



NEW YORK CITY COLLEGE OF TECHNOLOGY  
**CITY TECH**

**New York City College of Technology**  
**City University of New York**  
Department of Architectural Technology  
300 Jay Street  
Brooklyn, New York 11201

## **2020 Architecture Program Report Continuation of Candidacy**

Bachelor of Architecture: 160 semester credits

Year of Previous Visit: 2018

Current Term of Accreditation: The proposed professional architecture program, **Bachelor of Architecture**, was formally granted initial candidacy effective July 26, 2018.

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# Architecture Program Report - Initial Candidacy

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# Section 1. Program Description

## I.1.1 HISTORY AND MISSION

### COLLEGE

New York City College of Technology (City Tech) is one of the largest public colleges of technology in New York State. With a Fall 2019 enrollment of 17,036 students<sup>1</sup>, 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. There are currently 17,036 students enrolled across the college in various bachelor and associate degree programs, and that number continues to grow each year. 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 engineering 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

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<sup>1</sup> <http://air.citytech.cuny.edu/data-dashboard/enrollment-trends-fall/>

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<sup>2</sup> (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**<sup>3</sup>

*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.*

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### **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.*

### **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.*

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<sup>2</sup> Middle States Accreditation Link: [https://www.msche.org/institutions\\_view.asp?idinstitution=67](https://www.msche.org/institutions_view.asp?idinstitution=67)

<sup>3</sup> The mission statement of the college is available in the President's message on the college's website: <http://www.citytech.cuny.edu/about-us/mission.aspx>

## DEPARTMENT<sup>4</sup>

In its role as 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. NYCCT'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 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 or not-for-profit institutions, and 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 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 in and be leaders of the college's many student-initiated clubs. The Architectural Club, our Study Abroad Program, and other special initiatives have facilitated our 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 Department of Architectural Technology, at its founding as part of the Voorhees Technical

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<sup>4</sup> Descriptive Film on the Department of Architectural Technology: <https://vimeo.com/227292475>

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 prized for their work-related skills, in particular their ability to develop construction documents.

A four-year Bachelor of Technology in Architectural Technology degree was established in 2003. The two-year AAS program remained in place and was updated. 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 total.

From 2009-2013 the department conducted a comprehensive review of the curriculum of both degrees, re-designing 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 21, 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.

The faculty of New York City College of Technology is unique in many ways. Each full-time faculty member is a registered architect creating a professional body unmatched in academic circles. In addition, most of the faculty maintain an active practice or are part of professional studio culture and belong to a broad range of professional societies and certifying bodies such as USGBC, EDRA, NOMA, 2030 District, the AIA, and SARA-The Society of American Registered Architects. Of note our faculty have played many key roles in professional development and leadership of the architecture profession over the years in addition to community outreach and engagement.

Prof. Barbara Mishara AIA, has served as AIA New York state president, and serves as the AIAS AXP coordinator at the school.

Prof. Tim Maldonado FARA, has been inducted into the Cooper Union Hall of Fame and is a Fellow of the Society of American Registered Architects (SARA). He served as President of the NY Council of SARA and serves as Co-Chair of Design Awards SARA/NY.

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.

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. Phillip 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 well known for his research on traditional Japanese architecture and recently served as a guest designer for the Ronald McDonald House of Long Island.

Prof. Illya Azaroff AIA 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 is the YAF - Young Architects Forum Adcom 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 (ORR) and the Federal Government (HHS) on building the National Disaster Framework. He recently served as Chair of the National AIA Board Knowledge Committee and has been elected as the 2021 AIANY President.

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 and school student organizations.

Prof. Michael Duddy serves on the Board of Directors for the Yale 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.

Several faculty members have worked with the 2030 District that is being set up in New York. They provide expertise on various on 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 recent Solar Decathlon team DURA entry and engages in advancing sustainability through prototyping.

The demonstrated outreach, partnerships and valuable leadership to professional societies by the City Tech faculty set a high standard for the students and continue 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 ever 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.

