does not reduce diversity. We collect and monitor data through the annual assessment of student applicants at the first- and third-year entry points.

- Currently planning is underway for a new intensive architectural summer program for high school students with the College Now program. College Now is a comprehensive collaborative program of the City University of New York (CUNY) and the New York City Department of Education (DOE) designed to improve the academic achievement of NYC

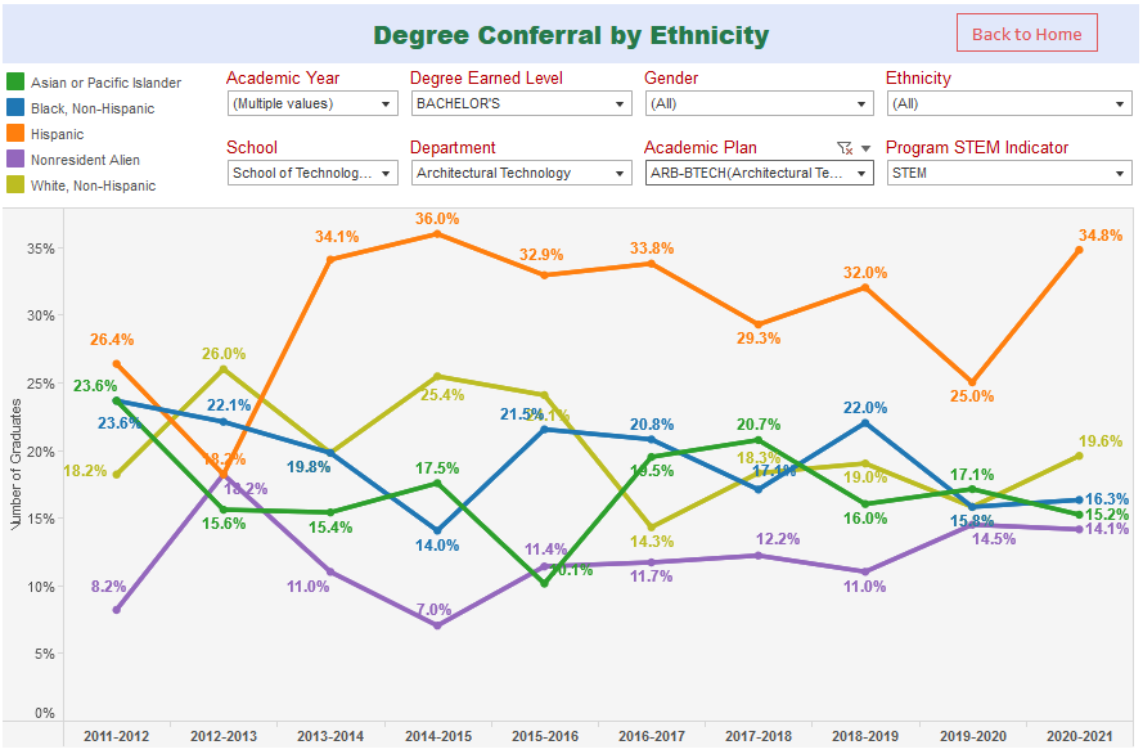
[4] Data provided by NYC College of Technology Office of Assessment, Institutional Research & Effectiveness, Link: http://air.citytech.cuny.edu/data-dashboard/enrollment-trends-fall

Public High School students, while preparing them for the demands of college. College Now at City Tech offers students from designated high schools the opportunity to enroll in college credit-bearing courses free of cost.

- The department communicates regularly with its New York City Career and Technical Education (CTE) Public High School partners to discuss program changes and curriculum updates at the Department of Architectural Technology. Invitations are extended to guidance counselors, principals, and students to open forums at the department on B. Arch program admissions requirements and application processes.

- City Poly High: City Polytechnic High School of Engineering, Architecture and Technology, which opened in fall 2009, was New York City's first 9-13 year high school, where students can earn both a high school diploma and an associate degree through a comprehensive six-year course of study. In 2015 it became one of the New York State P-TECH network of schools and adopted a 6-year model, replacing the trimester with a more traditional semester calendar. The school is a result of a partnership between the Departments of Architectural Technology and Construction Management at City Tech with the New York City Department of Education (DOE) and National Academy Foundation (NAF). Curriculum at this school, which integrates academics with technical subjects, was developed by City Tech faculty.

Department of Architectural Technology Degree Conferral by Ethnicity 2011-2021[5]



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.

[5] Data provided by NYC College of Technology Office of Assessment, Institutional Research & Effectiveness, Link: http://air.citytech.cuny.edu/data-dashboard/degree-conferral/

Program Response:

ANALYSIS OF DEPARTMENT FULL-TIME FACULTY DIVERSITY 2020

	MALE	FEMALE	WHITE	HISPANIC LATINO	BLACK AFRICAN AMERICAN	ASIAN
GENDER	14	7				
ETHNICITY			13	3	1	4
TOTAL: 21 FULL-TIME FACULTY						

ANALYSIS OF DEPARTMENT FULL-TIME FACULTY DIVERSITY 2022

	MALE	FEMALE	WHITE	HISPANIC LATINO	BLACK AFRICAN AMERICAN	ASIAN
GENDER	13	8				
ETHNICITY			12	3	1	5
TOTAL: 21 FULL-TIME FACULTY						

TOTAL: 21 FULL-TIME FACULTY

ANALYSIS OF DEPARTMENT ADJUNCT FACULTY DIVERSITY 2020

	Total Male	Total Female	Grand Total
American Indian or Alaska Native	0	0	0
Asian	8	8	16
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	1	1
Hispanic/Latino	1	2	3
White	37	17	54
Two or more races	0	0	0
Nonresident alien	0	0	0
Race and ethnicity unknown	0	0	0
Total	46	28	74

NAAB

ANALYSIS OF DEPARTMENT ADJUNCT FACULTY DIVERSITY 2022

	Total Male	Total Female	Grand Total
American Indian or Alaska Native	0	0	0
Asian	10	11	21
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	1	2	3
Hispanic/Latino	3	2	5
White	36	22	58
Two or more races	0	0	0
Nonresident alien	0	0	0
Race and ethnicity unknown	0	0	0
Total	50	37	87

Our faculty reflects the wide ethnic background of the Architectural Department's student body. Besides American-born professors, several full-time and part-time faculty are foreign-born and received their architectural degrees outside the United States. Those countries include Argentina, Bulgaria, Costa Rica, China, Colombia, Cuba, Cyprus, Dominican Republic, Ecuador, Great Britain, Greece, Jamaica, Haiti, India, Iraq, Israel, Italy, Mexico, Montenegro, Peru, the Philippines, South Korea, Spain, Turkey, the Ukraine, and Venezuela.

Likewise, many of the adjunct Classroom Laboratory Technicians (CLTs) that provide technical classroom support are graduates of our program. They have equally diverse backgrounds, with a concentration of Hispanic, African/American, and Asian roots.

In interviewing teaching candidates, the Department Appointments Committee values ethnic and racial diversity to reflect our students' background. This has proven to be an important asset in delivering our educational goals. The Appointments Committee follows the required CUNY policy on Equal Opportunity and Non-discrimination.

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.

Program Response:

Fall 2021 Student Enrollment by Ethnicity for all Degree Programs[6]

Ethnicity (IPEDS)	2021 Fall
American Indian or Alaskan Native	55 0.4%
Asian	2,988 20.9%
Black or African American	3,820 26.8%
Hispanic/Latino	4,868 34.1%
Native Hawaiian or Other Pacific Islander	32 0.2%
Nonresident alien	564 4.0%
Two or more races	319 2.2%
White	1,631 11.4%
Grand Total	14,277 100.0%

Fall 2021 Student Enrollment by Ethnicity for the B. Arch[7]

Ethnicity (IPEDS)	2021 Fall
Asian	13 15.5%
Black or African American	9 10.7%
Hispanic/Latino	48 57.1%
Nonresident alien	6 7.1%
White	8 9.5%
Grand Total	84 100.0%

The department actively seeks opportunities for students to become better engaged in the profession and pursue meaningful employment after graduation. There are several innovative programs that are proving successful in retaining and encouraging diversity of students. These programs have been tested and run for multiple semesters with positive feedback from organizers and employers. Soon the department expects for students to actively hear the benefits and opportunities of one program over another and make better informed decisions that align with their post-graduate or career visions.

- The Pre - Internship Seminar series enables students to learn more about architectural design studios or city agencies over the course of several meetings during the spring or fall semester. Representatives, architects or studio leaders, present projects, and share ideas with students to stimulate discussion and draw parallels to their ongoing studies. In turn the studios learn more about the students and their specific interests before making summer internship hires from the participants. The department has established pre-internship programs with:

[6] Data provided by NYC College of Technology Office of Assessment, Institutional Research & Effectiveness, Link: http://air.citytech.cuny.edu/data-dashboard/degree-conferral/

[7] Data provided by NYC College of Technology Office of Assessment, Institutional Research & Effectiveness, Link: http://air.citytech.cuny.edu/data-dashboard/degree-conferral/

Diller Scofidio + Renfro,
Robert AM Stern Architects
Selldorf Architects
ARO
Cook Fox
FX Collaborative
Perkins & Will
Tod Williams and Billie Tsien Architects
New York City Department of Buildings: DOB Scholars

There are several more programs currently under development with well-known architectural studios. These programs help maintain student diversity by providing access to employers they would not have independently, during the academic year. The programs integrate professional exposure and experience with classroom knowledge. They are scaffolded and structured experiences so that students are better informed about the range of practices and opportunities within the building industry. Once hired students are not isolated or left without a rounded internship experience. They are familiar with studio members and the studios mission. By offering students a foothold into the profession, the department can maximize the student learning experience inside and outside of the classroom and directly address the students' heavy working hours outside of the building industry, during the semester, which competes for their valuable time.

- The Architectural League Mentorship Program: Through this program, the League matches design professionals with architecture students in the New York/New Jersey area for nine months of one-on-one advising, relationship building, and mutual learning. Over the course of the program, mentors meet regularly with their students, offering them guidance as they prepare for careers in architecture and design. To facilitate these connections, the League organizes several group events for both mentors and students, including studio tours, panel discussions, and networking events. The mentorship program:

    - Prepares architecture students for meaningful careers in the design industry
    - Connects students with experienced practitioners who can provide firsthand knowledge of the realities of the industry
    - Creates an opportunity for design professionals to introduce the possibilities of the field to a new generation of designers
    - Fosters connections among professionals and students from diverse social, economic, and cultural backgrounds

This program was originally developed with the Department of Architectural Technology. Due to its resounding success, it has been expanded to include the Spitzer School of Architecture at City College of New York (CCNY), and the Michael Graves College of Architecture & Design at Kean University.

- A chapter of NOMAS was started at the department in 2021. This organization has received support from BKSK Architects by way of national conference admission fees and post event discussions. There is clear enthusiasm within the student body to discover the diversity of representation and role models within NYCOBA/NOMA that reflects their own. The connection to this organization promises to improve student retention and achievement in the department as it supports minority students navigating academic loads and a way to access the profession.

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.

Program Response:

- The college and department are regularly informed and guided by The Office of Compliance and Diversity. This office is responsible for administering the college's recruitment, hiring, appointment, and equal opportunity policies and procedures ensuring compliance with related laws, rules, and regulations dealing with human rights.

  The director of the Compliance and Diversity Office reports to the president of the college and serves as the chief diversity officer, Title IX coordinator, a 504/ADA coordinator and domestic violence awareness and prevention coordinator for NYC College of Technology. She ensures compliance with the university's policies and procedures regarding searches, Affirmative Action, Equal Employment Opportunity, discrimination prevention including sexual harassment prevention and domestic violence awareness and prevention. The CDO prepares the college's annual Affirmative Action Plan and related reports as mandated by the university. The reports can be found here:
  https://www.citytech.cuny.edu/compliance-diversity/index.aspx

- The City University of New York (CUNY) offers many programs across its campuses to celebrate, discuss and inspire social equity, diversity and inclusion. The University's commitment to diversity is posited on the following principles:

1. Engendering values and implementing policies that enhance respect for individuals and their cultures promotes excellence and an inclusive educational experience
2. Diversifying the University's workforce strengthens the institution, encourages the exchange of new ideas, and enriches campus life
3. Cultivating diversity and combating bigotry are an inextricable part of the educational mission of the University
4. Fostering tolerance, sensitivity, and mutual respect throughout CUNY is beneficial to all members of the University community

- The Department of Architectural Technology worked closely with the Department of African American studies to co-sponsor a talk by Mabel O. Wilson at City Tech. This was an enormously successful event with over 100 students in attendance. Dr. Wilson graciously offered her time to engage a small group of black architecture students in an intimate conversation about her background in practice and academics and hear their concerns about the profession. The Department Chair, Marta Effinger Crichlow attended a housing studio jury where the studio brief overlaps with course content from AFR 3000ID "Black New York". This exchange and collaboration is expected to yield more interdisciplinary exchanges in coming semesters.

- As previously mentioned, the $3M USDOE Title V grant was awarded to Prof. Smith. She and the department will use this grant to expand education opportunities for and to improve the attainment of Hispanic Students.

- The Perkins Peer Advisement Program is also focused on giving exemplary upper-level female students a platform to contribute to the department and grow their leadership skills by becoming mentors themselves. Through the grant, students are hired as teacher assistants and work with students and faculty in first-year studio courses.

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

Program Response:

The Center for Student Accessibility works directly with faculty and students to provide accommodations for students with different physical and/or mental abilities. The Center provides support to enrolled students who have documented permanent or temporary disabilities. The Center's primary mission is to support the educational goals for enrolled students with disabilities through access, empowerment, resources, advocacy, collaboration and outreach throughout the College and the community at large. The Center aids in the areas of enrollment, academic advisement, tutoring, assistive technologies, and testing accommodations.

The Center for Student Accessibility works closely with faculty and staff in an advisory capacity and assists in the development of reasonable accommodations that allow students with disabilities full participation in all the programs and activities offered at City Tech while meeting the academic standards maintained by the College.

The department's facilities plan to increase flexibility in instructional modalities using operable furniture paired with the Virtual Desktop Infrastructure (VDI), will enable adaptive instructional environments and is a strategy to support faculty, staff, and students with different physical abilities.

Additional resources can be found here: https://www.citytech.cuny.edu/accessibility/

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:

5.6.1 Space to support and encourage studio-based learning.

Program Response:

The Department of Architectural Technology is located on the eighth floor of Voorhees Hall. Classrooms, computer labs, and faculty offices occupy 12,682 SF or 87% of the net floor area. The office suite of the Dean of the School of Technology and Design occupies the remaining 13%, or 1,951 SF. Additional square footage on the second floor is dedicated to classrooms. There is also a drafting studio as well as some standard lecture classrooms on the third floor and a fabrication space with CNC mills located on the first floor.

Voorhees Hall underwent a $38 million renovation funded by CUNY-Wide Condition Assessment Funds. Completed in spring 2013, work included a new glass façade with added windows to increase natural lighting and improvements to the entrance lobby. The project completed under budget was managed by the Dormitory Authority of the State of New York (DASNY). The surplus funds were used to enhance classrooms, faculty offices, the cafeteria, lobby, and common spaces. Work on the interior of the building began in summer 2013.

The Department of Architectural Technology currently serves a large student body of approximately 700 commuter students with 20 full-time teaching faculty and over 60 adjuncts.

Current Space Allocation:

Studio space is the most critical space typology for any school of architecture due to the clear hierarchical position of the studio curriculum as the place for exploration and synthesis of the broad range of skills and knowledge inherent in the discipline. We are currently utilizing existing space, assigning studio courses into computer labs that are not well set up for the range of activities that take place in studio courses such as hand sketching and drawing, desk critiques, model making, large format drawing analyses, group discussions, and pin-up presentations.

During the height of the pandemic space planning initiatives and equipment upgrades were put on hold. Available resources were diverted to assisting students and faculty with distance learning. The college purchased numerous laptops, mobile Wi-Fi devices for distribution to students without adequate equipment for remote classroom work. Faculty were trained in remote instruction tools and content delivery. The Virtual Desktop Initiative remains a valuable tool for students in the Department of Architectural Technology. The Chief Information Officer and SOTD Dean have submitted a request for an expansion of this tool via the Capital Funding Process. A less costly remote access software has been implemented during the Fall 2020 semester to leverage computer equipment currently on campus.

As described in detail in section I.2.2 Physical Resources, the college has begun to move forward on plans to upgrade and expand student computing equipment and upgrade facilities. A dedicated space has been allocated for the B. Arch Thesis student and two classrooms were created on the second floor of Voorhees after all faculty offices were consolidated on the 8th floor. The new classroom spaces are being designed and developed carefully as a model flex space for multi-modal instruction and large format presentation delivery. The Chief Information Officer has met with the department to discuss ideas for maximizing the use of these rooms with advanced audio-visual equipment.

2020 ANALYSIS OF DEPARTMENT SPACE RESOURCE NEEDS

	Studios (Upper)	Studios (Lower)	Computer Labs	General Classrooms
EXISTING	4	1	3	4-5
Required 2017-2018	6	1	4	4-5
Required 2019-2023	6	3	4	4-5
2020 PROPOSAL	6	3	2	3
Total New Learning Spaces	2	2	-1	-1

In addition, scholarly research on teaching reinforces the need for instructional spaces to allow for multiple modes of teaching and interaction. This requirement impacts space and furniture selection as well as the provision of technology access for students. A college wide report “Reconsidering the Learning Environment”, developed by College Council’s Buildings and Grounds Committee, provides guidance on the latest scholarship as well as approaches to facilitating multi-modal teaching spaces, which we will adopt where possible.

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.

Program Response:

The department makes use of spaces across the campus to support student learning as described below:

The New Academic Building: is noteworthy because of the range of spaces and technology it makes available to faculty and students. It has a large one thousand seat auditorium, a triple height lobby with prime street front visibility and one-hundred-person capacity breakout rooms and lounges. This building also contains classrooms of varying sizes equipped with high quality presentation equipment. The NYCDOB Scholars program holds their weekly meetings in this building. The department has utilized the classrooms for our multidisciplinary courses such as ARCH 3551- Sustainability: History & Practice. Final thesis reviews for the B. Arch students in Spring 2022 will also be held in the atrium of the New Academic Building.

The Voorhees Theater: is also a resource for the department. This theater holds approximately 200 people. The department has utilized this space for in-person town halls, multidisciplinary panel discussions that were a component of the FUSELab Intersections Symposia and for a lecture series which was sponsored by the Ornamental Metal Institute of NY.

Multipurpose Classrooms V-205 & V-207: The department is working on developing a multipurpose space from two current classrooms V-205 and V-207. We have discussed our ideas for this space with the college's Technology team. This includes an operable partition between the rooms and an audio-visual system that can accommodate small seminar settings and larger presentations. This is still in the planning stages, but a technical design has been established and modular furniture placed on order.

Woodshop: The department is provided access to a wood shop space located within the department of Construction Management and Civil Engineering Technology. This shared space is used intermittently by students in the department. The range of tools are limited, but the atmosphere is often inspiring as students meet others in different programs using similar tools and techniques. The Department of Entertainment Technology maintains a sophisticated wood shop in the Voorhees building. Periodically, architecture students or staff may utilize this for special projects. The department's fabrication lab in V-813 is often shared with several departments and this interdisciplinary environment adds to the enthusiasm students feel when they can assist faculty and students in other departments with their projects.

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.

Program Response:

Faculty offices were relocated to the 8th floor in the Spring of 2022. The move to consolidate faculty in one location will facilitate several student support activities including student advisement, mentoring, and research cross pollination through an open office environment that allows for informal conversation and easy collaboration.

The existing faculty offices on the eighth floor retains a small conference room for private meetings between faculty and students. There are a limited number of enclosed office spaces for faculty. The Director of Advisement was assigned a private office because of the need to counsel students with multiple academic and personal challenges.

The department chair's office was reconfigured to allow for increased intradepartmental meetings and interdisciplinary collaborations. It functions as a war room where faculty can quickly assemble to discuss and review various program initiatives on teaching, research, and mentoring. A large video monitor and webcam enable a range of meeting formats.

5.6.4 Resources to support all learning formats and pedagogies in use by the program.

Program Response:

The college maintains active subscriptions to many software applications for faculty and students to support multiple learning formats. Primary instructional tools include OpenLab, an open online community for City Tech, and Blackboard, a "Learning Management system". There are student general computer labs available for in-person usage in the Voorhees building and the Namm building. Computer labs in the architecture department are reopening for student usage in the spring semester. The Ursula C. Schwerin Library dedicates a librarian to collaborate with architecture faculty and staff to help build student research skills and connect with knowledge in their disciplines. The library maintains a range of architectural journals and books, including a subscription to the Material ConneXion. The department maintains a collection of books and reference materials for use by faculty and students. A digital tools library is also maintained in the front office, which includes CO2 meters, thermal cameras, and laser measure tapes. This equipment can be checked out by students for course specific usage.

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:

Amid the COVID-19 coronavirus pandemic and the consequent lockdown and social distancing mandated by the Governor of the State of New York, the college reworked and implemented a distance learning curriculum. The college distributed 330 iPads and 408 Chromebooks to students so they can continue to learn under the distance learning format. Using these Chromebooks, our students were able to access software required for coursework by use of our Virtual Desktop Infrastructure. These devices will continue to be available for loan in the future, promoting students' ability for virtual group work and research. As part of that support, a Virtual Desktop Infrastructure (VDI) system, proof of concept, was successfully installed in one classroom's workstations. Based on the success of this pilot, an expansion of the VDI has was submitted and as a part of Capital Funding, in the Fall of 2022 the department was able to implement the new Apporto VDI platform. The VDI system enables students to access digital tools from any area outside of the classroom. It can activate informal campus spaces where students currently gather to work - with a full complement of studio software. It is a component of a forward-looking design studio that is not encumbered by desktop computers and cables.

Faculty professional development on online pedagogy and curriculum and on the use of new technology to improve online instruction was provided to all faculty through the Faculty Commons and iTEC (Instructional Technology & the Technology Enhancement Centers). The library continued to modify the delivery of support for research and information literacy under distance education.

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.

Program Response:

New York City College of Technology is a public institution of higher learning, as is the entire City University of New York system. It is supported by the State and City of New York utilizing tax levy funds, as well as revenue generated by tuition. The State and the City of New York have provided continuous legislative budgetary support.

The budget for the University is appropriated by the State and City. The State of New York is the principal funding source of the University, financing 46% of the fiscal year 2014 operating budget. Tuition revenue, which must be recognized and appropriated by the City and State, is the second largest source of funding, comprising 44% of the fiscal year 2014 operating budget. The City of New York finances the remaining 10% of the cost of operating. The University annually submits an operating tax-levy budget request to the State and the City that is comprised of both the mandatory, or base-line needs, and programmatic requests. The mandatory requests include contractual salary increases calculated by the colleges and other than personal service (OTPS) inflationary increases that are based on previous year expenditures plus an increase determined by the application of the Higher Education Price Index. It also includes requests for rent increases, fringe benefits, energy, and new building needs. The programmatic request is based on University Program initiatives outlined in the Master Plan and is developed by the University's central leadership in consultation with various CUNY constituencies, including members of the Board of Trustees, College Presidents, and faculty and student representatives.

The annual operating budget of the New York City College of Technology at the City University of New York is divided into four areas:

- Full- and part-time faculty salaries (PS)
- Other than personnel services (OTPS): the operating budget for general supplies/ laboratory materials replenishment, tools, office supplies, etc.
- Temporary services (TS); supports temporary administrative and teaching laboratory support personnel
- Tech Fee: a student fee which is used to provide computer software peripherals and other technical equipment and supplies that are used by students. Each year the department submits Tech Fee requests, which are reviewed by the Tech Fee Committee, which recommends funding.

The department relies on an annual Tech Fee fund to acquire, operate, and maintain digital equipment used by students and faculty. Major equipment expenses, greater than $50k, are supported by capital funding applications to the college. Both revenue streams advance or maintain core functions of the department and are subject to review by senior administrators with a consequent timeline for approval. Faculty make applications to both funds to advance their digital specialties or research involving software and hardware. They are encouraged to pursue grant funding as these monies accelerate the timeline for acquiring specialized equipment and/or staffing for implementation. The NSF ATE grant represents an example of this one-time enhancement to the core program. Grant funding is recognized as supplemental rather than essential to the regular advancement of technology and instruction within the department.

The Department of Architectural Technology continues to seek support outside of the college and the university. The department has pursued a larger visibility and professional community engagement through several ongoing initiatives, including hosting symposia, organizing student exhibitions at Borough Hall, hosting continuing education courses, inviting guest lecturers and jurors, and publishing and distributing our departmental journal, TECHNE. Our advisory board continues to offer the department important feedback and support continues from local, national, and international architects, engineers, and academics. We are currently in the process of

reconstituting our advisory board, targeting members that can continue to advise but also raise additional funds and contribute resources to the department.

While the college has a formal alumni association, the department seeks to directly track our alumni. The department is building an alumni directory, using social media to communicate and track alumni, and administering surveys to better understand how our graduates are performing in traditional and nontraditional career paths. These efforts will continue and become more robust over the course of our candidacy, to build a better feedback loop for curriculum development and a database to track and analyze the performance of our graduates.

The college provides support for students and faculty by providing or facilitating scholarship, fellowship, and grant funding.

STUDENT SUPPORT:

- Office of Scholarships & Residency Services: The college provides scholarships and grants for eligible students based on academic merit and/or financial need. The college's Office of Scholarships & Residency Services provides a list of scholarships and grants available to students and the process and guidance to apply. The department has now established the Selldorf Architects Scholarship for architecture students. This scholarship provides up to one year of tuition for a selected student. The department's scholarship committee is working on a "Arch Tech Laptop Fund" to support students on the purchase of a laptop for college use. This fund is currently sponsored by contributions from CWB Architects.

- Emerging Scholars Program: Provides training and a stipend to students who conduct research with a faculty advisor.

FACULTY SUPPORT

- New Faculty Release Time: All new full-time faculty are granted 24 hours of release time, to be used periodically throughout the first 5 years on the faculty. This time facilitates professional development and scholarly activity as the new faculty member works towards tenure and promotion.

- Office of Sponsored Programs: Provides support for grant applications. The office maintains a rich website providing guidance on potential funding sources, grant writing, and the application process within the college. The office also hosts periodic workshops on grant writing.

- CUNY Internal Funding: The university provides faculty grants that support university initiatives as well as faculty research, including Interdisciplinary Research, Undergraduate Research (Research in the Classroom), and Faculty Travel for Research.

- PSC-CUNY Research Award Program: The Professional Staff Congress and the University use this funding to "support activities in the creative arts and all academic relevant research." This funding also supports curriculum development and improvement in teaching.

- Faculty Commons: Faculty Commons adopts a programmatic approach to professional development and operates as a faculty resource and think tank where members collaborate on a variety of projects to shape curriculum, pedagogy, and assessment. In accordance with the College goals and strategic plan and with support from CUNY, the Office of the Provost, the College Council and the Professional Development Advisory Council, Faculty Commons strives to improve and promote the quality and excellence of faculty at New York City College of Technology.

Descriptions of the expense and revenue categories over which the program has either control or influence:

Financial Resources	2020	2021	2022
Instruction (FT + PT)	$2,269,417	$3,024,171	$3,449,633
Capital	$0	$0	$0
Overhead (Tech fee, OTPS, ProfTech)	$50,548	$3,057	$79,518
Special Laptop Purchase			$110,000
Revenue from all sources	$2,319,965	$3,027,228	$3,639,151
Enrollment	2020	2021	2022
AAS	170	163	155
Btech	514	486	544
BArch	15	84	64
	Fall AIRE data	Fall Aire data	from 9/13CBIL

Description of the scholarship, fellowship, and grant funds available for students and faculty:

Faculty

- Faculty fellowship leave available at 80% salary (every 7 years)
- PSC CUNY travel funds: $500 - $1,000
- PSC CUNY Research Award Program: $3,500 – $12,000 annually
- Professional Development Advisory Council (PDAC): $500 - $1000
- GRTI (Graduate Research Technology Initiative: $2,500 - $ 5,000
- Emerging Scholars Stipends for faculty: $1,000

Students:

- Departmental scholarships:
  - Annual Selldorf Scholarship: $7,000
  - Annual Laptop Grants: 3 @ $1,500
- LSAMP Louis Stokes Alliance for Minority Participation (NSF): $500
- Undergraduate Research Program: Honors & Emerging Scholars student stipends: $500
- Undergraduate Research Program: CUNY Research Scholars Program: $5,000 annually
- Petrie student emergency funds: variable
- Financial aid and federal work study awards: variable based on need

Upcoming Changes

- There are no immediate changes to enrollment anticipated.
- There are no changes planned for any pending reductions or increases in funding.
- There are no changes planned in funding models for faculty compensation, instruction, overhead, or facilities since the last visit.

NAAB

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.

Program Response:

CUNY's library system is a federation of 28 libraries and the CUNY Central Office of Library Services (OLS), which supports the university's libraries so that they may better serve students and faculty. At each college, the library plays a major role in supporting academic programs, teaching, and learning, and facilitating the curricular and research activities of faculty and students.

CUNY faculty and students may use and borrow materials from any of the University's libraries regardless of their college affiliation. CUNY's libraries also lend devices, such as laptops, calculators, and digital cameras, to support student work.

The Ursula C. Schwerin Library at New York City College of Technology is integral to the educational mission of the college, and fosters connections with and supports students, faculty, and staff in their academic pursuits. It is located on 300 Jay Street, a short 5-minute walk from Voorhees Hall on 186 Jay Street, where Architectural Technology courses are held and where academic departments in the School of Technology and Design are housed.

Library faculty and staff are committed to student success as we implement and acquire those services and resources that will have the greatest positive impact on the diverse City Tech community. The library offers physical and online access to academic resources, information technology, and study space. Our collections provide students with opportunities for intellectual exploration, and library faculty empower students to find and critically evaluate information and its uses. As members of an academic department in the college, library faculty research, innovate, and lead on issues in library and information studies, scholarly communications, instructional technology, pedagogy, and higher education.

The Ursula C. Schwerin Library is home to a range of resources directly related to Architecture including the Multimedia Center as well as access to: Applied Science and Technology Source, Art Full Text: Wilson, Art Museum Image Gallery, ARTstor, Avery Index to Architectural Periodicals, Bibliography of the History of Art, ebray, GreenFILE, Humanities Source, JSTOR journals, Material ConneXion, Oxford Art Online, Oxford Reference and SpringerLink Ebooks. Additionally, the department maintains a collection of books, reference materials, materials samples and product resources for use by faculty and students.

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.

Program Response:

All academic departments at the New York City College of Technology have a professional librarian with disciplinary subject expertise who serves as a designated liaison. The library liaison for the Architectural Technology department consults regularly with Architecture faculty about monograph and media acquisitions and conducts regular outreach to promote library services, programs, and resources. The library Architectural Technology liaison also provides subject specific research instruction (in person and remotely) for the department, creates virtual instructional content to

support student research, and is available for one-on-one research consultations with Architecture students throughout the academic year.

Access

The Ursula Schwerin library at the New York City College of Technology (City Tech) is part of the CUNY consortia library system, comprised on 31 libraries on 25 campuses located in New York City. Enrolled students at City Tech can borrow books from all lending collections across CUNY and have print materials transferred to different campuses. City Tech students have physical access to all libraries, on-site access to e-resources at all campuses, and both on-site and virtual access to City Tech e-resources. Additionally, students can request monographs, book chapters, and articles from external institutions to support their research through the library's Interlibrary Loan service.

Collections (see below)

The library has 2,115 print monographs and 1,497 e-books under LOC classification code NA. We have access to 12 of the fundamental AASL core periodicals as well as a number of recommended and topical journals. The appended table details the extent and format of Architecture collections including monographs, multimedia, and AASL periodicals available at City Tech. Consortia resources available through the CUNY system and historic and visual resource collections available through the New York Public Library supplement these local holdings.

Titles with Classification Code NA

Resource Type	Num of Titles (Active)
Book - Electronic	1,497
Book - Physical	2,115
Journal (Ceased publication) - Electronic	4
Journal (Ceased publication) - Physical	5
Journal - Electronic	21
Journal - Physical	9
Monographic component part - Physical	1
Other Serial (Ceased publication) - Electronic	1
Other Serial (Ceased publication) - Physical	3
Other Serial - Electronic	3
Other Serial - Physical	8
Other material - Electronic	3
Projected medium - Physical	40

Title	ISSN	Holdings	Type
A+U : Architecture & Urbanism = Kenchiku to toshi	0389-9160	Print: no.344 (1999)	Fundamental
Abitare	0001-3218	Print: Bound no. 447(2005:Feb.)-465 (2006:Oct.)	Fundamental
Architect : the magazine of the American Institute of Architects	1935-7001	Electronic: 2007-present Print: Bound: v.95 (2006:Nov.)-v.96 (2007)	Fundamental
l'Architecture d'Aujourd'Hui	0003-8695	Print: (2001) V4. V.7	Fundamental
Architectural Design (AD)	0003-8504	Electronic: 2005; 2001-2021 Print: v.63:pt.9/10 (1993), v.67:no.11/12 (1997:Nov. /Dec.), v.70:no.2-4 (2000), v.72:no. 6 (2002:Nov. /Dec.), v.73:no.1 (2003:Jan./Feb.), v.73:no.5 (2003: Sept./Oct.), v.74:no.4 (2004:July/Aug.), v.75:no.3 (2005:May/June)	Fundamental
Architectural Review	0003-861X	Electronic: 1994-present	Fundamental
El Croquis	0212-5633	Print: v.83, 88-89, 91-93 (2005)	Fundamental
Domus	0012-5377	Print: Bound: no.756 (1994:Jan.)-777 (1995:Dec.); Bound: no. 899 (2007:Jan.) -908 (2007:Nov.)	Fundamental
GA Houses	monographic series	Print: v.48 (Project 1996)	Fundamental
Journal of Architectural Education (JAE)	1046-4883	Electronic: 1984-2014	Fundamental
Journal of Architectural and Planning Research	0738-0895	Electronic: 1984-2018	Fundamental
Landscape Architecture	0023-8031	Print: Bound: v.73 (1983)-v.101 (2011)	Fundamental
Architects' Journal (AJ)	0003-8466	Electronic: 1997-present	Recommended
Dwell	1530-5309	Print: v.16 (2016)- in current Periodicals	Recommended
Energy and Buildings	0378-7788	Electronic: 1995-present	Recommended
Footprint : Delft School of Design Journal	1875-1504	Electronic: 2007-2011	Recommended
Future Anterior: journal of historic preservation history, theory & criticism	1549-9715	Electronic: 2004-present	Recommended
Journal of Interior Design	1071-7641	Electronic: 1997-present	Recommended
Metropolis	0279-4977	Electronic: 2008-present	Recommended

		Print: Bound v.25 (2005:Aug.) - v.28 (2008:Dec.)	
Muqarnas	0732-2992	Electronic: 1993-2008	Recommended
Nexus Network Journal: architecture and mathematics	1590-5896	Electronic: 1999-present	Recommended
Werk, Bauen + Wohnen	0257-9332	Electronic: 1980-present	Recommended
APT Bulletin	0848-8525	Electronic: 1986-present	Topical
ARQ (Chile)	0716-0852	Electronic: 2005-2011	Topical
Arris	1048-5945	Electronic: 2013-2020	Topical
Buildings & Landscapes: Journal of the Vernacular Architecture Forum	1936-0886	Electronic: 2007-present	Topical
Fine Homebuilding	1096-360X	Print: no. 272-288 (2018-2020)	Topical
Garden History	0307-1243	Electronic: 1972-2018	Topical
Home Cultures	1740-6315	Electronic: 2004-2010	Topical
Interior Design	0020-5508	Electronic: 1984-present	Topical
Journal of Architectural Engineering	1076-0431	Electronic: 1995-2014	Topical
JSSAC: Journal of the Society for the Study of Architecture in Canada	1486-0872	Open Access	Topical
Metu Journal of the Faculty of Architecture	0258-5316	Electronic: 2010-present	Topical
Old-House Journal	0094-0178	Electronic: 1975-2019	Topical
Places	0731-0455	Open Access	Topical
Techne (Florence): journal of technology for architecture and environment	2239-0243	Electronic: 2011-present	Topical
Vernacular Architecture	0305-5477	Electronic: 2005-present	Topical
West 86th: a journal of decorative arts, design history, and material culture	2153-5531	Electronic: 2011-present	Topical
Architecture Philosophy	2372-0883	Open Access	Titles to watch

Staff and Support Services

The Ursula Schwerin Library is staffed by 12 full time professional librarians with faculty status,5 part time library professionals, and a team of IT and technical support staff. One full time librarian is the department liaison for the Architecture department and is responsible for purchasing monographs and multimedia in this area, maintaining access to and promoting relevant electronic resources, creating virtual instructional content including tutorials and research guides, conducting information literacy instruction, providing one-on-one reference support to students (in person and remotely), and providing curricular and scholarly publishing support to faculty.

Space and Hours

The library occupies two floors of a building complex. On one level it contains a large open study area with computers, service desks, and periodicals / reserves / reference collections; the upper level contains print lending collections and individual study carrels devoted to silent study as well as 5 group study rooms. There are two adjacent computer labs off of the library. During the academic year, the library is open Monday-Thursday from 9-8pm, and on Fridays and Saturdays

from 9-5pm. During these hours students can get one-on-one research help from a librarian. We also offer 24X7 research support remotely through a consortially staffed chat service.

Disruption of Service
City Tech Librarians are able to support students and faculty remotely should a problem occur that does not allow for physical access to the collection. Most Architecture periodicals in our collection are available electronically and we primarily provide access to visual resources and maps digitally through subscription databases and public library digital collections. During the pandemic, when many of our physical collections were unavailable, we piloted a controlled digital lending program to provide access to canonical digitized books in our collection and offered book chapter scanning services through Interlibrary Loan. During the pandemic we also offered virtual office hours for architecture students and conducted library instruction online in addition to virtual chat reference services.

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.

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.

Program Response:

All NAAB related information can be found here:
http://www.citytech.cuny.edu/architectural/accreditation.aspx

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)

Program Response:

These documents can be found here:
http://www.citytech.cuny.edu/architectural/accreditation.aspx

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.

Program Response:

Links to the resources listed below can be found here:
http://www.citytech.cuny.edu/architectural/accreditation.aspx

NCARB Certification Guidelines
AIAS Studio Culture
Emerging Professional's Companion
National Council of Architectural Registration Boards (NCARB)
American Institute of Architects
American Institute of Architecture Students
Association of Collegiate Schools of Architecture

NAAB

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
j) Statements and/or policies on diversity, equity, and inclusion

Program Response:

Links to the documents listed below can be found here:
http://www.citytech.cuny.edu/architectural/accreditation.aspx

NAAB City Tech 2020, Continuing Candidacy Visiting Team Report (VTR)
NAAB City Tech 2020, Architecture Program Report (APR) Continuation of Candidacy
NAAB 2021, Letter of Continuation of Candidacy
NAAB City Tech 2018 Initial Candidacy Visiting Team Report (VTR)
NAAB City Tech 2017 Architecture Program Report Initial Candidacy (APR)
NAAB 2018, Letter of Initial Candidacy
Statements and/or policies on learning and teaching culture- See Course/ Policy Menu Link
Statements and/or policies on diversity, equity, and inclusion-See Course/ Policy Menu Link

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
b) Admissions requirements; admissions-decisions procedures, including policies and processes for evaluation of transcripts and portfolios (when required); and decisions regarding remediation and advanced standing
c) 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

Program Response:

a) First-year and transfer students must apply to CUNY and be accepted to City Tech prior to applying to the B. Arch program. Once they have been accepted by City Tech students must then complete a supplemental application to apply to the B. Arch program.

    - Link to the City Tech application instructions: https://www.citytech.cuny.edu/admissions/index.aspx#how-to-apply

- Link to the CUNY application form and instructions: https://www.cuny.edu/admissions/undergraduate/apply/cuny-application/

- Link to the B. Arch application form and instructions: https://www.citytech.cuny.edu/architectural/architectural-B. Arch.aspx#

b) Admission requirements and evaluation processes can be found on our website: https://www.citytech.cuny.edu/architectural/architectural-B. Arch.aspx#-

c) A description of the process for evaluating the content of a non-accredited degrees can be found on our website: https://www.citytech.cuny.edu/architectural/architectural-B. Arch.aspx#-

d) Requirements and forms for applying for financial aid and scholarships https://www.citytech.cuny.edu/financial-aid/

e) Explanation of how student diversity goals affect admission procedures https://www.citytech.cuny.edu/catalog/informations.aspx?Cat_ID=1019

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.**Program Response:**

Each college of The City University of New York is required to receive from each admitted student a non-refundable tuition deposit of $100 before the student will be permitted to register. Veterans, Special Programs students (including SEEK) and students whose Free Application for Federal Student Aid (FAFSA) shows an effective family contribution (EFC) of $3,000 or less will be exempt from the deposit requirement.

Resident Students
Full-time matriculated: $3,465 per semester
Part-time matriculated: $305 per credit
All Non-degree: $445 per credit (no limit)
Senior citizen fee: $65 per semester or session

All Non-Resident Students
Full-time matriculated: $620 per credit
Part-time matriculated: $620 per credit
All Non-degree: $915 per credit (no limit)

Complete up to date financial costs can be found at:
http://www.citytech.cuny.edu/admissions/tuition-general.aspx

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.

Program Response:

This information can be found here:
https://www.citytech.cuny.edu/architectural/architectural-B. Arch.aspx

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APPENDIX

Appendix A
Plan for Achieving Initial Accreditation
(documenting the program's complete implementation of the plan)

Appendix B
Steps that may be taken after initial accreditation is received

Appendix C
All previous VTRs

Appendix D
Eligibility memorandum

Appendix E
New York City College of Technology MSCHE Accreditation letter

NAAB

Appendix A

Plan for Achieving Initial Accreditation
(documenting the program's complete implementation of the plan)

a. ***Plan for Securing Resources***

While our department has operated with 700-800 students with our current facilities and full-time and part-time faculty, we will require additional resources to implement the B. Arch program in addition to our current programs. Below we detail our space needs and our plan to add studio and computer lab space and to work with our administration to consolidate faculty offices and gain formal access to a wood shop.

Program Response:

PHYSICAL RESOURCES: We continue to coordinate with the administration on enrollment numbers and space needs to assess the timing for adding studios and lab spaces. Our Facilities Committee documented existing conditions in detail and using projected enrollment for the B. Arch demonstrated the need for additional space clearly to the administration.

While the pandemic caused a pause in several physical plant upgrades, plans are again moving forward. The following are a summary of ongoing activities:

- The college is moving forward in investing $350,000. This funding provided 110 high end laptops and wide screen monitors for the use of our students.

- Fall 2021, two (2) additional classroom spaces (V 205 & 207) were allocated and renovated (1625 sq. ft) to support the B. Arch program. These spaces accommodate 18 students in each room. The two classroom spaces will be divided by an operable partition and is being designed with the assistance of City Tech's audio-visual team and the Chief Technology Officer as a multi-purpose presentation room to accommodate small format classes and larger lecture presentations or panel discussions.

- A dedicated space (V 209) (780 sq ft) is established for a senior (5th year) thesis studio. Students have taken possession of this space and are self-organizing for the production phase of their thesis studio.

- Large-format plotters and scanners were resubmitted to the Capital Projects budget process, but this funding was put on hold during the pandemic. In the Fall of 2022, Dean Shields funded a new departmental plotter as part of a Graduate Research Technology Initiative (GRTI) grant. The plotter will be online before the end of the fall 2022 semester.

- A large bed CNC mill was resubmitted to the Capital Projects budget process. This item was put on hold during the pandemic, and we are still awaiting funding.

- Starting in the Spring of 2022, all faculty were consolidated on the 8th floor (V 817) of the Voorhees building. An open plan faculty space was created from a former classroom by installing new desks, chairs, rolling file cabinets and colorful carpeting. This open plan which follows the original Facilities Committee design supports faculty collaborations and student advisement.

- The Virtual Desktop Infrastructure (VDI) system, proof of concept, was successfully installed in one classroom in the Fall of 2016 and later proved a significant asset during the pandemic. Based on the success of this pilot, an expansion of the VDI has was submitted and as a part

of Capital Funding and in the Fall of 2022 the department was able to implement the more robust and flexible Apporto VDI platform. This cloud-based platform allows for faster user customization and scalability. ARCH 3592 - Introduction to Photo-realistic Rendering and Animation is currently testing the graphic processing limits of this cloud-based infrastructure. This course utilizes several complex software packages. The VDI system enables students to access digital tools from any area outside of the classroom. It can activate campus spaces where students currently gather to work - with a full complement of studio software. It is a component of a forward-looking design studio that is not encumbered by desktop computers and cables.

- WI-FI weak spots have been identified and are being corrected as part of a move towards a virtual desktop infrastructure unencumbered by desktop computing.

- The Voorhees building HVAC plant and boiler were replaced in 2021 enabling better interior environments for classrooms, computer labs, server rooms and faculty office spaces.

- Construction on new bathroom facilities are in progress. The new women's bathrooms came online in the Fall of 2022 and work is in progress to upgrade to the men's facilities and expected to be complete in late 2022.

b. ***Securing Institutional Approvals***

At the date of this writing, we have strong institutional support for our B. Arch application made possible by the President, Provost, and Dean's offices. The college has a clear process for institutional approvals for new degree programs, new courses, and modifications to existing curriculum. Submissions are made to College Council, which assigns submissions to the Curriculum Committee for review. Once the submission is reviewed and adjustments made, it is put up for a vote in the committee to approve to send to the full council, which then reviews, debates, and votes for final approval at the subsequent council meeting.

Program Response:

The five-year B. Arch program has been formally approved by the New York City College of Technology College Council, CUNY Office of Academic Affairs and was registered by the New York State Department of Education on February 14th, 2020. Approval by NYSED further emphasizes the institution's commitment to providing adequate financial and instructional resources to support the program.

c. ***Plan for Recruiting and Retaining Students***

Our plan for retention centers on three key activities: advisement, academic support, and mentoring. The faculty dedicates significant time each semester reviewing students' progress through the curriculum and advising them on courses and workloads to stay on track for their degree program. This is especially important for those students that take courses out of sequence due to work schedules or other factors. Each year we review our advisement strategies and discuss opportunities for improvement.

Our department has made great strides in academic support for our students. First, we have introduced Computer Lab Technicians (CLT)s into our Design and Building Technology Courses as a means to support the software and hardware tools being used in those courses. These CLTs work closely with the teaching faculty to integrate and coordinate skills development into the course. This effort is a core part of our "Digital Spine." Second, CLT staff offer workshops during the week and on weekends that provide students with more intensive assistance in applying these tools to their course work and CLT staff have office hours for one-on-one tutoring, a support mechanism that is popular with the students.

The third key activity that helps us retain our students is mentorship. Both during office hours, during class, and other times outside of class, faculty take time to learn about our students' ambitions and their challenges and their hopes for a career. Our maximum class size of 24 students, with many courses with 18 students or less, allows for a better opportunity to get to know our students as individuals. We recognize that many of our students have not had a personal mentorship experience, and that this activity can play an important role in building our students' confidence and perseverance in pursuit of their goals.

Other activities also aid in our retention efforts, including departmental town hall meetings and new student orientation within our department, and counseling, tutoring, and special support services provided by the college (SEEK, ASAP).

Program Response:

Advisement
A robust Advisement Spine consisting of three formal required advisement sessions has been developed to keep students informed and current about program and career options. In all of the sessions we explain the differences between the B. Tech and B. Arch degrees and their potential eligibility for the new B. Arch degree program. Eligibility requirements, admissions procedures, and the B. Arch curriculum are discussed in group and individual advisement sessions. All full-time faculty participate in advising eligible candidates for the B. Arch program in the third session.

Academic Support
We continue to have Computer Lab Technicians (CLT)s in our design and building technology courses to support the software and hardware tools being used in those courses. Additionally, we have a comprehensive series of workshops and video tutorials to support the software and hardware tools being used in nearly all courses. The workshops are developed with faculty input to integrate and coordinate skills development within the course. The workshops are offered during the week and on weekends to provide students with directed assistance in applying these tools to their course work and are supplemented with one-on-one office hours.

Mentoring
All faculty maintain weekly open office hours to advise and mentor students in the department. In addition to assisting with coursework and curriculum planning, many faculty devote a substantial amount of time to reviewing portfolios, exploring career options, and getting to know our students. We have increased the number of departmental town hall meetings and continue to offer new student orientation within our department, and counseling, tutoring, and special support services provided by the college (SEEK, ASAP).

d. ***Plan for Recruiting Full-Time and Part-Time Faculty***

We have a strong full-time and part-time faculty that serves our 700-800 students in our current programs (20 full-time faculty and 60-70 part-time faculty.) We anticipate a small initial increase of students as we implement the B. Arch degree program. We will be able to operate the B. Arch degree initially with our current faculty numbers, but as we grow the program, we will evaluate our need for additional full-time and part-time faculty to support the increased numbers.

Program Response:

We are maintaining our current faculty capacity and filling course assignments with current full-time or part-time adjunct faculty. In 2020 one faculty member, Professor Agustin Maldonado retired and in the Fall of 2022, Prof. Jieun Yang joined our faculty as a new full time tenure track appointment. As a long time, adjunct, Prof. Yang comes in with an in depth knowledge of our program and our students. We continually re-assess faculty capacity as we prepare for each academic year. Thanks

to the campus' location and improving institutional reputation, the recruitment pool for adjunct instructional positions remains high, offering a wide range of skills and experience from which the department can draw.

e. ***Proposed Date for Enrolling the First Cohort***

The first "eligible" cohort entered as freshman in the Fall 0f 2017 and began the B. Arch program in the Fall of 2020.

Program Response:

Pursuant to NYSED's request, we accept students as first-year, advanced standing students (after completion of the equivalent of 3-years of full-time study), or transfer students. All students start in a uniform curriculum for the first three years, allowing us to maintain the open enrollment culture for our AAS and B. Tech degrees and to provide more students with the opportunity to prepare themselves for consideration into the B. Arch programs. This curriculum follows the SC/PC requirements for the B. Arch degree.

Our first cohort consisted of advanced standing students that were enrolled as freshman in our B. Tech program in Fall 2017 or after. Advanced standing students apply to the B. Arch program in the second semester of their second year. Students accepted into the B. Arch program then start the program in their third year. At the time this report is submitted, we have enrolled two cohorts of advanced standing students. By our Initial Accreditation visit in Fall 2022 we will have enrolled three cohorts of Advanced Standing students.

Since we received NYSED provisional registration in Feb 2020 we have begun to accept first-year and transfer applications for the B. Arch. At the time this report is submitted, we have enrolled one cohort of first-year and transfer students. By our Initial Accreditation visit in Fall 2022 we will have enrolled two cohorts of first-year and transfer students. We only accept applications once a year in February.

f. ***Projected Date for Awarding Degrees***

The first cohort completed all requirements for the B. Arch degree in the Spring 2022.

Program Response:

We are continuing to follow this schedule.

g. ***Plan for Developing and Implementing New Courses/Curriculum***

The department is in progress on the development of the new curriculum for the B. arch degree program.

Program Response:

We have approval from the college for all our curriculum changes for the five years of the B. Arch program. This includes shifting our building technology sequence back one semester, adding credit hours and contact hours to our studio courses, adding the new courses ARCH 1101 Intro to Architecture, ARCH 4781 Structures III, ARCH 4722 History/ Theory I, ARCH 4822 History/ Theory II, ARCH 5112 Architectural Design IX Thesis, and ARCH 5212 Architectural Design X Thesis, and requiring students to take either ARCH 3550 Building Performance Workshop or ARCH 3551 Sustainability History and Theory.

h. ***Plan for External Support***

The Department of Architectural Technology is eager to continue the project of gaining support outside of the college and the university.

Program Response:

The former advisory board has been reconceived to be the "Executive Council on Design Education and Engagement." Members are solicited from a diverse array of the building industry's associated fields and are tasked with building the profile and fundraising arm of the department, increasing experience, exposure and employment opportunities for students. The steering committee works with the executive council to promote relevance to the marketplace through their engagement and support. Current members include a building industry attorney, a windows manufacturing company, and architect from a well-known practice.

We continue to develop relationships with colleges outside of NYC. Input from and exposure to external academic institutions has a particularly high impact on students who infrequently travel outside of the city limits. The Study Abroad program has already achieved initial success in taking students overseas. Funding student travel is a continual challenge and institutions that can host and provide instruction for the students are valuable partners. A positive result of the international partners is an expansion of the camaraderie between students, enhancing their leadership and collaborative skills.

As our program continues to gain increased visibility, we have also established many relationships with notable firms and architectural organizations as described in Part 1 Context and Mission and Section 5.5.3.

i. ***Plan or Provisions in the Event the Program Does Not Achieve Initial Candidacy***

Our department believes we are ready for B. Arch candidacy now and that this is the logical course of action for our students and our program. If, however, we do not achieve initial candidacy this academic year, we will review any feedback we receive from NAAB, analyze the shortcomings of our plan, and begin a revision of our plan for submission the following academic year. As our curriculum changes will already be submitted and likely approved, we will review the date for implementation of the new courses of the AAS curriculum in relation to the delay in NAAB candidacy. We will continue our development of the second curriculum submission, as well as the coordination with our college on additional resources needed when students start to enroll in the B. Arch program.

Program Response:

In 2021 we were granted Continuation of Candidacy and have completed all the work necessary towards achieving initial Accreditation. As we proceed, we are building our knowledge base on the requirements to achieve accreditation and are continuing our research of existing NAAB programs to gain insights into successful operations of an accredited degree program. We will continue to work with NAAB and adjust and address critical issues as needed.

j. ***Plan or Provision in the Event the Program Does Not Achieve Initial Accreditation***

The B. Arch degree program will be our third degree program. Students who graduate with the hope of the B. Arch degree but are not granted the degree if the department fails to achieve initial accreditation, will have several options. First, this cohort of students can apply for any course substitutions necessary to be granted the B. Tech degree through our department. This degree does allow the students to pursue licensure in New York State. To provide an additional course of action for our students, we are currently coordinating articulation agreements with other regional

universities with M. Arch. degree programs. Many of our B. Tech degree graduates are already pursuing M. Arch. degrees around the country based on their strong portfolios and experience in our B. Tech program. If we have these articulation agreements in place prior to the first cohort's graduation date, as we anticipate, this cohort could continue their education towards a professional accredited degree at one of these institutions.

Many of the changes we are implementing are being evaluated for their general benefits to the existing degree programs as well as the benefits for the B. Arch degree. In this way, we can proceed with our pursuit of the B. Arch while also enhancing the AAS and B. TECH degrees. We also continue to seek articulation agreements that will provide our graduates a pathway to a NAAB accredited degree if we are not able to offer one at City Tech.

NAAB

Appendix B

Steps that may be taken after initial accreditation is received

The B. Arch program at City Tech was able to rely on its strong B. Tech program as a steppingstone to make great strides in becoming its own voice in our department. We have spent the last six years developing a robust infrastructure that will enable the B. Arch program to thrive at the college. Over the course of these six years, we were unfortunate in having to develop and organize our program around two different sets of NAAB criteria. While we understand the need for change, this undoubtedly took away time that we would have spent developing what we started for the 2014 Conditions for Accreditation instead of having to re-strategize to meet the requirements of the 2020 Conditions for Accreditation. While we feel we have a strong foundation to build upon we do endeavor to do the following after receiving initial accreditation:

- Program Vision and Agenda: Now that our program is in alignment with the NAAB criteria, we want to elucidate our vision for the future of our program. We have been fully invested in developing a structure for the program and are now eager to plan for its future.

- Growth and Development: Now that the infrastructure is in place to maintain our B. Arch program, we want to do more outreach and marketing to grow the program. With our location, affordable tuition, and accomplished faculty we have the potential to expand our student body and provide an accessible architectural education to a population that might not otherwise have this opportunity.

- Diversify the Faculty: Although our faculty is diverse, we do not match the demographic of our student body. We need to engage new faculty members who are more representative of our students.

- Facilities: We acknowledge that we need more, and better, teaching, learning, support, and student spaces. Given the constraints of being a tuition-funded public college we need to develop a realistic plan to better our facilities for both the faculty and students.

- Relevance: We are part of a college of technology and need to continue to refine and develop our curriculum to sustain relevance in the industry. We need to ensure that both students and faculty stay engaged with current technologies and innovations.

- Articulation Agreements: We need to update existing articulation agreements to ensure students entering the B. Tech program have the relevant preparatory education to be placed into the B. Arch program and establish new articulation agreements to increase the pipeline of potential incoming students and provide opportunities for graduating students.

- Maintain Diversity: We need to continue to monitor our admissions process to ensure we are maintaining the diversity that makes our program unique and essential to the profession.

- First Year Admissions Strategy: We need to improve our first-year admissions criteria. Accepting first-year students was required by the New York State Department of Education. We knew this would be challenging since many students applying to our college are inadequately prepared. We need to rework our articulation agreements with local high schools and develop first- year application criteria that more accurately accepts students with the adequate preparatory education.

- Long-range Planning Needs to be Formalized: Although we have established informal goals and agendas, we need to establish a formal long-range planning strategy to continue to develop and improve our program.

- Internship and Networking Opportunities: With our location in New York City, diverse student body, and connections to the industry we have so many opportunities to strengthen and grow our ties with industry partners. We have made great strides in this arena over the last couple of years. As our reputation has grown, we hope to continue to increase our visibility, make new connections, and foster opportunities for students.

Appendix C

All previous VTRs

New York City College of Technology
City University of New York
Department of Architectural Technology

Initial Candidacy Visiting Team Report

Bachelor of Architecture [160 Semester Credits]

The National Architectural Accrediting Board
February 3-7, 2018

Vision: The NAAB aspires to be the leader in establishing educational quality assurance standards to enhance the value, relevance, and effectiveness of the architectural profession.

Mission: The NAAB develops and maintains a system of accreditation in professional architecture education that is responsive to the needs of society and allows institutions with varying resources and circumstances to evolve according to their individual needs.

Contents

I. Summary of Visit

a. Acknowledgments and Observations

The team wishes to thank City Tech's administration, faculty, staff, and students for their hospitality and assistance during the visit. The self-study (APR) was thorough and well written, the graphics in the team room were helpful, and the course notebooks were well organized. The team appreciates the courtesy, candor, and organization of the university community.

The Department of Architectural Technology promotes a culture of inclusivity. City Tech is on a path to become one of the only public commuter schools with an accredited architecture program. Because of its open access, the college attracts students who enter with widely disparate levels of academic preparation, professional goals, and personal circumstances. The program, with a mission of educating informed and engaged urban citizens, has the potential to significantly contribute to the diversity of architecture and related fields. The team noted an extraordinary richness of ideas emerging from this diverse environment.

The department is prominently located in a City Tech building at the terminus of the Brooklyn and Manhattan bridges, and at the edge of Brooklyn's main commercial and civic district. While the department owns or has access to extraordinary digital fabrication tools, it also has significant needs for adequate studio space and faculty offices as it develops a Bachelor of Architecture.

University, college, and school administrators are committed to the mission, goals, and success of the program. They see architecture as an important addition to the overall mission of City Tech. They are committed to the success of the program as are the faculty and staff.

The students are a collaborative and respectful group. The student body is collegial, supportive, and passionate about their education. Faculty support and cohesiveness was also exceptional. The full-time and part-time faculty are excited about the future of the program and their mission. They felt included in the curriculum planning and interaction with college administration.

b. Conditions Not Achieved (list number and title)

Not Met	Not Yet Met	In Progress	Not Applicable
	II.1.1 (all SPCs) II.4.2	I.2.2 I.2.3	II.4.1 II.4.4 II.4.5 III.1 III.2

II. Progress on the Plan for Achieving Initial Accreditation

The program is following the timetable as identified in the APR-IC. Students have matriculated into the first year of the undergraduate program, and the college has started the approval process for the Bachelor of Architecture. The first B. Arch. students will graduate in 2022. This is in accordance with their plan for initial accreditation.

III. Progress Since the Previous Site Visit

This category is not applicable.

IV. Compliance (or Plans for Compliance) with the 2014 Conditions for Accreditation

PART ONE (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

This part addresses the commitment of the institution, and its faculty, staff, and students to the development and evolution of the program over time.

PART ONE (I): SECTION 1 – IDENTITY AND SELF-ASSESSMENT

I.1.1 History and Mission: The program must describe its history, mission, and culture and how that history, mission, and culture shape the program's pedagogy and development.

- Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that shapes or influences the program.
- The program must describe its active role and relationship within its academic context and university community. This includes the program's benefits to the institutional setting, and how the program as a unit and/or individual faculty members participate in university-wide initiatives and the university's academic plan. This also includes how the program as a unit develops multi-disciplinary relationships and leverages opportunities that are uniquely defined within the university and its local context in the surrounding community.

2018 Analysis/Review:

New York City College of Technology (City Tech) is one of the largest public colleges of technology in New York State. Founded in 1946 as the New York State Institute for Applied Arts and Sciences, City Tech has been a pioneer in technology-based education. In 1953, oversight was transferred from the state to the city of New York, and the institute was renamed New York City Community College. Eleven years later it became a part of the City University of New York (CUNY) system. Another root of City Tech can be traced to 1881 when the Technical Schools of the Metropolitan Museum of Art were renamed the New York Trade School. In 971, these schools, renamed Voorhees, were incorporated into City Tech and continued to offer two-year associate degrees. In 2002 the college was renamed New York City College of Technology to keep pace with its role as a senior college offering four-year programs. In the same year the Department of Architectural Technology was authorized to offer a four-year Bachelor of Technology (BTech) degree.

The mission of NYCCT's Department of Architectural Technology focuses on workplace- oriented curriculum, leading-edge technologies, and student-focused environment, providing opportunities for students to engage in real world community service projects. Given its location in downtown Brooklyn, the program endeavors to use New York City as a laboratory for learning.

I.1.2 Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments, both traditional and non-traditional.

- The program must have adopted a written studio culture policy that also includes a plan for its implementation, including dissemination to all members of the learning community, regular evaluation, and continuous improvement or revision. In addition to the matters identified above, the plan must address the values of time management, general health and well-being, work-school-life balance, and professional conduct.
- The program must describe the ways in which students and faculty are encouraged to learn both inside and outside the classroom through individual and collective learning opportunities that include, but are not limited to, participation in field trips, professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities.

2018 Analysis/Review:

City Tech recognizes the importance of learning culture, while understanding the unique factors that impact that cultural development in an urban commuter technical college. Long commutes, limited contact hours, financial circumstances, family and employment obligations, high student to instructor ratios, and the amount of work that must be executed outside the studio without guidance or feedback combine to create the need for targeted responses.

To that end, the program has undertaken the following initiatives:

- Working with the college to reduce the number of students in each section of studio.
- Consideration of curricular changes that place a high level of importance on building technology as their pedagogical goal of an integrated knowledge-based studio sequence. Finding a balance between flexibility and sequence is the goal in addressing this student population's needs.
- Extend the hours of student access to facilities, since many students have little or no access to hardware or software outside the school.
- While students have found ways to form bonds, activities such as an annual Town Hall, Solar Decathlon participation, and support for several clubs aims to strengthen cohort bond. A new cohort group advisement structure intends to bring cohorts together to share experiences, communicate, and give feedback to the program.
- As of the date of this visit, the program has not begun drafting a Studio Culture Policy.

I.1.3 Social Equity: The program must have a policy on diversity and inclusion that is communicated to current and prospective faculty, students, and staff and is reflected in the distribution of the program's human, physical, and financial resources.

- The program must describe its plan for maintaining or increasing the diversity of its faculty, staff, and students as compared with the diversity of the faculty, staff, and students of the institution during the next two accreditation cycles.
- The program must document that institutional-, college-, or program-level policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other diversity initiatives at the program, college, or institutional level.

***2018 Analysis/Review**:*

The APR identifies diversity as a central asset of the program and culture at City Tech, and it is clearly a strength of the program. The institution is a federally designated Hispanic Serving Institution (HSI). As an open-access institution, City Tech celebrates the ability and historic mission "to offer opportunities for educational advancement to students regardless of financial circumstances or prior academic achievement." The APR describes numerous institution-level programs for student support, including departmental workshops that are coordinated with the program curriculum offerings.

The program's intention is to help as many students as possible reach a level where they become eligible for the B. Arch. degree and to ensure that access to this program does not reduce diversity. The program describes that it will collect and monitor data through annual assessment, review the profile of students who achieve eligibility compared to the profile of entering first-year students, make adjustments to early curriculum and add further support mechanisms to improve access, and will examine changes to the curriculum and degree program specifically for their potential impact on student diversity.

Among the student body at City Tech, 43% were born outside the United States, 62% speak a language other than English at home, 33% list their parents as college graduates, and 58% report household incomes of less than $30,000. According to the Equality of Opportunity Project, City Tech is ranked fifth in the nation on the overall mobility index, where students come from the lowest 40% income brackets, and after education move into the highest 40% income brackets.

Over a ten-year period, it appears that 63% of all graduates in the Department of Architectural Technology have identified as men, with some years at 69% men. While the proportion of women is lower than may be

seen at other programs, it was noted to the team that the cultural backgrounds of the students often do not traditionally support women in the architecture and construction fields, so reaching 30 to almost 40% women is a significant achievement.

Over the past 11 fall enrollment terms, 34% of students have identified as Hispanic/Latino, 21% Black or African American, 15.7% White, 15.6% Asian, and 12.7% as nonresident alien. Graduation data appears to follow similar demographic trends.

The Appointments Committee for teaching candidates follows the required institutional policy for EEO/AA. This document is publicly available for review (https://www.ccny.cuny.edu/affirmativeaction/eeo).

I.1.4 Defining Perspectives: The program must describe how it is responsive to the following perspectives or forces that impact the education and development of professional architects. Each program is expected to address these perspectives consistently and to further identify, as part of its long-range planning activities, how these perspectives will continue to be addressed in the future.

A. Collaboration and Leadership. The program must describe its culture for successful individual and team dynamics, collaborative experiences, and opportunities for leadership roles. Architects serve clients and the public, engage allied disciplines and professional colleagues, and rely on a spectrum of collaborative skills to work successfully across diverse groups and stakeholders.

***2018 Analysis/Review**:*

The Department of Architectural Technology at City Tech has numerous methods of developing collaborative skills and leadership within its diverse student body. Cultural awareness is encouraged through collaborative studios, place-based learning, community partnerships, and research initiatives. In 2014-15, for example, a group of dedicated students under the direction of faculty members participated in the U.S. Department of Energy Solar Decathlon. Students effectively support each other in the classroom and in informal study groups, often in off-campus residences.

B. Design. The program must describe its approach for developing graduates with an understanding of design as a multi-dimensional protocol for both problem resolution and the discovery of new opportunities that will create value. Graduates should be prepared to engage in design activity as a multi-stage process aimed at addressing increasingly complex problems, engaging a diverse constituency, and providing value and an improved future.

***2018 Analysis/Review**:*

The program approaches design through the lenses of building technology, sustainability, and urban environments. The studio sequence is designed to build from fundamental principles through increasing complexity and scale, as related to urban issues. Design projects take advantage of local sites, community-engagement, hands-on experiences, and a connection to practice. The studio culture is centered around place-based learning and collaboration with both the professional and larger urban community.

C. Professional Opportunity. The program must describe its approach for educating students on the breadth of professional opportunity and career paths for architects in both traditional and non-traditional settings, and in local and global communities.

***2018 Analysis/Review**:*

The program sustains a breadth of opportunities for architecture students in many ways. There are regular student visits to offices of leading architects in the region, and workshops with professionals. These opportunities afford both students and practitioners access to each other and illustrate a wide range of career paths for design professionals.

D. Stewardship of the Environment. The program must describe its approach for developing graduates who are prepared to both understand and take responsibility for stewardship of the environment and the natural resources that are significantly compromised by the act of building and by constructed human settlements.

***2018 Analysis/Review**:*

The program has a deep, personal, immediate connection to the perspective of environmental stewardship. From the direct and lasting impact of Superstorm Sandy, the program has evolved a thought-leadership position in the realm of urban resiliency. The program participates in and hosts national programs related to resiliency and the urban environment. The curriculum is developing a sustainability spine for real, action-oriented skills and knowledge, and the program recently placed in the Solar Decathlon. The program notes its dedication and commitment to actively engage the environment and the professional responsibility to it.

E. Community and Social Responsibility. The program must describe its approach for developing graduates who are prepared to be active, engaged citizens that are able to understand what it means to be a professional member of society and to act on that understanding. The social responsibility of architects lies, in part, in the belief that architects can create better places, and that architectural design can create a civilized place by making communities more livable. A program's response to social responsibility must include nurturing a calling to civic engagement to positively influence the development of, conservation of, or changes to the built and natural environment.

***2018 Analysis/Review**:*

City Tech design students engage with local communities in a responsible manner. This helps provide leadership in raising the public discourse about good design. City Tech specifically has a goal of providing quality higher education to underserved groups. The department, in turn, provides access to design education to those who typically are underserved by design professionals.

I.1.5 Long-Range Planning: The program must demonstrate that it has identified multi-year objectives for continuous improvement with a ratified planning document and/or planning process. In addition, the program must demonstrate that data is collected routinely, and from multiple sources, to identify patterns and trends so as to inform its future planning and strategic decision making. The program must describe how planning at the program level is part of larger strategic plans for the unit, college, and university.

***2018 Analysis/Review**:*

The department is founded on the commitment that its students have the necessary skills to satisfy the ever-changing demands of the profession. In addition, a ten-year departmental self-evaluation process reviews and assesses mission, vision, faculty, student population, resources, curriculum, and facilities.

Moving toward accreditation, the program recognizes the need and opportunity to address, revisit, and codify its vision and establish new long-term goals, including building a studio culture, strengthening history and theory offerings in response to the diversity of the students, introducing a virtual desktop infrastructure, and establishing articulation agreements with technical high schools and M. Arch. programs. To date, the program has been consumed with accreditation and has not yet initiated work on a long-range plan.

I.1.6 Assessment:

A. Program Self-Assessment Procedures: The program must demonstrate that it regularly assesses the following:

- How well the program is progressing toward its mission and stated objectives.
- Progress against its defined multi-year objectives.
- Progress in addressing deficiencies and causes of concern identified at the time of the last visit.
- Strengths, challenges, and opportunities faced by the program while continuously improving learning opportunities.

The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success.

***2018 Analysis/Review**:*

The program describes itself as having a culture of assessment but recognizes that self-assessment must be broadened and codified so it better serves the development and refinement of curriculum adjustment and teaching methodologies. Both campus-wide and internal program evaluations are taking place covering multiple topics, including general education development, the monitoring of course pass rates, periodic faculty course review, course redesign, critical course assessment, peer review, program outcomes, and outside professional input and review.

B. Curricular Assessment and Development: The program must demonstrate a well-reasoned process for curricular assessment and adjustments, and must identify 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.

***2018 Analysis/Review**:*

The university and department have strong and well-developed assessment processes through curricular evaluations; evaluations by students, faculty members, and alumni; and local professional input. City Tech uses various means to provide student feedback on both courses and faculty. Curriculum committees review all changes and additions to courses and academic programs. The faculty must approve any alterations to existing academic programs.

PART ONE (I): SECTION 2 – RESOURCES

I.2.1 Human Resources and Human Resource Development:

The program must demonstrate that it has appropriate human resources to support student learning and achievement. This includes full- and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff.

- The program must demonstrate that it balances the workloads of all faculty to support a tutorial exchange between the student and the teacher that promotes student achievement.
- The program must demonstrate that an Architect Licensing Advisor (ALA) has been appointed, is trained in the issues of AXP, has regular communication with students, is fulfilling the requirements as outlined in the ALA position description, and regularly attends ALA training and development programs.
- The program must demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement.
- The program must describe the support services available to students in the program, including, but not limited to, academic and personal advising, career guidance, and internship or job placement.

[X] Demonstrated

2018 Team Assessment: City Tech has about 20 full-time faculty members in the Department of Architectural Technology. All are registered in the United States or other countries. All have advanced degrees. The part-time faculty includes 60 adjuncts who come from public or private practices. Professional development for faculty and staff is provided by the Faculty Commons, which helps with pedagogy and scholarship, grant writing and applications, and research support. The Office of Faculty and Staff Relations offers workshops on topics ranging from compliance courses to enhancement of administrative skills. Many of the faculty are engaged with publications, conferences, and other activities focused on research, scholarship, and teaching. New faculty are given course release over the first five years for research, and the faculty noted that time and support for research are strong. Funding for presenting research and other activities is a challenge, and understanding by the institution and college of the nature of scholarly research in the practice of architecture is an ongoing conversation.

The program has an Architect Licensing Advisor who is in regular communication with students and attends training and development programs.

I.2.2 Physical Resources: The program must describe the physical resources available and how they support the pedagogical approach and student achievement.

Physical resources include, but are not limited to, the following:

- Space to support and encourage studio-based learning.
- Space to support and encourage didactic and interactive learning, including labs, shops, and equipment.
- Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.
- Information resources to support all learning formats and pedagogies in use by the program.

If the program's pedagogy does not require some or all of the above physical resources, for example, if online course delivery is employed to complement or supplement onsite learning, then the program must describe the effect (if any) that online, onsite, or hybrid formats have on digital and physical resources.

[X] In Progress

2018 Team Assessment: Voorhees Hall is one of three buildings which compose City Tech. Voorhees is home to the nine departments of the School of Technology and Design; Architectural Technology is housed

on the eighth floor, with some supplemental space on the first, second, and third floors for faculty office space and shared classrooms/labs.

Physical space is perhaps the most notable challenge for the program, and appears to be the biggest concern of the students; conversely, the available equipment for interactive learning is well established, drawing from the program's technology-based pedagogical roots (and supported by grant-funding and the college's technology fund). To integrate the pedagogical approach for a B. Arch. program, space to support and encourage studio-based learning is an area of focus for the program. The APR describes studio space as the most critical typology, and has identified the need for four new studios and a new computer lab and wood shop to support the B. Arch. program. Previous reports indicated that two additional studios might come online in fall 2017, with the other two needed by 2019; however, it does not appear that this renovation work is yet underway.

Some studio courses are currently making do with adapting spaces that are not properly set up for studio activities—predominantly computer labs. Several labs are set-up as hybrid studios with drafting tables and computers, some with space for lectures. Lecture courses are typically delivered in the lab or hybrid lab-studio spaces. All studio work is done with "hot desks," and the workshop is the only place for students to do "messy" work, such as cutting and gluing, since other studios are clean spaces with computers. The workshop is not large enough for all the students in the program to work, so certain times, like finals, are difficult to manage. There are some limited storage solutions for student work, but it generally appears to be a challenge for students to have dedicated space for nondigital work and materials. Since students have long commutes (often two hours or more), it is very difficult for them to transport models and materials back and forth between home and school.

The program is examining the possibility of B. Arch. students having assigned studio desks in the final year or two of study, if possible, but the limitations of space in the urban environment are a concern.

Faculty office space is also identified as a target need for improvement, since faculty are currently spread across several floors and locations; many faculty share small offices or i open cubicles, which do not offer any privacy for work or advising. It does not appear that the physical spaces are fully supporting the full range of faculty roles and responsibilities.

The program intends to form a departmental facilities team to study long-term space needs and work with the institution to implement a plan. The newest building on the City Tech campus, a health sciences building, is opening soon and will relieve some space pressures for the department. The administration is currently replanning the third floor of Voorhees Hall, and the department is working closely to coordinate specific program requirements for new studio and lab space.

An overall challenge for students and faculty is that the building hours are limited, with no access available after hours. Since the building is staffed with security guards when open, it has been challenging to extend the hours of access (currently open until 10pm on weeknights, and 5pm on weekends) to help meet the variety of schedules that working students keep. The students cite 24-hour access as one of their biggest needs. Students currently find other places to work when the building closes, such as other CUNY libraries, or collectively at their homes.

As noted in I.2.3 Financial Resources, the program has a funding source to support equipment, and the students and faculty have access to multiple printing, plotting, scanning, laser cutting, 3D printing, vacuum-forming, CNC routing, and other fabrication facilities. There are three computer labs for open access/teaching, plus four hybrid studios with computers.

The program shares use of a wood shop as well as a large lecture hall and small classrooms with other departments in the school. The shared shop spaces do not currently provide the desired access to class time or access outside class times.

Non-programmed space for student interaction is provided on the second floor, in the student lounge/cafeteria shared by the nine departments in the School of Technology and Design.

The school's physical resources are described in the APR, pages 38-41. In addition, the team was afforded a guided tour and independent access to all spaces. The approach to physical resources was a significant

topic of conversation in the meetings with the dean, provost, president, faculty, and students. The program is working hard to adapt the space available to the teaching methodologies, and to integrate space for pinups and review throughout the eighth floor.

I.2.3 Financial Resources: The program must demonstrate that it has appropriate financial resources to support student learning and achievement.

[X] In Progress

2018 Team Assessment: The department appears to be funded for current needs. The department does not appear to have a flexible operating budget that gives the chair discretion to support special projects. The budget for the university is appropriated by the state and city. The state of New York is the principal funding source of the university, financing 46% of the operating budget. Tuition revenue, is the second largest source of funding, comprising 44% of the operating budget. The city of New York finances the remaining 10% of the budget. The department relies on an annual Tech Fee fund to acquire, operate, and maintain digital equipment used by students and faculty.

I.2.4 Information Resources: The program must demonstrate that all students, faculty, and staff have convenient, equitable access to literature and information, as well as appropriate visual and digital resources that support professional education in the field of architecture.

Further, the program must demonstrate that all students, faculty, and staff have access to architectural librarians and visual-resource professionals who provide information services that teach and develop the research, evaluative, and critical-thinking skills necessary for professional practice and lifelong learning.

[X] Demonstrated

2018 Team Assessment: While a small collection of quick-reference materials is kept in the faculty conference room of the Architectural Technology area, the primary location for library access is at the college's library less than a half a mile away—about a 10-minute walk. An instructional librarian serves as the liaison to architecture, and has been working closely with faculty to develop and evolve collections, especially related to the B. Arch. curriculum modifications and NAAB SPC. The librarian also supports teaching research methodologies as part of the architecture course work.

Students and faculty have access to the entire CUNY library system—a federation of 28 libraries—and can use those resources on-site at any of the library locations or request through interlibrary loan. The CUNY libraries also lend devices, such as laptops, calculators, and digital cameras, to support student work. Other library resources in the area, such as the New York Public Library, are extensive.

The college is pursuing participation in Open Educational Resources (OER) in recognition of the challenges its student body faces through the burden of textbook costs and access. A budget of $3,000 annually is currently allocated for adding to the architecture collection at the college's main library.

The library is open 8:30am-10:30pm M-Th, 8:00am-7:00pm on Friday, 9:00am-5:00pm on Saturday, and is closed on Sundays.

The team found evidence through a guided tour of the library with the architecture library liaison.

I.2.5 Administrative Structure and Governance:

- **Administrative Structure:** The program must describe its administrative structure and identify key personnel within the context of the program and the school, college, and institution.
- **Governance:** The program must describe the role of faculty, staff, and students in both program and institutional governance structures. The program must describe the relationship of these structures to the governance structures of the academic unit and the institution.

[X] Demonstrated

***2018 Team Assessment*:** City Tech provided the organizational structure of the college and the program in the APR, including the identification of key personnel. The chairperson, elected by the faculty, provides the leadership for the Department of Architectural Technology, serving a three-year term. The chairperson

reports directly to the dean of the School of Technology and Design, who presides over the nine departments of the school. The dean, along with the other two deans, reports to the provost and vice president for academic affairs. The administrative structure is described on the college website http://www.citytech.cuny.edu/about-us/leadership.aspx.

The college is governed by the Plan of Governance for New York City College of Technology, adopted by the college in 2010 and by CUNY Board of Trustees in 2013. The document provides the structure for the College Council, which implements the concept of shared governance. The council is composed of faculty, staff, administrators, and students. The plan can be found at http://www.citytech.cuny.edu/ofsr/docs/policies/governancePlan.pdf.

CONDITIONS FOR ACCREDITATION

PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

This part has four sections that address the following:

- **STUDENT PERFORMANCE.** This section includes the Student Performance Criteria (SPC). Programs must demonstrate that graduates are learning at the level of achievement defined for each of the SPC listed in this section. Compliance will be evaluated through the review of student work.
- **CURRICULAR FRAMEWORK.** This section addresses the program and institution relative to regional accreditation, degree nomenclature, credit hour requirements, general education, and access to optional studies.
- **EVALUATION OF PREPARATORY EDUCATION.** The NAAB recognizes that students entering an accredited program from a preprofessional program and those entering an accredited program from a non-preprofessional degree program have different needs, aptitudes, and knowledge bases. In this section, programs will be required to demonstrate the process by which incoming students are evaluated and to document that the SPC expected to have been met in educational experiences in non-accredited programs have indeed been met.
- **PUBLIC INFORMATION.** The NAAB expects accredited degree programs to provide information to the public regarding accreditation activities and the relationship between the program and the NAAB, admissions and advising, and career information, as well as accurate public information concerning the accredited and non-accredited architecture programs.

Programs demonstrate their compliance with Part Two in four ways:

- A narrative report that briefly responds to each request to “describe, document, or demonstrate.”
- A review of evidence and artifacts by the visiting team, as well as through interviews and observations conducted during the visit.
- A review of student work that demonstrates student achievement of the SPC at the required level of learning.
- A review of websites, links, and other materials.

PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

PART TWO (II): SECTION 1 – STUDENT PERFORMANCE – EDUCATIONAL REALMS AND STUDENT PERFORMANCE CRITERIA

II.1.1 Student Performance Criteria: The SPC are organized into realms to more easily understand the relationships between individual criteria.

Realm A: Critical Thinking and Representation: Graduates from NAAB-accredited programs must be able to build abstract relationships and understand the impact of ideas based on the research and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. This includes using a diverse range of media to think about and convey architectural ideas, including writing, investigative skills, speaking, drawing, and model making.

Student learning aspirations for this realm include:

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Assessing evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

A.1 **Professional Communication Skills:** *Ability* to write and speak effectively and use appropriate representational media both with peers and with the general public.

[X] Not Yet Met

2018 Team Assessment: ARCH 5212 (Studio X) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 10 during the fifth year. This would be the spring of 2022 for the first cohort.

A.2 **Design Thinking Skills:** *Ability* to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

[X] Not Yet Met

2018 Team Assessment: ARCH 3512 (Arch Design V) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 5 during the third year. This would be the fall of 2019 for the first cohort.

A.3 **Investigative Skills:** *Ability* to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

[X] Not Yet Met

2018 Team Assessment: ARCH 4812 (Arch Design VIII) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 8 during the fourth year. This would be the spring of 2021 for the first cohort.

A.4 **Architectural Design Skills:** *Ability* to effectively use basic formal, organizational, and environmental principles and the capacity of each to inform two- and three-dimensional design.

[X] Not Yet Met

2018 Team Assessment: ARCH 5212 (Studio X) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 10 during the fifth year. This would be the spring of 2022 for the first cohort.

A.5 **Ordering Systems:** *Ability* to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

[X] Not Yet Met

2018 Team Assessment: ARCH 1212 (Foundations II) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 2 during the first year. This course is currently underway.

A.6 **Use of Precedents:** *Ability* to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices regarding the incorporation of such principles into architecture and urban design projects.

[X] Not Yet Met

2018 Team Assessment: ARCH 4712 (Arch Design VI) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 7 during the fourth year. This would be the fall of 2020 for the first cohort.

A.7 **History and Culture:** *Understanding* of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, and technological factors.

[X] Not Yet Met

2018 Team Assessment: ARCH 4722 (History/Theory) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 7 during the fourth year. This would be the fall of 2020 for the first cohort.

A.8 **Cultural Diversity and Social Equity:** *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 buildings and structures.

[X] Not Yet Met

2018 Team Assessment: ARCH 4712 (Arch Design VI) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 7 during the fourth year. This would be the fall of 2020 for the first cohort.

Realm A. General Team Commentary: The team found that A.1 through A.8 in this realm are Not Yet Met. The program has not yet delivered the B. Arch. course(s) in which SPC are expected to be met at this time. The first cohort of students started the 5-year program in fall 2017. The primary source of evidence of accomplishment at the prescribed level is expected to be found in student work in the final three years of the B. Arch.

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. Additionally, the impact of such decisions on the environment must be well considered.

Student learning aspirations for this realm include:

- Creating building designs with well-integrated systems.
- Comprehending constructability.
- Integrating the principles of environmental stewardship.

- Conveying technical information accurately.

B.1 **Pre-Design:** *Ability* to prepare a comprehensive program for an architectural project, which must include 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.

[X] Not Yet Met

2018 Team Assessment: ARCH 5112 (Arch. Design IX) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 9 during the fifth year. This would be the fall of 2021 for the first cohort.

B.2 **Site Design:** *Ability* to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation in the development of a project design.

[X] Not Yet Met

2018 Team Assessment: ARCH 3612 (Arch. Design VI) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 6 during the third year. This would be the spring of 2020 for the first cohort.

B.3 **Codes and Regulations:** *Ability* to design sites, facilities, and systems consistent with the principles of life-safety standards, accessibility standards, and other codes and regulations.

[X] Not Yet Met

2018 Team Assessment: ARCH 3612 (Arch. Design VI) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 6 during the third year. This would be the spring of 2020 for the first cohort.

B.4 **Technical Documentation:** *Ability* to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

[X] Not Yet Met

2018 Team Assessment: ARCH 3531 (Bldg. Tech. IV) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 5 during the third year. This would be the fall of 2019 for the first cohort.

B.5 **Structural Systems:** *Ability* to demonstrate the basic principles of structural systems and their ability to withstand gravity, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

[X] Not Yet Met

2018 Team Assessment: ARCH 4781 (Structures III) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 7 during the fourth year. This would be the fall of 2020 for the first cohort.

B.6 **Environmental Systems:** *Understanding* of the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

[X] Not Yet Met

2018 Team Assessment: ARCH 4812 (Studio VIII) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 8 during the fourth year. This would be the spring of 2021 for the first cohort.

B.7 **Building Envelope Systems and Assemblies:** *Understanding* of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

[X] Not Yet Met

2018 Team Assessment: ARCH 4812 (Studio VIII) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 8 during the fourth year. This would be the spring of 2021 for the first cohort.

B.8 **Building Materials and Assemblies:** *Understanding* of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse.

[X] Not Yet Met

2018 Team Assessment: ARCH 3531 (Bldg. Tech. IV) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 5 during the third year. This would be the fall of 2019 for the first cohort.

B.9 **Building Service Systems:** *Understanding* of the basic principles and appropriate application and performance of building service systems, including mechanical, plumbing, electrical, communication, vertical transportation security, and fire protection systems.

[X] Not Yet Met

2018 Team Assessment: ARCH 3670 (Bldg. Systems) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 6 during the third year. This would be the spring of 2020 for the first cohort.

B.10 **Financial Considerations:** *Understanding* of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

[X] Not Yet Met

2018 Team Assessment: ARCH 4861 (Professional Practice) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 8 during the fourth year. This would be the spring of 2021 for the first cohort.

Realm B. General Team Commentary: The team found that SPC B.1 through B.10 in this realm are Not Yet Met. The program has not yet delivered the B. Arch. courses in which SPC are expected to be met. The first cohort of students started the 5-year program in fall 2017. The primary source of evidence of accomplishment at the prescribed level is expected to be found in student work in the final three years of the B. Arch.

Several of the courses intended to demonstrate evidence of realm B SPC are currently taught in the BTech program. The syllabi provided for the current course offerings delineate the NAAB SPC learning outcomes and assessment methods. However, student work was not yet available for review.

Realm C: Integrated Architectural Solutions: Graduates from NAAB-accredited programs must be able to synthesize a wide range of variables into an integrated design solution. This realm demonstrates the integrative thinking that shapes complex design and technical solutions.

Student learning aspirations in this realm include:

- Synthesizing variables from diverse and complex systems into an integrated architectural solution.
- Responding to environmental stewardship goals across multiple systems for an integrated solution.
- Evaluating options and reconciling the implications of design decisions across systems and scales.

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

[X] Not Yet Met

2018 Team Assessment: ARCH 5112 (Arch Design IX) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 9 during the fifth year. This would be the fall of 2021 for the first cohort.

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

[X] Not Yet Met

2018 Team Assessment: ARCH 5112 (Arch Design IX) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 9 during the fifth year. This would be the fall of 2021 for the first cohort.

C.3 **Integrative Design:** *Ability* to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

[X] Not Yet Met

2018 Team Assessment:

ARCH 5212 (Studio X) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 10 during the fifth year. This would be the spring of 2022 for the first cohort.

Realm C. General Team Commentary: The SPC of realm C are expected to be demonstrated by the student work in a “capstone” studio. While the team saw evidence of isolated aspects in very early work, the SPC of realm C are Not Yet Met.

Realm D: Professional Practice: Graduates from NAAB-accredited programs must understand business principles for the practice of architecture, including management, advocacy, and acting legally, ethically, and critically for the good of the client, society, and the public.

Student learning aspirations for this realm include:

- Comprehending the business of architecture and construction.
- Discerning the valuable roles and key players in related disciplines.
- Understanding a professional code of ethics, as well as legal and professional responsibilities.

D.1 **Stakeholder Roles in Architecture:** *Understanding* of the relationship between the client, contractor, architect, and other key stakeholders, such as user groups and the community, in the design of the built environment, and understanding the responsibilities of the architect to reconcile the needs of those stakeholders.

[X] Not Yet Met

2018 Team Assessment: ARCH 4861 (Professional Practice) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 8 during the fourth year. This would be the spring of 2021 for the first cohort.

D.2 **Project Management:** *Understanding* of the methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.

[X] Not Yet Met

2018 Team Assessment: ARCH 4861 (Professional Practice) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 8 during the fourth year. This would be the spring of 2021 for the first cohort.

D.3 **Business Practices:** *Understanding* of the basic principles of business practices within the firm, including financial management and business planning, marketing, business organization, and entrepreneurialism.

[X] Not Yet Met

2018 Team Assessment: ARCH 4861 (Professional Practice) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 8 during the fourth year. This would be the spring of 2021 for the first cohort.

D.4 **Legal Responsibilities:** *Understanding* of the architect's responsibility to the public and the client as determined by regulations and legal considerations involving the practice of architecture and professional service contracts.

[X] Not Yet Met

2018 Team Assessment: ARCH 4861 (Professional Practice) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 8 during the fourth year. This would be the spring of 2021 for the first cohort.

D.5 **Professional Ethics:** *Understanding* of the ethical issues involved in the exercise of professional judgment in architectural design and practice, and understanding the role of the AIA Code of Ethics in defining professional conduct.

[X] Not Yet Met

2018 Team Assessment: ARCH 4861 (Professional Practice) is the intended course to demonstrate student achievement at the prescribed level for this criterion. This course is scheduled for semester 8 during the fourth year. This would be the spring of 2021 for the first cohort.

Realm D. General Team Commentary: The team found that criteria D.1 through D.5 in this realm are Not Yet Met. The primary source of evidence of accomplishment at the prescribed level is expected to be found in student work in year 4 of the B. Arch.

ARCH 4861 Professional Practice, which is typically taken the second semester of the fourth year (and is offered in both fall and spring, annually), appears designed to cover the criteria for this realm; however, student work was not yet available for review.

The program is currently teaching ARCH 4861 as part of the BTech program, although it has not yet delivered the course to B. Arch. students. The first cohort of students started the five-year program in fall 2017.

PART TWO (II): SECTION 2 – CURRICULAR FRAMEWORK

II.2.1 Institutional Accreditation:

In order for a professional degree program in architecture to be accredited by the NAAB, the institution must meet one of the following criteria:

1. The institution offering the accredited degree program must be, or be part of, an institution accredited by one of the following U.S. regional institutional accrediting agencies for higher education: the Southern Association of Colleges and Schools (SACS); the Middle States Association of Colleges and Schools (MSACS); the New England Association of Schools and Colleges (NEASC); the North Central Association of Colleges and Schools (NCACS); the Northwest Commission on Colleges and Universities (NWCCU); and the Western Association of Schools and Colleges (WASC).
2. Institutions located outside the U.S. and not accredited by a U.S. regional accrediting agency may request NAAB accreditation of a professional degree program in architecture only with explicit written permission from all applicable national education authorities in that program's country or region. Such agencies must have a system of institutional quality assurance and review. Any institution in this category that is interested in seeking NAAB accreditation of a professional degree program in architecture must contact the NAAB for additional information.

[X] Met

2018 Team Assessment: The APR included evidence that New York City College of Technology (City Tech) is accredited by Middle States Commission on Higher Education.

II.2.2 Professional Degrees and Curriculum: The NAAB accredits the following 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.

The B. Arch., M. Arch., and/or D. Arch. are titles used exclusively with NAAB-accredited professional degree programs.

Any institution that uses the degree title B. Arch., M. Arch., or D. Arch. for a nonaccredited degree program must change the title. Programs must initiate the appropriate institutional processes for changing the titles of these nonaccredited programs by June 30, 2018.

The number of credit hours for each degree is specified in the *NAAB Conditions for Accreditation*. Every accredited program must conform to the minimum credit hour requirements.

[X] Met

2018 Team Assessment: The APR lists the B. Arch. as the accredited degree program with a curriculum comprised of 160 credit hours. The school currently offers 2-year AAS and a 4-year BTech nonprofessional degrees.

PART TWO (II): SECTION 3 – EVALUATION OF PREPARATORY EDUCATION

The program must demonstrate that it has a thorough and equitable process to evaluate the preparatory or preprofessional education of individuals admitted to the NAAB-accredited degree program.

- Programs must document their processes for evaluating a student's prior academic coursework related to satisfying NAAB Student Performance Criteria when a student is admitted to the professional degree program.
- In the event that a program relies on the preparatory educational experience to ensure that admitted students have met certain SPC, the program must demonstrate that it has established standards for ensuring these SPC are met and for determining whether any gaps exist.
- The program must demonstrate that the evaluation of baccalaureate degree or associate degree content is clearly articulated in the admissions process, and that the evaluation process and its implications for the length of a professional degree program can be understood by a candidate prior to accepting the offer of admission. See also, Condition II.4.6.

[X] In Progress

2018 Team Assessment: City Tech assumes that initially all students in the B. Arch. will complete all five years of the program at City Tech. If the program plans to admit transfer students, then it will need to develop a process for evaluating preparatory education.

PART TWO (II): SECTION 4 – PUBLIC INFORMATION

The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the general public. As a result, the following seven conditions require all NAAB-accredited programs to make certain information publicly available online.

II.4.1 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*, Appendix 1, in catalogs and promotional media.

[X] Not Applicable

2018 Team Assessment: While the first cohort enrolled in the fall of 2017, students do not formally enter the B. Arch. program until the fourth year of study. The program has purposefully avoided indicating the potential NAAB-accredited degree in its materials until at least the initial candidacy review. Therefore, the required NAAB language is not currently included on the website or other promotional media. NAAB information does not appear to be included in Student Resources on the program website. The B. Arch. program is not listed among the degree programs on the website.

II.4.2 Access to NAAB Conditions and Procedures:

The program must make the following documents electronically available to all students, faculty, and the public:

The 2014 NAAB Conditions for Accreditation

The Conditions for Accreditation in effect at the time of the last visit (2009 or 2004, depending on the date of the last visit)

The NAAB Procedures for Accreditation (edition currently in effect)

[X] Not Yet Met

2018 Team Assessment: The program has purposefully avoided indicating the potential NAAB-accredited degree in its materials until at least the initial candidacy review.

II.4.3 Access to Career Development Information:

The program must demonstrate that students and graduates have access to career development and placement services that assist them in developing, evaluating, and implementing career, education, and employment plans.

[X] Met

2018 Team Assessment: The department has an advisement center that assists students with career guidance, and a faculty member who serves as job placement coordinator.

II.4.4 Public Access to APRs and VTRs:

In order to promote transparency in the process of accreditation in architecture education, the program is required to make the following documents electronically available to the public:

- All Interim Progress Reports (and narrative Annual Reports submitted 2009-2012).
- All NAAB Responses to Interim Progress Reports (and NAAB Responses to narrative Annual Reports submitted 2009-2012).
- The most recent decision letter from the NAAB.
- The most recent APR.[1]

[1] This is understood to be the APR from the previous visit, not the APR for the visit currently in process.

- The final edition of the most recent Visiting Team Report, including attachments and addenda.

[X] Not Applicable

2018 Team Assessment: This section is not yet applicable.

II.4.5 ARE Pass Rates:

NCARB publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered useful to prospective students as part of their planning for higher/post-secondary education in architecture. Therefore, programs are required to make this information available to current and prospective students and the public by linking their websites to the results.

[X] Not Applicable

2018 Team Assessment: This section is not yet applicable.

II.4.6 Admissions and Advising:

The program must publicly document all policies and procedures that govern how applicants to the accredited program are evaluated for admission. These procedures must include first-time, first-year students as well as transfers within and outside the institution.

This documentation must include the following:

- Application forms and instructions.
- Admissions requirements, admissions decision procedures, including policies and processes for evaluation of transcripts and portfolios (where required), and decisions regarding remediation and advanced standing.
- Forms and process for the evaluation of preprofessional degree content.
- Requirements and forms for applying for financial aid and scholarships.
- Student diversity initiatives.

[X] Met

2018 Team Assessment: Admissions and advising information can be found on the City Tech admissions website.

II.4.7 Student Financial Information:

- The program must demonstrate that students have access to information and advice for making decisions regarding financial aid.
- 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.

[X] Met

2018 Team Assessment: Complete up-to-date financial costs can be found on the City Tech admissions website.

PART THREE (III): ANNUAL AND INTERIM REPORTS

III.1 Annual Statistical Reports: The program is required to submit Annual Statistical Reports in the format required by the *NAAB Procedures for Accreditation*.

The program must certify that all statistical data it submits to the NAAB has been verified by the institution and is consistent with institutional reports to national and regional agencies, including the Integrated Postsecondary Education Data System of the National Center for Education Statistics.

[X] Not Applicable

2018 Team Assessment: Annual Statistical Reports and Interim Program Reports are not required until Initial Candidacy has been approved by the Board of Directors.

III.2 Interim Progress Reports: The program must submit Interim Progress Reports to the NAAB (see Section 11, *NAAB Procedures for Accreditation,* 2012 Edition, Amended).

[X] Not Applicable

2018 Team Assessment: Annual Statistical Reports and Interim Program Reports are not required until Initial Candidacy has been approved by the Board of Directors.

V. Appendices

Appendix 1. Conditions Met with Distinction

2018 Team Assessment: Conditions Met with Distinction is not applicable at this time.

Appendix 2. Team SPC Matrix

The team is required to complete an SPC matrix that identifies the course(s) in which student work demonstrated the program's compliance with Part II, Section 1.

The program is required to provide the team with a blank matrix that identifies courses by number and title on the y axis and the NAAB SPC on the x axis. This matrix is to be completed in Excel and converted to Adobe PDF and then added to the final VTR.

2018 Team Assessment: This section is not applicable. While City Tech provided the team with a matrix and course notebooks, the courses have not been offered yet and student work was not reviewed.

Appendix 3. The Visiting Team

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VI. Report Signatures

Respectfully Submitted,

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Team Chair

Jennifer Charzewski, AIA
Team Member

John Senhauser, FAIA
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NAAB Representative

New York City College of Technology
City University of New York
Department of Architectural Technology

Continuing Candidacy Visiting Team Report

Bachelor of Architecture [160 Semester Credits]

COF EDIT

The National Architectural Accrediting Board
November 1-3, 2020

Vision: The NAAB aspires to be the leader in establishing educational quality assurance standards to enhance the value, relevance, and effectiveness of the architectural profession.

Mission: The NAAB develops and maintains a system of accreditation in professional architecture education that is responsive to the needs of society and allows institutions with varying resources and circumstances to evolve according to their individual needs.

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I. Summary of Visit

a. Acknowledgements and Observations

As a preface to this assessment, the team acknowledges the extraordinary circumstances we currently find ourselves in that largely disrupt direct physical interaction, both among the students, faculty and administration of the program, as well as among the visiting team itself. That said, the team thanks New York City College of Technology (City Tech) and the Department of Architectural Technology for their efforts to mount an entirely virtual team visit, as well as their hospitality in hosting the team, all in the midst of delivering coursework to the student population in a virtual environment. Via a highly detailed APR and well-organized on-line exhibits, we have been able to conduct a full and constructive assessment despite not being physically on-site. In particular, thanks go out to department chair Sanjive Vaidya and B.Arch. program directors Claudia Hernandez and Ting Chin for their work in preparing the visit materials under these less-than-ideal conditions, as well as the staff at NAAB for facilitating the virtual visit logistics.

In both review of the APR and discussions with stakeholders during the visit, the team observed several noteworthy aspects of the program:

- Serving an under-represented population in the profession is a foundational value of the program; this enlarges access to a professional degree, with the potential to increase diversity within the discipline.
- The Department of Architectural Technology has a unique learning culture that places emphasis on a welcoming atmosphere, sense of belonging, and collegiality, all founded on a keen understanding of “diversity” as a core strength of the department.
- The team observed a disconnect between the innate strengths of the learning culture and formal studio culture policies. Students are eager for growth and engagement in the program’s development. The existing framework provides a foundation for robust future development that leverages a student driven methodology.
- Conversations with faculty, staff and students confirmed a strong sense of openness and access to one another. Individual mentorship and advising by faculty enhance student achievement.
- Utilization of the program’s urban setting as a “laboratory for learning” connects students to real-world issues of direct relevance to the student population. Transversely, the program benefits greatly from the engagement of active practitioners who bring applied research and knowledge to the curriculum.
- Issues of studio space, security and physical access highlight the limitations inherent in a commuter school with which the program is grappling. Though not yet fully implemented, Virtual Desktop Infrastructure (VDI) is potentially a significant mechanism to increase access to the program beyond the physical studios’ limitations, and particularly as a creative response to the current pandemic shutdown.
- With its roots in a vocational program, the B.Arch. program has a distinct strength in terms of technical production and preparation; this is well understood at every level of administration (college, school, department, program).
- The school and college see the importance of an accredited degree program and give priority to it along with their other accredited programs leading to licensure. At the same time, the program benefits from the increased cachet of accreditation vis-à-vis other area architecture programs, industry and professional connections.
- The dean, chair and students all expressed an interest in strengthening cross-disciplinary collaboration with the eight additional departments within the School of Technology and Design.
- Integrated coordination between the AAS, B.Tech. and B.Arch. programs (i.e., the “degree ladder”) allows students to move between programs and receive credentials with multiple points of entry and departure. The integral relationship with the B.Tech. program also provides students a unique opportunity to experience synergies between design and technology.
- The program is in a phase of growth – building capacity and resources along the way – which given the limited staff support, demonstrates its commitment towards accreditation.

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b. Conditions Not Achieved (list number and title)

Not Met	Not Yet Met	In Progress	Not Applicable
	SPC A.1, A.3, A.4, A.8, B.1, B.6, B.7, B.10, C.1, C.2, C.3, D.1, D.2, D.3, D.4, D.5	I.1.5 Long-Range Planning I.1.6 Assessment I.2.2 Physical Resources II.3 Evaluation of Preparatory Education SPC A.6, A.7, B.5	II.4.5 ARE Pass Rates III.2 Interim Program Reports

c. Conditions Met with Distinction

B.4 Technical Documentation is met with distinction. Detailed drawings, outline specifications, and visualization of complex building construction elements at the third-year level are to be applauded.

II. Progress on the Plan for Achieving Initial Accreditation

2020 Visiting Team Assessment: The program continues to make progress on its initial 10-point plan for accreditation:

- Plan for Securing Resources: The program's Facilities Committee is documenting existing facilities and enrollment projections in a report to the college administration to better demonstrate and justify the proposed improvements to physical resources (see *Physical Resources* assessment below). Additional financial resources for digital lab technology and VDI are in progress via the established capital funding mechanism (see *Financial Resources* assessment below).
- Securing Institutional Approvals: The B.Arch. program has secured approvals from the NYCCT College Council and CUNY Office of Academic Affairs, as well as the New York State Department of Education (NYSED).
- Plan for Recruiting and Retaining Students: The program continues to refine its retention triad of advisement, academic support and mentorship. It has broadened the advisement process in a more structured format offered each fall (see *Human Resources* and *Access to Career Development Information* assessments below), as well as augmenting the Computer Lab Technicians with more comprehensive workshops to support software/hardware tools as part of the program's "Digital Spine." Enhanced student recruitment for freshman entrance is still a work-in-progress, with current recruitment focused on New York City's Career and Technical Education (CTE) schools.
- Plan for Recruiting Full-Time and Part-Time Faculty: Current levels of full-time and part-time faculty continue to meet the needs of the program, with re-assessment annually in line with projected enrollment (see *Human Resources* assessment below). The pool of potential adjunct faculty, if needed, is high given the school's location in New York City.
- Proposed Date for Enrollment of First Cohort: The department revised its curriculum map so that the first three years of the B.Arch. and B.Tech. programs are now identical. The first cohort of B.Arch. students matriculated in 2017 and are currently in the first semester of their fourth year; they consist entirely of advanced standing students initially enrolled in the AAS or B.Tech. programs. NYSED approval allowed admission of freshman, advanced standing (3 years in the department or equivalent) and transfer students into the B.Arch. program starting with the fall 2020 semester. At present there are not yet any transfer students in the program from other institutions.
- Projected Date for Awarding Degrees: The program is on track to graduate its first cohort in spring 2022.

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- Plan for Developing and Implementing New Courses/Curriculum: The program is on track for all courses and curriculum to be in place to graduate its first cohort and provided to the team full course outlines for review.
- Plan for External Support: The department has re-imagined the previous advisory board as the Executive Council on Design Education and Engagement, consisting of an array of industry and professional leaders to further enhance outside support of the program. The program has also developed relationships with other institutions outside the NYC area to leverage opportunities for more diverse student engagement.
- Plan or Provisions in the Event the Program Does Not Achieve Initial Candidacy: The program achieved Initial Candidacy in 2018 and is continuing to work with NAAB and other accredited programs to study and implement best practices with the goal of Initial Accreditation.
- Plan or Provision in the Event the Program Does Not Achieve Initial Accreditation: Curriculum enhancements currently in progress will be to the benefit of both the B.Arch. and B.Tech. programs, which will facilitate graduates to more easily attain the B.Tech. degree if the B.Arch. program does not achieve accreditation. New York does provide a pathway to state licensure for graduates of the B.Tech. program. The department also continues to seek articulation agreements with other accredited M.Arch. programs in the region that would allow students to continue their professional degree at one of those institutions, although they have not yet finalized any as of the time of the visit.

III. Progress Since the Previous Site Visit

2014 Condition II.1.1 Student Performance Criteria A.1 through D.5: The SPC are organized into realms to more easily understand the relationships between individual criteria.

Previous Team Report (2018): All SPC are Not Yet Met. Courses have not been offered at the time of this visit.

2020 Visiting Team Assessment: Please see Part II Section 1 for the team's assessment of Student Performance Criteria.

2014 Condition II.4.2 Access to NAAB Conditions and Procedures:

The program must make the following documents electronically available to all students, faculty, and the public:

The 2014 NAAB Conditions for Accreditation
The Conditions for Accreditation in effect at the time of the last visit (2009 or 2004, depending on the date of the last visit)
The NAAB Procedures for Accreditation (edition currently in effect)

Previous Team Report (2018): The program has purposefully avoided indicating the potential NAAB-accredited degree in its materials until at least the initial candidacy review.

2020 Visiting Team Assessment: Copies of the NAAB Procedures and Conditions are available on the Architectural Technology Department's website: http://www.citytech.cuny.edu/architectural/accreditation.aspx

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IV. Compliance (or Plans for Compliance) with the 2014 Conditions for Accreditation

PART ONE (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

This part addresses the commitment of the institution, and its faculty, staff, and students to the development and evolution of the program over time.

PART ONE (I): SECTION 1 – IDENTITY AND SELF-ASSESSMENT

I.1.1 History and Mission: The program must describe its history, mission, and culture and how that history, mission, and culture shape the program's pedagogy and development.

- Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that shapes or influences the program.
- The program must describe its active role and relationship within its academic context and university community. This includes the program's benefits to the institutional setting, and how the program as a unit and/or individual faculty members participate in university-wide initiatives and the university's academic plan. This also includes how the program as a unit develops multi-disciplinary relationships and leverages opportunities that are uniquely defined within the university and its local context in the surrounding community.

[X] Described

2020 Analysis/Review: Through various iterations since its founding in 1946 as a response to the emerging post-war needs of business and industry, New York City College of Technology (City Tech) has become a national model for technology-based education. Bolstered by the 1971 incorporation of the technical/vocational associate degree programs of Voorhees Technical Institute, City Tech is now the largest of CUNY's senior colleges, with a student population of over 17,000. The Department of Architectural Technology established its 4-year B.Tech. program in 2002, notable in that it requires 40% more liberal arts credits than required by the state, emphasizing its commitment to a strong general education foundation alongside specialized technical training. In 2015, the results of a multi-year study of the alignment and trajectory of the B.Tech. program, together with the increasing demand seen in graduates for post-graduate professional education, provided the impetus for creation of the new B.Arch. program currently in candidacy for NAAB accreditation.

As extensively detailed in the APR and discussions during the visit, the mission of both the college and the department focuses on "*providing broad access to high quality technological and professional education for a diverse urban population.*" (APR, p. 4) In pursuance of that, the program emphasizes increased accessibility to an accredited professional architectural degree for a significantly under-served student demographic, with competitive tuition and an open-enrollment policy filling a unique niche among other area programs. As part of a commuter school serving a population coming from varying life situations, the program exploits the context of its urban setting as a "laboratory for learning," including concepts such as place-based learning, as well as taking advantage of professional engagement and partnerships within the community directly impacting student success. With a deep faculty of distinguished professionals and practitioners, the department continues to be a leader in key areas of applied research and policy within the greater New York area, as well as with innovative interdisciplinary offerings and curriculum development engaging other City Tech departments.

I.1.2 Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments, both traditional and non-traditional.

- The program must have adopted a written studio culture policy that also includes a plan for its implementation, including dissemination to all members of the learning community, regular evaluation, and continuous improvement or revision. In addition to the matters identified above, the plan must

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address the values of time management, general health and well-being, work-school-life balance, and professional conduct.

- The program must describe the ways in which students and faculty are encouraged to learn both inside and outside the classroom through individual and collective learning opportunities that include, but are not limited to, participation in field trips, professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities.

[X] Demonstrated

2020 Analysis/Review: The Department of Architectural Technology has a unique learning culture that places emphasis on a welcoming atmosphere, sense of belonging and collegiality. This ethos is strengthened through a nurturing environment that prepares students for advanced education and employment in the architecture, engineering and construction industry with multiple "departure" and "entry" points that maximize success and degree conferral. Furthermore, the department has emphasized student development of academic and professional interests off-campus. The program's location in downtown Brooklyn has allowed students and faculty to foster strong connections in the local community, attending community board meetings, engaging with active neighborhood development projects and participating in timely conversations about the impacts of the built environment. Nascent study abroad and travel opportunities show great promise and excitement from both faculty and students.

Long commutes, family and employment obligations, and financial considerations inform the program's approach to a time management/work-life balance-centric learning culture. A studio culture policy memorializes pillars of diversity, inclusion, constructive feedback, discovering and developing a voice, camaraderie, discussion, debate and optimism. However, the team observed a disconnect between the innate strengths of the learning culture and formal policies; students expressed a lack of knowledge and engagement in the creation of the studio culture policy.

Students are eager to engage with the program's development and yearn for the opportunities that come with an accredited degree. Existing platforms for student participation, such as the Architecture Club, provide a framework to channel energy and expand participation, leveraging a student driven methodology. Comparison and conversation at the student level with peers at other accredited degree programs in the CUNY system and New York City through facilitated discussions by the AIA New York/Center for Architecture and the Architectural League of New York has helped generate this eagerness. At present, active AIAS and NOMAS chapters do not exist but may provide the framework to help further develop engagement.

Conversations with faculty, staff and students confirmed a strong sense of openness and access to one another. Individual mentorship and advising by faculty enhance student achievement. Remote learning has further strengthened the department's culture of learning, creating mutual benefit and camaraderie.

I.1.3 Social Equity: The program must have a policy on diversity and inclusion that is communicated to current and prospective faculty, students, and staff and is reflected in the distribution of the program's human, physical, and financial resources.

- The program must describe its plan for maintaining or increasing the diversity of its faculty, staff, and students as compared with the diversity of the faculty, staff, and students of the institution during the next two accreditation cycles.
- The program must document that institutional-, college-, or program-level policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other diversity initiatives at the program, college, or institutional level.

[X] Demonstrated

2020 Analysis/Review: As a public, open-enrollment, commuter and Hispanic-Serving Institution (HSI), City Tech places great importance on providing affordable access to the profession for a largely under-served urban population. As such, it seeks to fill a distinct niche among the many accredited programs in the New York City

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area. The most recent statistics in the APR note the student population to be over 40% Hispanic/Latino, over 40% non-U.S. born, over half from households earning less than $30k, 25% working >20 hours/week and a large majority receiving need-based financial aid. Gender equity has also progressed since the initial candidacy visit, with women accounting for over 46% of students in 2019.

The program sees diversity as one of its major assets, both in its demographics and notably in the content of its curriculum. The APR describes a number of concrete initiatives the program engages for both facilitating a necessary level of preparation and ensuring a continued level of achievement for its student body. In addition, development of the curriculum takes into account its potential effect on diversity. As noted in the APR p. 19, the program anticipates "*the need to adjust our early curriculum and add further support mechanisms to improve access to the new degree program. A critical long-range goal is to ensure that access to the B.ARCH. program does not reduce diversity, and we will collect and monitor data through annual assessment*."

Faculty appointments strive to mirror the diversity of the student body, and follow the extensive diversity and inclusion policies of the college and CUNY as a whole (which also apply to student admission, services and financial aid), including an updated Affirmative Action Plan and the CUNY Policy on Equal Opportunity and Non-Discrimination. Full-time faculty, however, remain 2/3 male and predominantly white, while over 60% of the large pool of adjunct faculty are male and 75% are white. Though this breakdown is not yet comparable to student diversity, particularly in terms of Hispanic/Latino faculty, the program discussed other avenues that may increase faculty diversity over time, such as recruitment of adjuncts from the diverse pool of recent graduates. Direct action is currently hindered by a CUNY-wide hiring freeze related to the COVID pandemic.

I.1.4 Defining Perspectives: The program must describe how it is responsive to the following perspectives or forces that impact the education and development of professional architects. Each program is expected to address these perspectives consistently and to further identify, as part of its long-range planning activities, how these perspectives will continue to be addressed in the future.

A. Collaboration and Leadership. The program must describe its culture for successful individual and team dynamics, collaborative experiences, and opportunities for leadership roles. Architects serve clients and the public, engage allied disciplines and professional colleagues, and rely on a spectrum of collaborative skills to work successfully across diverse groups and stakeholders.

B. Design. The program must describe its approach for developing graduates with an understanding of design as a multi-dimensional protocol for both problem resolution and the discovery of new opportunities that will create value. Graduates should be prepared to engage in design activity as a multi-stage process aimed at addressing increasingly complex problems, engaging a diverse constituency, and providing value and an improved future.

C. Professional Opportunity. The program must describe its approach for educating students on the breadth of professional opportunity and career paths for architects in both traditional and non-traditional settings, and in local and global communities.

D. Stewardship of the Environment. The program must describe its approach for developing graduates who are prepared to both understand and take responsibility for stewardship of the environment and the natural resources that are significantly compromised by the act of building and by constructed human settlements.

E. Community and Social Responsibility. The program must describe its approach for developing graduates who are prepared to be active, engaged citizens that are able to understand what it means to be a professional member of society and to act on that understanding. The social responsibility of architects lies, in part, in the belief that architects can create better places, and that architectural design can create a civilized place by making communities more livable. A program's response to social responsibility must include nurturing a calling to civic engagement to positively influence the development of, conservation of, or changes to the built and natural environment.

[X] Described

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2020 Analysis/Review: One sign of a healthy and forward-thinking program is not only how it responds to the Defining Perspectives, but also in the degree of integration among the ways it addresses them. As described in both the APR and visit interviews, City Tech demonstrates both qualities.

Using its urban setting as a "laboratory for learning," the program emphasizes placed-based learning in an urban environment through collaborative studios and community engagement. The collaborative nature of the studios provides students with direct experience working integrally with other colleagues and designers, as well as with community stakeholder "clients" as part of a real-world process. Interdisciplinary learning is a significant part of the curriculum, with a requirement for one course co-taught with faculty from arts & sciences, such as the noteworthy Learning Places course, taught in conjunction with library sciences.

The integrated relationship with the B.Tech. program is another example of the blurring of disciplinary lines, exposing students in design studios to "*both the conceptual art of architecture and the science of building*" (APR p. 24), as well as exposure to varied professional paths. The evolution of the program from a technology-based foundation permeates its approach to design, exemplified in initiatives such as the Closing the Loop Project, an interdisciplinary framework encompassing multiple courses in building technology, sustainability and fabrication. In addition to an emphasis on cutting-edge software and digital fabrication technology in the design curriculum, programs such as Emerging Scholars fosters student collaboration with faculty research beyond the design studio.

The inclusion in the curriculum of more liberal arts coursework than required by the state highlights the program's emphasis on developing the analytical and communication skills necessary for successful professional engagement and achievement. As noted in the APR (p. 23), *"[s]upplementing these curriculum-based initiatives are a number of programs in which students develop collaborative and leadership skills to prepare them to enter the professional world."* These range from student organizations such as the Architecture Club, to an ongoing professional relationship with the New York Architectural League, to scholarly/professional opportunities such as the Intersections conference focusing on cutting-edge technologies while fostering relationships with leading professionals in the field. The re-imagined Advisory Board as the Executive Council on Design Education and Engagement, drawing from a broad array of building industry professionals, further supports these varied efforts.

A noteworthy professional focus where City Tech has taken a lead addresses resiliency in urban environments. Most recently spurred by the effects of Superstorm Sandy, which directly affected many students and faculty, urban resiliency has become a focus of faculty applied research and leadership. As noted in the APR (p. 22), "*[research-based] curricula in both the design studios and lab electives are focused on […] sustainability, resiliency, and performative design."* Exemplified in such interdisciplinary endeavors as the Solar Decathlon, among others, the curriculum embraces "*[d]esign that engages building technology, sustainability, and local communities in urban environments."* (APR p. 24)

A significant part of City Tech's mission is to provide greater access to the profession for historically under-served populations, which includes supporting students with "*widely disparate levels of academic preparation, professional goals and personal circumstances.*" (APR p. 17) As such, this student demographic directly feels the impact of environmental design on urban communities, and the program's placed-based collaborative studios directly engage those under-served communities of which the student body has a unique understanding. As noted in the APR (p. 27), "*[t]his awareness is a foundation upon which to build an increasingly broad understanding and dedication to the responsibilities they will take on as professionals."*

I.1.5 Long-Range Planning: The program must demonstrate that it has identified multi-year objectives for continuous improvement with a ratified planning document and/or planning process. In addition, the program must demonstrate that data is collected routinely, and from multiple sources, to identify patterns and trends so as to inform its future planning and strategic decision making. The program must describe how planning at the program level is part of larger strategic plans for the unit, college, and university.

[X] In Progress

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2020 Analysis/Review: The Department has focused significant resources toward initial accreditation and is in the process of strengthening self-initiated Long-Range Planning efforts to better identify multi-year objectives.

Annually, the department chair is responsible for summarizing the department's alignment with broader college initiatives in an annual "Goals and Targets" report. These goals include access, degree completion, career success, knowledge creation and new economic models.

Every ten years, the provost's office undertakes an external review of the department. The most recent review covered the academic years of 2003-2013 and was the genesis for creating a Bachelor of Architecture degree.

Planning objectives to-date have been student-centric, focused on relevant skill building in an ever-changing profession. Course-coordination meetings, super-juries, town halls and targeted lecture content combine to accomplish these objectives. A steering committee, composed of faculty members, has convened to craft and implement a vision for the long-term future of the department. A formal document or process has not yet been ratified.

In tandem with these initiatives, the program has reconstituted the Advisory Board as the Executive Council on Design Education and Engagement to help promote the program. This group is composed of industry professionals that will help elevate the program through fundraising and relevance in the marketplace.

I.1.6 Assessment:

A. Program Self-Assessment Procedures: The program must demonstrate that it regularly assesses the following:

- How well the program is progressing toward its mission and stated objectives.
- Progress against its defined multi-year objectives.
- Progress in addressing deficiencies and causes of concern identified at the time of the last visit.
- Strengths, challenges, and opportunities faced by the program while continuously improving learning opportunities.

The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success.

B. Curricular Assessment and Development: The program must demonstrate a well-reasoned process for curricular assessment and adjustments, and must identify 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.

[X] In Progress

2020 Analysis/Review:

Program Self-Assessment: Program self-assessment was evident in supplemental information that was provided at the time of the team visit. Although not explicitly stated, the self-assessment is being carried out in terms of the department mission that can be found on page 4 of the APR. The Department of Architectural Technology is in the process of implementing growth based on a 2015 program review, which the college requires on a 10-year cycle. The 2015 program review makes an assessment based on the program's mission and objectives. At that time, the department had seen substantial growth in their student body after developing the 4-year B.Tech. degree, which had grown out of the 2-year AAS degree program. The development of the B.Arch. is the result of the department following suggested objectives for growth coming out of that review process. Progress continues to be on track.

Curricular Assessment and Development: The B.Arch. and B.Tech. programs have the same requirements for the first three years of each degree. In the meeting with the faculty, they noted that curricular assessment of the first three years has led to updating some of the courses. This is the first year that the program is teaching

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the B.Arch. fourth year curriculum. Courses are developed according to the curricular plan, and additional classes will be developed and put in place over the next two years. In the APR, the program states that the curriculum will be examined and assessed annually to understand its impact on student diversity and ensure access. The APR notes that a committee assesses program faculty teaching performance yearly to align faculty and course assignments according to their teaching strengths. The APR notes that the department has developed a culture of assessment that needs to be broadened and codified, and notes that they intend to institute this as the B.Arch. program develops. They plan on assessing student reading, development of visual tools and 'whole student' assessment through the use of an e-portfolio.

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PART ONE (I): SECTION 2 – RESOURCES

I.2.1 Human Resources and Human Resource Development:

The program must demonstrate that it has appropriate human resources to support student learning and achievement. This includes full- and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff.

- The program must demonstrate that it balances the workloads of all faculty to support a tutorial exchange between the student and the teacher that promotes student achievement.
- The program must demonstrate that an Architect Licensing Advisor (ALA) has been appointed, is trained in the issues of IDP, has regular communication with students, is fulfilling the requirements as outlined in the ALA position description, and regularly attends ALA training and development programs.
- The program must demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement.
- The program must describe the support services available to students in the program, including, but not limited to, academic and personal advising, career guidance, and internship or job placement.

[X] Demonstrated

2020 Team Assessment: The human resources narrative in the APR, supported by discussions with administrators and faculty during the visit, the NYCCT website and additional materials provided by the program, establish the following:

Faculty assignments support student achievement. Full-time and part-time faculty are assigned to courses that align with their areas of professional expertise. The City Tech Instructional Faculty Handbook states that the normal teaching assignment for full-time faculty is 24 credit hours in an academic year, along with student advisement, committee assignments and other duties assigned by the department chair. All full-time faculty are focused on supporting student achievement in the B.Arch. program. In the meeting with faculty, they noted that their teaching, service and research workloads were balanced. Faculty have access to the college document, Guidelines for Faculty Personnel Process, which outlines personnel processes, faculty appointment and reappointment, and faculty engagement in committees. Faculty have opportunities to develop pedagogy and scholarship through the Faculty Commons, the college's center for teaching, learning and scholarship. Faculty also noted that their research and scholarship activities were well-supported through the school, college and university. In addition, both full-time and part-time faculty engage in professional development related to architecture and allied professions through professional organizations in the city.

The department currently operates with minimal dedicated support staff, relying to a great extent on support staff provided by the school, including an allotment of College Laboratory Technicians (CLTs). School administration acknowledged that anticipated growth of the department may warrant consideration of additional staff in the future as funding allows.

Students have access to academic and professional advising administered at the school and college level. First-time students attend the college's New Student Center prior to attending classes. After that, students are advised by program faculty, with all full-time faculty participating in student advising. Professor Ken

Conzelmann serves as the department's Job Placement Coordinator and maintains a list of contacts. Faculty ties to the design profession often lead to student internships and jobs. Professor Barbara Mishara serves as the Architect Licensing Advisor for the department. As noted in the APR, the college has support mechanisms in place for health and wellbeing related to academic performance and personal counseling, and there is funding available for student financial emergencies. See sections II.4.3 and II.4.6 for additional information on the department's career guidance and advising resources.

I.2.2 Physical Resources: The program must describe the physical resources available and how they support the pedagogical approach and student achievement.

Physical resources include, but are not limited to, the following:

- Space to support and encourage studio-based learning.
- Space to support and encourage didactic and interactive learning, including labs, shops, and equipment.
- Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.
- Information resources to support all learning formats and pedagogies in use by the program.

If the program's pedagogy does not require some or all of the above physical resources, for example, if online course delivery is employed to complement or supplement onsite learning, then the program must describe the effect (if any) that online, onsite, or hybrid formats have on digital and physical resources.

[X] In Progress

2020 Team Assessment: The Department of Architectural Technology is primarily located on the eighth floor of Voorhees Hall. This space has long supported the department's large student body (700-800) and faculty (approximately 81 full- and part-time).

With high utilization rates and limited hours, access to facilities for students and faculty has placed a strain on physical resources. The lack of dedicated storage and studio space places a burden on students to complete most of their work off-campus, heavily depending on space at home and a precarious commute for physical models. The department has developed a plan for enhancements to learning environments across the first, second, third and eighth floors. This includes space reconfiguration and furniture upgrades. A formal timeline for funding and implementation is presently on hold. In conversations with college leadership (president and interim provost), they expressed continued commitment to these capital improvements, with the current delay due to diversion of state and city funding as a result of the pandemic.

Modeling spaces for the creation and exploration of three-dimensional representation reside on the first and third floors of Voorhees Hall, supported by 3D printers, laser cutters, CNC mills, robotic arms and other digital infrastructure. All students are taught to utilize these resources with the support of College Laboratory Technicians (CLT) faculty/staff.

Virtual Desktop Infrastructure (VDI), which enables students to access digital tools, software and computational power from outside the classroom, was on a path for implementation pre-pandemic and has since been partially deployed. This model has allowed the School of Technology and Design, as well as the Department of Architectural Technology, to creatively navigate the limits of physical space and access. Additionally, VDI presents opportunities for students to decrease personal expenses and utilize consolidated computing power for digital creation. Used primarily by freshman at present, this infrastructure shows great promise. The program anticipates that VDI will be expanded in the future with additional capital funding.

I.2.3 Financial Resources: The program must demonstrate that it has appropriate financial resources to support student learning and achievement.

[X] Demonstrated

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2020 Team Assessment: The financial narrative in the APR, supported by discussions with administrators during the visit, establishes that the program has sufficient resources to support faculty endeavors and student achievement. Budgetary funding for the City University of New York (CUNY), of which NYCCT is a part, derives from annual appropriations by the state and city of New York and student tuition. The department, in addition, relies on a student Tech Fee to fund acquisition and maintenance of technology and equipment for both faculty and students, as well as capital funding requests to the college for items >$50k. Funding of planned facilities reconfiguration is separate from the department and dependent on the overall capital projects budget of the college. While initial phases of the project have been queued for approval, the general diversion of state and city funding for pandemic-related virtual infrastructure has largely put plans on hold, including that for the department's VDI expansion. However, the experience gained from the current virtual delivery during the pandemic shutdown has also encouraged efforts to establish cloud-service VDI as a regular capital line item in the budget.

The department also actively promotes and facilitates grant funding as a supplemental income stream to support faculty initiatives and is pursuing active engagement of previously established industry/professional relationships, as well as a reconstituted advisory board to leverage external support for the program.

I.2.4 Information Resources: The program must demonstrate that all students, faculty, and staff have convenient, equitable access to literature and information, as well as appropriate visual and digital resources that support professional education in the field of architecture.

Further, the program must demonstrate that all students, faculty, and staff have access to architectural librarians and visual-resource professionals who provide information services that teach and develop the research, evaluative, and critical-thinking skills necessary for professional practice and lifelong learning.

[X] Demonstrated

2020 Team Assessment: Although the department maintains a small on-site library for access to course textbooks and a limited amount of material/product samples, the primary information resource for the program is the Ursula C. Schwerin Library, located about a 5-10-minute walk across campus from the department's facilities. As the main library for the City Tech campus, the Schwerin Library also provides full access to the other 27 campus libraries in the CUNY system, including access to laptops and equipment as well as full online access and borrowing privileges. As documented in the APR, a full range of print, visual and digital resources to support a professional program are available, including extensive on-line catalog and full-text services.

As with all other academic divisions, the Architectural Technology Department has a dedicated professional librarian liaison with disciplinary expertise. In addition to regular coordination with program faculty for collection acquisition and services, the library liaison "*provides subject specific research instruction (in person and remotely) for the department, creates virtual instructional content to support student research, and is available for one-on-one research consultations with [a]rchitecture students.*" (APR p. 70) As academic faculty, librarians also directly engage in research on information methodology, technology and pedagogy, and have notably collaborated with the department's faculty on the interdisciplinary Learning Places course offering.

I.2.5 Administrative Structure and Governance:

- **Administrative Structure:** The program must describe its administrative structure and identify key personnel within the context of the program and the school, college, and institution.
- **Governance:** The program must describe the role of faculty, staff, and students in both program and institutional governance structures. The program must describe the relationship of these structures to the governance structures of the academic unit and the institution.

[X] Demonstrated

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2020 Team Assessment: Information in the APR, along with additional information on university faculty and governance provided to the team, confirm the administrative structure and governance for the department and programs. The Bachelor of Architecture program is offered alongside the AAS in Architectural Technology and the B.Tech. in Architectural Technology in the Department of Architectural Technology. It is one of nine departments in the School of Technology and Design. The Instructional Staff Handbook notes that the New York City College of Technology has a policy of shared governance, and the College Council is made up of faculty, staff, administrators and students. There is also a university-wide (CUNY) faculty senate. The college is headed by a president (Dr. Russell Hotzler) and provost (Dr. Pamela Brown, interim), and is divided into three schools headed by academic deans. Dean Gerarda Shields heads the School of Technology and Design.

The handbook indicates that department chairs must be tenured faculty members. Department faculty who are eligible to vote (the tenured professoriate along with untenured faculty at multiple ranks who have had a third annual appointment) elect the chair for a three-year term. The chair of the Department of Architectural Technology is Professor Sanjive Vaidya. Two co-directors, Professors Claudia Hernandez and Ting Chin, manage the B.Arch. program. The department has a required Departmental Committee on Appointments, headed by the department chair, that makes recommendations to the College Personnel and Budget Committee on matters related to faculty. The college committee makes recommendations to the institution's Board of Trustees.

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CONDITIONS FOR ACCREDITATION

PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

This part has four sections that address the following:

- **STUDENT PERFORMANCE.** This section includes the Student Performance Criteria (SPC). Programs must demonstrate that graduates are learning at the level of achievement defined for each of the SPC listed in this section. Compliance will be evaluated through the review of student work.
- **CURRICULAR FRAMEWORK.** This section addresses the program and institution relative to regional accreditation, degree nomenclature, credit hour requirements, general education, and access to optional studies.
- **EVALUATION OF PREPARATORY EDUCATION.** The NAAB recognizes that students entering an accredited program from a preprofessional program and those entering an accredited program from a non-preprofessional degree program have different needs, aptitudes, and knowledge bases. In this section, programs will be required to demonstrate the process by which incoming students are evaluated and to document that the SPC expected to have been met in educational experiences in non-accredited programs have indeed been met.
- **PUBLIC INFORMATION.** The NAAB expects accredited degree programs to provide information to the public regarding accreditation activities and the relationship between the program and the NAAB, admissions and advising, and career information, as well as accurate public information concerning the accredited and non-accredited architecture programs.

Programs demonstrate their compliance with Part Two in four ways:

- A narrative report that briefly responds to each request to “describe, document, or demonstrate.”
- A review of evidence and artifacts by the visiting team, as well as through interviews and observations conducted during the visit.
- A review of student work that demonstrates student achievement of the SPC at the required level of learning.
- A review of websites, links, and other materials

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PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

PART TWO (II): SECTION 1 – STUDENT PERFORMANCE – EDUCATIONAL REALMS AND STUDENT PERFORMANCE CRITERIA

II.1.1 Student Performance Criteria: The SPC are organized into realms to more easily understand the relationships between individual criteria.

Realm A: Critical Thinking and Representation: Graduates from NAAB-accredited programs must be able to build abstract relationships and understand the impact of ideas based on the research and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. This includes using a diverse range of media to think about and convey architectural ideas, including writing, investigative skills, speaking, drawing, and model making.

Student learning aspirations for this realm include:

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Assessing evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

A.1 **Professional Communication Skills:** *Ability* to write and speak effectively and use appropriate representational media both with peers and with the general public.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

A.2 **Design Thinking Skills:** *Ability* to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

[X] Met

2020 Team Assessment: The team found comprehensive evidence of student achievement at the prescribed level in student work prepared for ARCH 3512 Design V, as well as evidence of discrete components of the criterion in student work prepared for ARCH 2312 Design III.

A.3 **Investigative Skills:** *Ability* to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

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A.4 **Architectural Design Skills:** *Ability* to effectively use basic formal, organizational, and environmental principles and the capacity of each to inform two- and three-dimensional design.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

A.5 **Ordering Systems:** *Ability* to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

[X] Met

2020 Team Assessment: The team found evidence of student achievement at the prescribed level in student work prepared for ARCH 1112 Design 1.

A.6 **Use of Precedents:** *Ability* to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices regarding the incorporation of such principles into architecture and urban design projects.

[X] In Progress

2020 Team Assessment: The program is currently delivering the courses in which this SPC is expected to be met at the time of initial accreditation, and accordingly, student work is not yet available for evaluation.

A.7 **History and Culture:** *Understanding* of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, and technological factors.

[X] In Progress

2020 Team Assessment: The program is currently delivering the courses in which this SPC is expected to be met at the time of initial accreditation, and accordingly, student work is not yet available for evaluation.

A.8 **Cultural Diversity and Social Equity:** *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 buildings and structures.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

Realm A. General Team Commentary:

The program has not yet delivered coursework in which the majority of the Realm A SPC are expected to be met, so the team cannot yet make a more comprehensive assessment of Critical Thinking and Representation beyond the two SPC noted as currently Met.

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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. Additionally, the impact of such decisions on the environment must be well considered.

Student learning aspirations for this realm include:

- Creating building designs with well-integrated systems.
- Comprehending constructability.
- Integrating the principles of environmental stewardship.
- Conveying technical information accurately.

B.1 **Pre-Design:** *Ability* to prepare a comprehensive program for an architectural project, which must include 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.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

B.2 **Site Design:** *Ability* to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation in the development of a project design.

[X] Met

2020 Team Assessment: The team found evidence of student achievement at the prescribed level in student work prepared for Arch 3612 Design IV, as well as evidence in components of the criterion in student work prepared for Arch 2312 Design III and Arch 1250 Site Planning.

B.3 **Codes and Regulations:** *Ability* to design sites, facilities, and systems consistent with the principles of life-safety standards, accessibility standards, and other codes and regulations.

[X] Met

2020 Team Assessment: The team found evidence of student achievement at the prescribed level in student work prepared for ARCH 3531 Building Tech IV and ARCH 3612 Design VI, as well as ARCH 3512 Design V.

B.4 **Technical Documentation:** *Ability* to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

[X] Met

2020 Team Assessment: The team found evidence of student achievement at the prescribed level in student work prepared for ARCH 3531 Building Tech IV. Detailed drawings, outline specifications, and visualization of complex building construction elements at the third-year level are to be applauded.

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B.5 **Structural Systems:** *Ability* to demonstrate the basic principles of structural systems and their ability to withstand gravity, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

[X] In Progress

2020 Team Assessment: The program is currently delivering the courses in which this SPC is expected to be met at the time of initial accreditation, and accordingly, student work is not yet available for evaluation.

B.6 **Environmental Systems:** *Ability* to demonstrate the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

[X] Not Yet Met

2020 Team Assessment The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

B.7 **Building Envelope Systems and Assemblies:** *Understanding* of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

B.8 **Building Materials and Assemblies:** *Understanding* of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse.

[X] Met

2020 Team Assessment: The team found evidence of student achievement at the prescribed level in student work prepared for ARCH 3531 Building Tech IV as well as in ARCH 1231 Building Tech I and ARCH 2331 Building Tech II.

B.9 **Building Service Systems:** *Understanding* of the basic principles and appropriate application and performance of building service systems, including mechanical, plumbing, electrical, communication, vertical transportation security, and fire protection systems.

[X] Met

2020 Team Assessment: The team found evidence of student achievement at the prescribed level in student work prepared for ARCH 3670 Building Systems as well as in ARCH 3531 Building Tech IV.

B.10 **Financial Considerations:** *Understanding* of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

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Realm B. General Team Commentary:

Coursework is commendable for incorporating meaningful programming and code compliance exercises as an integrated part of the design process in early as well as mid-level studio projects. B.4 Technical Documentation has been met with distinction. Detailed drawings, outline specifications, and visualization of complex building construction elements at the third-year level are to be applauded.

The program has not yet delivered the courses in which SPC B1, B5, B6, B7 and B10 are expected to be met at the time of initial accreditation.

Realm C: Integrated Architectural Solutions: Graduates from NAAB-accredited programs must be able to synthesize a wide range of variables into an integrated design solution. This realm demonstrates the integrative thinking that shapes complex design and technical solutions.

Student learning aspirations in this realm include:

- Synthesizing variables from diverse and complex systems into an integrated architectural solution.
- Responding to environmental stewardship goals across multiple systems for an integrated solution.
- Evaluating options and reconciling the implications of design decisions across systems and scales.

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

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

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

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

C.3 **Integrative Design:** *Ability* to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

Realm C. General Team Commentary:

The program has not yet delivered the courses in which Realm C SPC are expected to be met at the time of initial accreditation.

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Realm D: Professional Practice: Graduates from NAAB-accredited programs must understand business principles for the practice of architecture, including management, advocacy, and acting legally, ethically, and critically for the good of the client, society, and the public.

Student learning aspirations for this realm include:

- Comprehending the business of architecture and construction.
- Discerning the valuable roles and key players in related disciplines.
- Understanding a professional code of ethics, as well as legal and professional responsibilities.

D.1 **Stakeholder Roles in Architecture:** *Understanding* of the relationship between the client, contractor, architect, and other key stakeholders, such as user groups and the community, in the design of the built environment, and understanding the responsibilities of the architect to reconcile the needs of those stakeholders.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

D.2 **Project Management:** *Understanding* of the methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

D.3 **Business Practices:** *Understanding* of the basic principles of business practices within the firm, including financial management and business planning, marketing, business organization, and entrepreneurialism.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

D.4 **Legal Responsibilities:** *Understanding* of the architect's responsibility to the public and the client as determined by regulations and legal considerations involving the practice of architecture and professional service contracts.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

D.5 **Professional Ethics:** *Understanding* of the ethical issues involved in the exercise of professional judgment in architectural design and practice, and understanding the role of the AIA Code of Ethics in defining professional conduct.

[X] Not Yet Met

2020 Team Assessment: The program has not yet delivered the courses in which this SPC is expected to be met at the time of initial accreditation.

COPEDT

Realm D. General Team Commentary:

The program has not yet delivered the courses in which Realm D SPC are expected to be met at the time of initial accreditation.

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PART TWO (II): SECTION 2 – CURRICULAR FRAMEWORK

II.2.1 Institutional Accreditation:

In order for a professional degree program in architecture to be accredited by the NAAB, the institution must meet one of the following criteria:

1. The institution offering the accredited degree program must be, or be part of, an institution accredited by one of the following U.S. regional institutional accrediting agencies for higher education: the Southern Association of Colleges and Schools (SACS); the Middle States Association of Colleges and Schools (MSACS); the New England Association of Schools and Colleges (NEASC); the North Central Association of Colleges and Schools (NCACS); the Northwest Commission on Colleges and Universities (NWCCU); and the Western Association of Schools and Colleges (WASC).
2. Institutions located outside the U.S. and not accredited by a U.S. regional accrediting agency may request NAAB accreditation of a professional degree program in architecture only with explicit written permission from all applicable national education authorities in that program's country or region. Such agencies must have a system of institutional quality assurance and review. Any institution in this category that is interested in seeking NAAB accreditation of a professional degree program in architecture must contact the NAAB for additional information.

[X] Met

2020 Team Assessment: The City Tech website contains evidence of regional institutional accreditation. The Middle States Commission on Higher Education reaffirmed accreditation of the New York City College of Technology of the City University of New York in 2018, and the next evaluation is scheduled for 2025-26.

II.2.2 Professional Degrees and Curriculum: The NAAB accredits the following 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.

The B. Arch, M. Arch, and/or D. Arch are titles used exclusively with NAAB-accredited professional degree programs.

Any institution that uses the degree title B. Arch, M. Arch, or D. Arch for a non-accredited degree program must change the title. Programs must initiate the appropriate institutional processes for changing the titles of these non-accredited programs by June 30, 2018.

The number of credit hours for each degree is specified in the *NAAB Conditions for Accreditation*. Every accredited program must conform to the minimum credit hour requirements.

[X] Met

2020 Team Assessment: The program offers 160 total credit hours and a credit distribution that meets the minimum requirements for a Bachelor of Architecture (B.Arch.) degree.

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PART TWO (II): SECTION 3 – EVALUATION OF PREPARATORY EDUCATION

The program must demonstrate that it has a thorough and equitable process to evaluate the preparatory or preprofessional education of individuals admitted to the NAAB-accredited degree program.

- Programs must document their processes for evaluating a student's prior academic coursework related to satisfying NAAB Student Performance Criteria when a student is admitted to the professional degree program.
- In the event that a program relies on the preparatory educational experience to ensure that admitted students have met certain SPC, the program must demonstrate that it has established standards for ensuring these SPC are met and for determining whether any gaps exist.
- The program must demonstrate that the evaluation of baccalaureate degree or associate degree content is clearly articulated in the admissions process, and that the evaluation process and its implications for the length of a professional degree program can be understood by a candidate prior to accepting the offer of admission. See also, Condition II.4.6.

[X] In Progress

2020 Team Assessment: The APR and additional information provided in the virtual team room document evidence of evaluation of preparatory education, although transfer admissions have not yet occurred.

Students are evaluated for admissions at the college level, which has established a minimum standard that all students entering into the Department of Architectural Technology must meet. All prospective students admitted into the department have the opportunity to submit additional requirements to apply for the B.Arch., which are posted on the program website: http://www.citytech.cuny.edu/architectural/architectural-barch.aspx#.

Since the B.Tech. and B.Arch. curricula are the same for the first three years, transfer students and students in the B.Tech. program can be admitted to the B.Arch. program through advanced standing in the spring of their third year. In meetings with the department chair and program directors, they clarified that in spring 2020 the first cohort, a small group of freshmen admitted to the B.Tech. degree program in 2017, submitted materials for admission to the B.Arch. Those who met the requirements are designated as advanced standing students in the B.Arch. program. The requirements for consideration for admission to the B.Arch. through advanced standing are posted on the program website: http://www.citytech.cuny.edu/architectural/architectural-barch.aspx.

The program provided evaluation rubrics and sample evaluation files for both entering freshman and advanced standing students.

In meetings with the chair and program directors, they confirmed that of the B.Arch. SPCs, only one that is satisfied in the first three years of the B.Tech./B.Arch. curriculum (A.5. Ordering Systems) will be evaluated for equivalency for transfer students. Transfer students must satisfy all other SPCs through regularly designated coursework at City Tech. At the time of the visit, the program has not yet admitted any transfer students that have gone through this process.

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PART TWO (II): SECTION 4 – PUBLIC INFORMATION

The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the general public. As a result, the following seven conditions require all NAAB-accredited programs to make certain information publicly available online.

II.4.1 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*, Appendix 1, in catalogs and promotional media.

[X] Met

2020 Team Assessment: The Statement on NAAB Accredited Degrees is located on the program website: http://www.citytech.cuny.edu/architectural/accreditation.aspx.

II.4.2 Access to NAAB Conditions and Procedures:

The program must make the following documents electronically available to all students, faculty, and the public:

The 2014 NAAB Conditions for Accreditation

The Conditions for Accreditation in effect at the time of the last visit (2009 or 2004, depending on the date of the last visit)

The NAAB Procedures for Accreditation (edition currently in effect)

[X] Met

2020 Team Assessment: Copies of the NAAB Procedures and Conditions are available on the Architectural Technology Department's website: http://www.citytech.cuny.edu/architectural/accreditation.aspx.

II.4.3 Access to Career Development Information:

The program must demonstrate that students and graduates have access to career development and placement services that assist them in developing, evaluating, and implementing career, education, and employment plans.

[X] Met

2020 Team Assessment: In addition to access to standard on-line career development resources, the program has a structured schedule of required educational and career advisement in both group and individual sessions starting in the first year of the curriculum and continuing at key milestones thereafter. These sessions cover educational paths and career options for both the architecture and building technology programs, which share coursework in the first three years of both curricula, as well as accommodating the varied schedules of the student population.

II.4.4 Public Access to APRs and VTRs:

In order to promote transparency in the process of accreditation in architecture education, the program is required to make the following documents electronically available to the public:

- All Interim Progress Reports (and narrative Annual Reports submitted 2009-2012).
- All NAAB Responses to Interim Progress Reports (and NAAB Responses to narrative Annual Reports submitted 2009-2012).

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- The most recent decision letter from the NAAB.
- The most recent APR.[1]
- The final edition of the most recent Visiting Team Report, including attachments and addenda.

[X] Met

2020 Team Assessment: Copies of the 2019 Letter of Initial Candidacy, 2017 Architecture Program Report, and 2018 Initial Candidacy Visiting Team report are available on the department's website: http://www.citytech.cuny.edu/ architectural/accreditation.aspx.

II.4.5 ARE Pass Rates:

NCARB publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered useful to prospective students as part of their planning for higher/post-secondary education in architecture. Therefore, programs are required to make this information available to current and prospective students and the public by linking their websites to the results.

[X] Not Applicable

2020 Team Assessment: ARE pass rates are not yet applicable as the program has not yet received initial accreditation.

II.4.6 Admissions and Advising:

The program must publicly document all policies and procedures that govern how applicants to the accredited program are evaluated for admission. These procedures must include first-time, first-year students as well as transfers within and outside the institution.

This documentation must include the following:

- Application forms and instructions.
- Admissions requirements, admissions decision procedures, including policies and processes for evaluation of transcripts and portfolios (where required), and decisions regarding remediation and advanced standing.
- Forms and process for the evaluation of preprofessional degree content.
- Requirements and forms for applying for financial aid and scholarships.
- Student diversity initiatives.

[X] Met

2020 Team Assessment: The college website, the APR and supplementary materials supplied to the visiting team provide evidence related to program admissions and advising. Application forms, instructions and the admissions process are available on the college and department websites. Instructions and a link to the B.Arch. application portal for B.Arch. program evaluation is on the department website (http://www.citytech.cuny.edu/ architectural/architectural-barch.aspx).

First year students apply via the CUNY application. Once accepted to CUNY, students who apply to the B.Arch. program have additional requirements that are assessed by program faculty led by program co-directors. The first three years of the B.Tech. and B.Arch. curricula are the same, so students have the opportunity to also enter the program as advanced standing students prior to their fourth year. Advanced standing students and

[1] This is understood to be the APR from the previous visit, not the APR for the visit currently in process.

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transfer students have specific requirements that are reviewed by program faculty led by program co-directors. Transfer students apply first via the CUNY application, with the same additional requirements as advanced standing students. To date, the program has had freshman and advanced standing applicants but has not yet had transfer applicants. Once students enter the department, they have access to all full-time faculty for advising. Students are required to participate in group and individual advising sessions, and the program has developed a semester-by-semester schedule for advising B.Arch. students through their five years in the program. Advising includes portfolio review in the students' second year, career and graduate school advising in the first semester of the fourth year and the final semester prior to graduation. In meetings with the department chair and program directors, they clarified that freshmen admitted to the department who apply for the B.Arch. but do not meet the requirements receive a letter indicating that they can apply again for the B.Arch. in their third year as advanced standing students. Group advising sessions in the studio courses and other information sessions are provided for these students to prepare their future application for the B.Arch. program. The college provides scholarships and grants to students based on academic merit and/or financial need and also provides a list of scholarships and grants for which students can apply.

The APR indicates that City Tech is a noted leader in diversity of students. As an open access institution, students enter the department with a wide range of academic preparedness. A number of programs are in place to support the diverse student body at City Tech. Support from the college, school and program includes, but is not limited to, counseling and academic support services, peer mentoring for female students, departmental workshops, online tutorials and one-on-one classroom support. The goal of the department is to help as many students as possible become eligible for the B.Arch. program.

II.4.7 Student Financial Information:

- The program must demonstrate that students have access to information and advice for making decisions regarding financial aid.
- 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.

[X] Met

2020 Team Assessment: The APR includes evidence of access to student financial information. The program provided the website link to City Tech financial aid information (http://www.citytech.cuny.edu/admissions/tuition-general.aspx), where students have access to information about the cost of attending the school and the process for applying for financial aid. The program website (http://www.citytech.cuny.edu/architectural/architectural-barch.aspx#) provides general information about approximate additional costs for the college baccalaureate degree programs, alongside information about how to apply to and admissions requirements for the B.Arch. program.

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PART THREE (III): ANNUAL AND INTERIM REPORTS

III.1 Annual Statistical Reports: The program is required to submit Annual Statistical Reports in the format required by the *NAAB Procedures for Accreditation*.

The program must certify that all statistical data it submits to the NAAB has been verified by the institution and is consistent with institutional reports to national and regional agencies, including the Integrated Postsecondary Education Data System of the National Center for Education Statistics.

[X] Met

2020 Team Assessment: The APR included links to the most recent annual reports as well as indication that this statistical data has been verified by the institution per IPEDS/NCES.

III.2 Interim Progress Reports: The program must submit Interim Progress Reports to the NAAB (see Section 11, *NAAB Procedures for Accreditation,* 2012 Edition, Amended).

[X] Not Applicable

2020 Team Assessment: Interim Progress Reports are not yet applicable as the program has not yet received initial accreditation.

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V. Appendices:

Appendix 1. Conditions Met with Distinction

B.4 Technical Documentation is met with distinction. Detailed drawings, outline specifications, and visualization of complex building construction elements at the third-year level are to be applauded.

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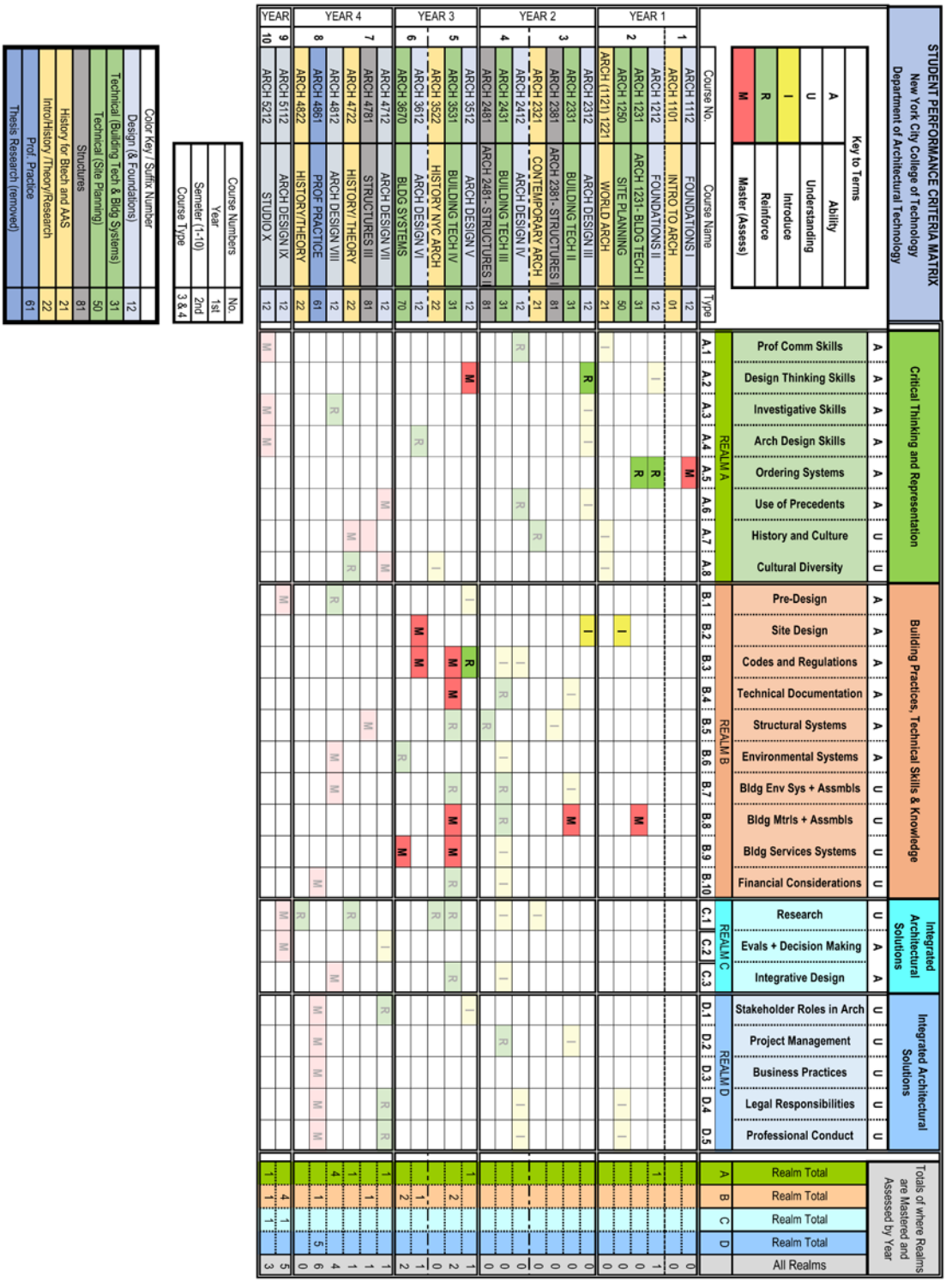
Appendix 2. Team SPC Matrix

The team is required to complete an SPC matrix that identifies the course(s) in which student work demonstrated the program's compliance with Part II, Section 1.



Appendix 3. The Visiting Team

Team Chair, Practitioner
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NAAB Representative
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Associate Director | AIA Board of Directors
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VI. Report Signatures

Respectfully Submitted,

John Edwards
Team Chair

Kate Wingert-Playdon
Team Member

Ryan Gann
Team Member

COF E

Appendix D

Eligibility memorandum

National Architectural Accrediting Board, Inc.

t. 202.783.2007

f. 202.783.2822

e. info@naab.org

w. naab.org

March 13, 2017

Russell K. Hotzler, Ph.D.
President
New York City College of Technology
300 Jay Street, Namm-320
Brooklyn, New York 11201

Dear President Hotzler,

At the February 2017 meeting of the National Architectural Accrediting Board (NAAB), the board reviewed the Application for Candidacy for the New York City College of Technology.

As a result, the proposed professional architecture degree program, the **Bachelor of Architecture,** has been accepted as eligible for candidacy. A visit for initial candidacy has been added to the Visit List for fall 2017. This visit will be conducted under the provisions of the NAAB 2014 Conditions for Accreditation and Section 4 of the *NAAB Procedures for Accreditation, 2015 Edition.*

The Architecture Program Report for Initial Candidacy (APR-IC) is due in the NAAB office 180 days before the date of the visit. The format and content of the APR-IC is described in detail in Sections 2 and 4 of the Procedures and in the Guidelines for Preparing an APR.

The board wishes to express its support for newly-developing programs by encouraging administrators and faculty to take advantage of the resources available within the community of program administrators, department chairs, and deans represented by the members of the Association of Collegiate Schools of Architecture (ACSA). The annual ACSA Administrators Conference and the ACSA Annual Meeting can be sources of rich discussion and advice for emerging programs. Further, the NAAB offers a full range of programs and workshops at both of these conferences that may be of value to the faculty and administrators at the New York City College of Technology.

A letter with the name of the proposed chair for the visit will be forthcoming in late summer. Once the New York City College of Technology approves the chair, you will be able to set the date for the visit.

If the program wishes to postpone the visit for initial candidacy to spring 2018, please submit a request at your earliest convenience.

Sincerely,

Judith Kinnard, FAIA
President

cc: Sanjive Vaidya, Chair ✓
Kevin Hom, FAIA

Enc: Final Visiting Team Report

National Architectural Accrediting Board, Inc.

t. 202.783.2007

f. 202.783.2822

e. info@naab.org

w. naab.org

Date: December 19, 2016

MEMORANDUM FOR THE NATIONAL ARCHITECTURAL ACCREDITING BOARD

FROM: JORI ERDMAN, AIA, NOMA, LEED AP
DIRECTOR

KEVIN FLYNN, FAIA, NCARB, IES
DIRECTOR

ANDREA RUTLEDGE, CAE, Hon. AIA
EXECUTIVE DIRECTOR

SUBJECT: Eligibility for Candidacy –New York City College of Technology
(5 year B. Arch. 160 semester credit hours)

On October 12, 2016 New York City College of Technology filed an application for candidacy for an accredited Bachelor of Architecture. This application was filed under the terms of the 2015 NAAB Procedures for Accreditation, Section 4. Additional information was provided at the request of the NAAB on October 26.

The next step is to determine whether the proposed degree program is eligible for candidacy. The application was reviewed by a panel consisting of the executive director, Jori Erdman, AIA, NOMA, LEED AP, and Kevin Flynn, FAIA, NCARB, IES. Ms. Erdman and Ms. Rutledge conducted an eligibility visit on December 2.

The purposes of the eligibility visit are:

- To review the Conditions and Procedures with the proposed program's administrators, faculty, staff, and students.
- To confirm the institutional commitment to the implementation of the Plan for Achieving Initial Accreditation.
- To review the physical, financial, human, and information resources committed to the program.

Upon completing the visit, the panel is required to submit a memorandum to the NAAB Board of Directors addressing four areas:

1. A review of the resources committed to the program
2. Commitment of by the institution to implementation of the Plan for Achieving Initial Accreditation.
3. Assessment of the readiness of the program's readiness to complete a visit for initial candidacy.
4. Recommendation to the NAAB Board of Directors to accept or not accept the program as eligible for initial candidacy. The recommendation will also identify the length of time that should elapse before scheduling the initial candidacy visit.

General Information:

New York City College of Technology (NYCCT) is one of the largest public colleges of technology in New York State. With a fall 2015 enrollment of 17,424 students, the highest among the City University of New York's (CUNY) senior colleges, it is considered a national model for technological education.

Since its founding in 1946 as the New York State Institute for Applied Arts and Sciences, NYCCT has been a pioneer in technology-based education. Established in response to the emerging needs of business and industry, it provided highly-trained technicians and other specialists to support the post-war economy. In 1953, oversight was transferred from the State to the City of New York and the institute was renamed New York City Community College. Eleven years later it became a part of the City University of New York (CUNY) system.

Since its creation after World War II, the institution has maintained an explicit commitment to the social, economic, and political advancement of its students and graduates with a particular emphasis on first-generation college students and individuals from underrepresented groups.

The Department of Architectural Technology, originally part of the Voorhees Technical Institute, provided a two-year degree (AAS) in architectural drafting. At that time an associate's degree was adequate for entry-level employment in an architectural office. In the building industry, the graduates of the department were prized for their work-related skills, namely their ability to develop construction documents.

A four-year Bachelor of Technology in Architectural Technology (B. Tech.) was added in 2003. The two-year AAS program remained in place and was updated. The two degrees are the only programs of their kind in the CUNY system. The offering of the four-year degree proved popular and the student population expanded significantly. Currently enrollment ranges from 700 to 800 students total.

Between 2009 and 2013 the department conducted a comprehensive review of the curriculum of both degrees, redesigning them to balance the demands of the workforce, technological focus, and NAAB requirements for an accredited degree. The updated degrees integrate the college's general education focus, as well as placing a greater emphasis on an integrated design process that has a strong foundation in technological knowledge and cutting-edge tools training and skills development. To support this new curriculum, the department hired eight new full-time faculty members, bringing the total to 20. The department has a part-time faculty cohort of 60.

The department has a robust learning culture that takes advantage of social spaces and ad hoc meet-ups as places for students to interact, coach and challenge each other, and engage. The students who met with the NAAB reviewers all commented on the strength of the support they give and receive from one another both in and out of the studio or classroom. Students also expressed significant pride in the program and the value of the opportunities available to them. All but one were planning to pursue advanced, NAAB-accredited degrees in order to become registered.

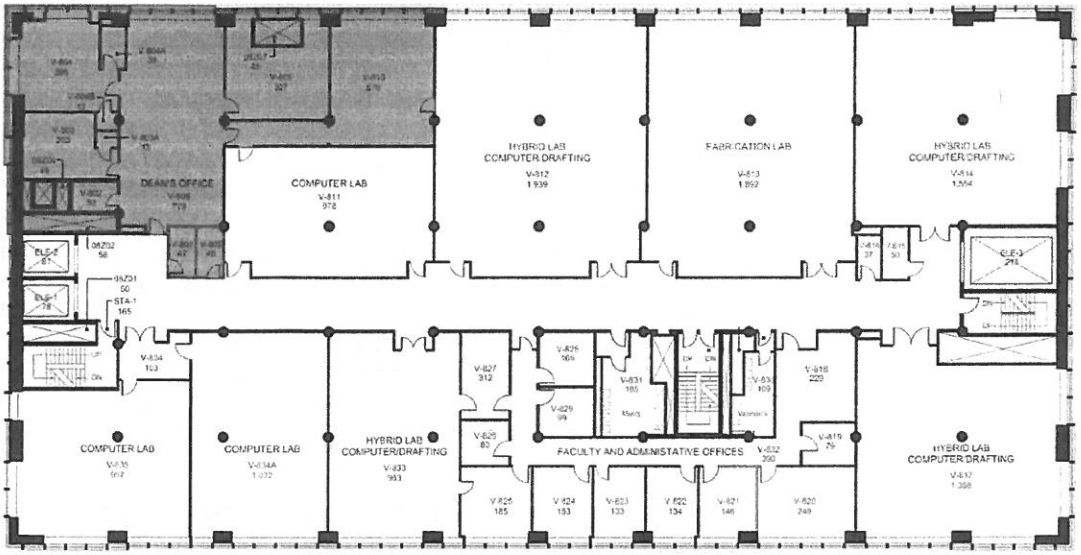
1. Review of Resources Committed to the Program

Physical Resources

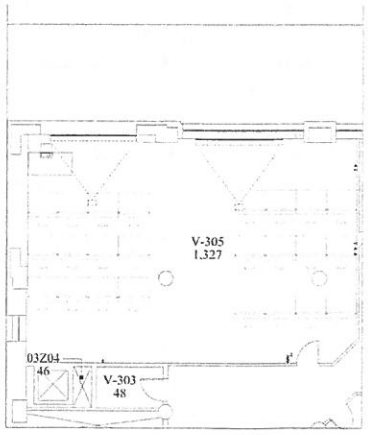
The Department of Architectural Technology is located on the eighth floor of Voorhees Hall on the NYCCT campus in Brooklyn, NY. Classrooms, computer labs, and faculty offices occupy 12,682 SF or 87% of the net floor area. The remaining 13%, or 1,951 SF, is occupied by the office suite of the dean of the School of Technology and Design. Additional square footage on the second floor is dedicated to faculty cubicles. There is a drafting studio as well as some standard lecture classrooms on the third floor. The administration anticipates the

initial B. Arch. cohort will be in the range of 30-45 students. The current curriculum indicates that the first two years of the program will have all students taking courses together, with the same total number of credit hours as the current AAS program, but with a slight increase in the teaching load due to the maximization of lab hours for studio and building technology courses.

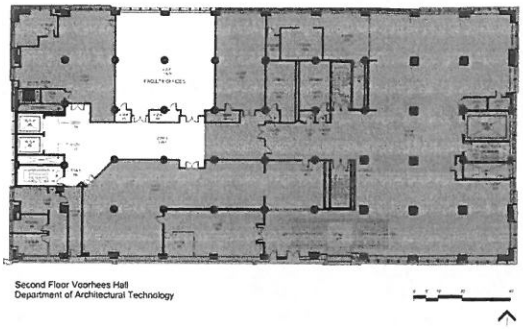
Current Space Allocation:



Department of Architectural Technology Primary Floor Plan (8th Floor, Voorhees Hall)



Additional Classrooms (3rd Floor, Voorhees Hall) (Particular Classroom Varies)



Second Floor Voorhees Hall
Department of Architectural Technology

Additional Faculty Offices (2nd Floor, Voorhees Hall)

From our meetings with faculty, the chair, and the dean, as well as touring and observing the physical resources, it is clear the department is making the best use of the space they have given their current teaching methodology and willingness to improvise. This includes assigning studio courses into computer labs that are not properly setup for the range of activities that are required in their current methodology (i.e., hand sketching and drawing, desk critiques, model making, large format drawing analysis and layout, group discussion, and pin-up presentations).

An analysis of the modified curriculum for the AAS program as well as the new B. Arch. program revealed to the department that they will need two new studio spaces by the fall of 2017 as well as one additional computer lab. Another two new studio spaces will be required by fall of 2019.

The administration is in the process of re-planning the third floor of Voorhees Hall, with new studio and lab space being assigned to the department. The dean and the chair expressed their intention to work with the administration to coordinate the program's specific program requirements for these spaces and confirm their availability by the required dates. At this point in time, the administration plans to think innovatively about how to accommodate and adapt both new and existing space to accommodate multi-modal teaching, including facilitating group discussion, teamwork, in-class research, and dynamic presentations, all with a view toward contemporary practice and worklife. All spaces will be expected to provide a base level of student access to networked digital technology in addition to the provisions at the instructor podium.

As a part of their internal self-study, the department identified the need for a formal arrangement for access to a wood shop as a complement to the fabrication lab. Currently the department is a guest in the shop of another department, which does not allow adequate class time and access outside of class times. The program leadership intends to continue working with the administration to address this need.

Faculty office space does not provide "space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising." With few exceptions, faculty are assigned to cubicles on the second floor while the administration is assigned a small set of offices on the 8th floor. This arrangement not only dissociates the faculty from the leadership, the administrative center, and the majority of teaching spaces, it currently does not provide any space where faculty can advise students

in confidence. This is currently achieved in an ad hoc manner that future teams may see as a deficiency as the program progresses to initial accreditation.

The department does not require individual laptops for the students; although some students have made the investment. Access to computers for all students is provided in designated computer labs throughout Voorhees Hall. Faculty have arranged for software specific to architecture be installed on all machines and have also worked out web-based access for everyone on campus. The building is locked each night at 10:00 p.m., about which both students and faculty complained. In addition, there is no dedicated desk space for students where they can keep their belongings and projects; everything moves with them at all times.

Financial Resources

The program currently operates as a state and tuition-funded institution. All of the basic operational needs of the program are intended to be met with funds provided through these two sources.

During our visit, we were made aware of many enhancements that have been made by the department through one-time, funded grants and several major gifts. It is important for the long-term sustainability of an accredited program that such one-time gifts are enhancements to the core program, rather than funding the core activities. Administrators are advised to be clear about the distinction and to monitor activities so that there is not drift in one direction or the other.

Human Resources

Faculty members in the department of architectural technology have professional backgrounds outside of academia, providing students with the benefit of extensive real-world experience. There are 20 full-time faculty members in the department. All are registered architects: 19 are registered in the United States and one in Costa Rica. All have advanced degrees and three have PhDs. The part-time instructional staff of over 60 adjuncts hold positions in city agencies, at prestigious public or not-for-profit institutions, and with the region's leading private architecture, design and engineering firms. Faculty maintain close ties to industry. This often leads to student internships and permanent employment.

There are many human resource related policies already in place by virtue of being part of the CUNY system. There is a clear administrative structure in place with appropriate oversight of the program.

Student advising is offered at the college level as well as professional advising by architecture faculty. The department has identified an Architect Licensing Advisor who has begun training in the program already.

The student cohort composition is highly diverse and gender balanced (see application p. 12). The faculty is less so and is more closely reflective of the national averages.

Information Resources

Because of the existing degree programs, the department has a strong connection to the library. In addition, by being part of the CUNY system, students and faculty have access to libraries all over the metropolitan area as well as through inter-library loan. In addition, the Architectural Technology Department maintains a library for students to check out textbooks used in courses, other reference books, material samples, and product resources as well as a limited number of other printed materials.

2. Commitment of the Institution to the Implementation of the Plan for Achieving Initial Accreditation

During our visit we met with the administrators of the Institution, including:

- Russell K. Hotzler, Ph.D., President
- Bonne August, Ph.D., Provost and VP for Academic Affairs
- Kevin Hom, Dean, School of Technology and Design
- Sanjive Vaidya, Chair, Department of Architectural Technology

They reiterated their commitment to achieving accreditation for a Bachelor of Architecture program within the School of Architecture. They see this as a part of their evolving institutional mission and have already sought and received ABET accreditation for their engineering programs. The president and provost see accreditation of the B. Arch. as the natural, next step for the department and in line with the institutional commitment to economic success for their graduates.

They did not make any specific commitment to improving or enlarging the space for the program but we concluded that the department has not yet made the case to the institution nor have they identified milestones or deadlines by which a proposal would be made. The dean indicated that further study would be done to evaluate the needs of the architectural programs as progress is made in developing the curriculum. The Dean of the School indicated that the commuter school aspect of the institution may allow innovative thinking about spatial use and programming.

They also were responsive to our counsel that space must be allocated to allow faculty to complete all of the duties of their positions, including advising, which needs private and confidential space.

While it is clear the dean, president, and department chair are giving a great deal of thought to innovative and creative ways to address the space needs of a program that will see more students remain enrolled for a longer period of time, the review panel made it equally clear that these plans must be documented with timelines and milestones so that subsequent visiting teams can observe progress toward realizing physical resources that will support student learning.

3. Readiness of the Program to Complete a Visit for Initial Candidacy

The panel's observations indicate that the program could be ready to complete a visit for initial candidacy by the fall of 2017.

The timeline for achieving initial accreditation is reasonable and includes the necessary institutional approvals for each stage of the corresponding curriculum reform.

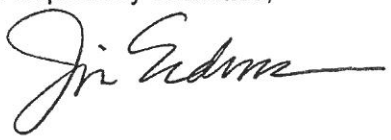
The institution's president has a record of achieving state-level approvals for new and revised programs; his office will lead that effort. The program is, however, advised to include the dates and milestones for state approval in the next iteration of its timeline. These approvals must be in place by the time of initial accreditation.

The department intends to implement a revised curriculum beginning fall of 2017. Given that they are building the new program out of an existing, robust four-year program, there are already many elements in place necessary to initiate the curriculum and conduct an initial candidacy visit.

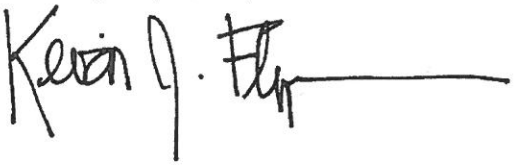
The B. Arch. curriculum is still being reviewed and evaluated – particularly the final three years. The SPC matrix submitted with the application has already been revised. Nevertheless, they have a solid outline for the first two years that is ready for implementation, pending approvals, with the fall 2017 entering class. The faculty continue to review the curriculum against the NAAB SPC and expect to make adjustments.

Finally, as stated earlier in this report, the program should be prepared to document planning and implementation goals for physical resources for subsequent teams.

Respectfully submitted,



Jori Erdman, AIA, NOMA, LEED AP



Kevin Flynn, FAIA, NCARB, IES

Andrea Rutledge, CAE, Hon. AIA

NATIONAL ARCHITECTURAL ACCREDITING BOARD, INC.
1101 Connecticut Ave NW, Suite 410 | Washington, DC 20036
info@naab.org | 202.783.2007 | www.naab.org

July 26, 2018

Russell K. Hotzler, Ph.D.
President
New York City College of Technology
300 Jay Street
Brooklyn, NY 11201

Dear President Hotzler:

At their July 2018 meeting, the directors of the National Architectural Accrediting Board (NAAB) reviewed the Visiting Team Report (VTR) for New York City College of Technology.

On behalf of the Board, it gives me great pleasure to inform you that the **Bachelor of Architecture** degree program was granted initial candidacy. The next visit for continuation of candidacy is scheduled for 2020. The program must achieve initial accreditation by 2024.

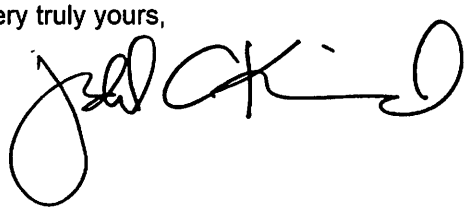
Please be reminded that candidacy is predicated on the following requirement:

- Submission of Annual Statistical Reports. These reports capture statistical information on the institution and the program. The next statistical report is due on or before November 30, 2018.

Public dissemination of both the Architecture Program Report and the VTR is also required. These documents must be made public electronically in their entirety. Please see Condition II.4.4 of the *2014 Conditions for Accreditation* and Section 5 of the 2015 *Procedures for Accreditation.*

On behalf of the NAAB and the visiting team, thank you for your support of accreditation in architecture education.

Very truly yours,



Judith Kinnard, FAIA
President

cc: Sanjive S. Vaidya, Department Chair
Stephen Schreiber, FAIA, Team Chair

NATIONAL ARCHITECTURAL ACCREDITING BOARD, INC.
1735 New York Ave NW | Washington, DC 20006
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March 12, 2021

Russell K. Hotzler, Ph.D.
President
New York City College of Technology
300 Jay Street
Brooklyn, NY 11201

Dear President Hotzler:

At their February 2021 meeting, the directors of the National Architectural Accrediting Board (NAAB) reviewed the Visiting Team Report (VTR) for New York City College of Technology.

On behalf of the Board, it gives me great pleasure to inform you that the **Bachelor of Architecture** degree program was granted continuation of candidacy. The next visit for either initial accreditation or continuation of candidacy is scheduled for 2022. This visit will be conducted under the provisions of the NAAB *2020 Conditions for Accreditation* and Section 5 of the *2020 NAAB Procedures for Accreditation*. The program must achieve initial accreditation by 2024.

Please be reminded that continuing candidacy is predicated on submission of Annual Statistical Reports, as well as public dissemination of both the Architecture Program Report and the VTR. These documents must be made public electronically in their entirety. Please see Condition II.4.4 of the 2014 *Conditions for Accreditation* and Section 5 of the 2015 *Procedures for Accreditation*.

Listed below are the required program documents and due dates:

Document Due	Date Due
Annual Statistical Report	November 30, 2021
Architecture Program Report	March 1, 2022

On behalf of the NAAB and the visiting team, thank you for your support of accreditation in architectural education.

Very truly yours,

Marilys Nepomechie, FAIA, DPACSA, NCARB
President

cc: Sanjive S. Vaidya, Department Chair
John Edwards, Assoc. AIA, Team Chair

Appendix E

New York City College of Technology MSCHE Accreditation letter

CHE MSA **Middle States Commission on Higher Education**
3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501
www.msche.org

June 22, 2018

Dr. Russell K. Hotzler
President
New York City College of Technology of the City University of New York
300 Jay Street
Brooklyn, NY 11201

Dear Dr. Hotzler:

At its session on June 21, 2018, the Middle States Commission on Higher Education acted:

> To reaffirm accreditation and to commend the institution for the quality of self-study process and report. The next evaluation visit is scheduled for 2025-2026.

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 New York City College of Technology of the City University of New York. If any further clarification is needed regarding the SAS or other items in this letter, please feel free to contact Dr. Stephen J. Pugliese, Vice President.

Sincerely,

Gary L. Wirt, Ed.D.
Chair

c: Interim Chancellor, City University of New York Central Administration

Most Recent Commission Action:

June 21, 2018:	To reaffirm accreditation and to commend the institution for the quality of self-study process and report. The next evaluation visit is scheduled for 2025-2026.

Brief History Since Last Comprehensive Evaluation:

November 21, 2013:	To accept the Periodic Review Report and to reaffirm accreditation. To commend the institution for the quality of the Periodic Review Report and process. The next evaluation visit is scheduled for 2017-2018.

Next Self-Study Evaluation: 2025 - 2026

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 *Accreditation Actions*.

MIDDLE STATES COMMISSION ON HIGHER EDUCATION
3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501
www.msche.org

STATEMENT OF ACCREDITATION STATUS

NEW YORK CITY COLLEGE OF TECHNOLOGY OF THE CITY UNIVERSITY OF NEW YORK
300 Jay Street
Brooklyn, NY 11201
Phone: (718) 260-5000; Fax: (718) 260-5198
www.citytech.cuny.edu

Chief Executive Officer: Dr. Russell K. Hotzler, President

System: City University of New York Central Administration
Mr. James B. Milliken, J.D., Chancellor
205 East 42nd Street
New York, NY 10017
Phone: (646) 664-9100; Fax: (646) 664-3868

INSTITUTIONAL INFORMATION

Enrollment (Headcount): 17282 Undergraduate

Control: Public

Affiliation: Government-State Systems - City University of New York

2015 Carnegie Classification: Baccalaureate Colleges - Diverse Fields

Approved Degree Levels: Postsecondary Award/Cert/Diploma (< 1 year), Postsecondary Award/Cert/Diploma (>=1 year, < 2 years), Associate's, Bachelor's;

Distance Education Programs: Not Approved

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 1957

Last Reaffirmed: June 21, 2018