Our "Intersections" symposium series<sup>5</sup> initiated by our department and held annually at our college has exposed our students to academics and practitioners as they share their research and explore potential applications of techniques, software and tools that increase building performance and enhance project delivery. 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. One such course, Learning Places, specifically matches an Arch Tech professor with a Libraries professor in a place-based learning setting that combines exploring urban design and history with research skills. 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<sup>6</sup>, giving them release time to focus on general education principles and teaching techniques through seminars and projects. Professor Montgomery from our faculty took the initiative to develop a new Interdisciplinary

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<sup>5</sup> Fuse Lab/Intersections Sample Link: <https://openlab.citytech.cuny.edu/fuselab/event/intersections-2015/>

<sup>6</sup> A Dept of Education Title V grant supporting re-envisioning General Education at City Tech. For more information regarding the Living Lab Grant, follow this link: <https://openlab.citytech.cuny.edu/livinglab/>

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 will be documented in two forthcoming book chapters by Professor Montgomery on Place-based Learning and Undergraduate Research and Primary Source Research Enhancing Undergraduate Research.

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.<sup>7</sup>

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 on where our graduates go after earning their degrees, but current findings indicate a significant increase of interest and applications to graduate school where students can earn an accredited professional degree. In addition, we see an increasing number of students placed in more prominent 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.

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<sup>7</sup> External Evaluator Report by Wayne Drummond, FAIA, Dean Emeritus and Professor, University of Nebraska-Lincoln, 2015\_05. See Link: [https://www.dropbox.com/sh/m09bodhie1n8tn/AADSXdleP5R5UVdXRQrGLIDaA/03\\_Supplemental%20Materials/I.1.6%20Program%20Self-Assessment?dl=0&list=&preview=NYCCT\\_Drummond+FINAL+\(1\).pdf&subfolder\\_nav\\_tracking=1](https://www.dropbox.com/sh/m09bodhie1n8tn/AADSXdleP5R5UVdXRQrGLIDaA/03_Supplemental%20Materials/I.1.6%20Program%20Self-Assessment?dl=0&list=&preview=NYCCT_Drummond+FINAL+(1).pdf&subfolder_nav_tracking=1)





## I.1.2 LEARNING CULTURE

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 the other programs and our contact hours are currently 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 accepted; it increases the credit allocation for studio courses 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 higher allocation of time per student. Critical to student success, the longer and more frequent class contact hours will 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 currently 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 be focused on developing a more efficient time-management and work-school-life balance, than students at residential colleges. This factors

into the management of our student's 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. Furthermore, working with the department's Master Course Scheduler, classroom resources throughout the campus are being leveraged to improve supplement 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 is 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 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 find synergies between learning as it occurs across these parallel subjects. To support the outside responsibilities of our urban commuter students, we try 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, we anticipate that the final three years of the B. Arch degree will 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 actually increased the level of camaraderie and peer support. 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 it through the introduction of a series of shared 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 advisement structure has been mapped out on our new B. Arch curriculum chart (section II.2.2). It also includes periodic Town Hall meetings that encourage broad attendance by the full student body and our full-time and part-time faculty. This event allows the department community to build relationships and promotes a common sense of perspective and intention.

A recent effort to enhance and develop student learning and camaraderie are the mentorship programs organized by the Architectural League of New York and Tod Williams and Billie Tsien Architects dedicated to students in the Department of Architectural Technology. These programs provide 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. Furthermore, the students are partnered individually with mentors who can supplement and guide their academic and career intentions.

Our students support an active Architecture Club, Digital Fabrication Club, and as well as a few specialized clubs, with a combined membership of over 100 students. These clubs host lectures, workshops, and sponsor travel, both local and international, to visit significant architectural works and architectural offices. Through both infrastructure improvements and the development of additional activities the department continues to look for methods and opportunities to develop greater cohort support.

## STUDIO CULTURE POLICY

### OVERVIEW

The sacrifice City Tech students make to be in studio over and above extraordinary financial and familial responsibilities, unique to this demographic, adds weight and breadth to Studio Culture. We acknowledge the value students bring as representatives of a manifold cultural experience embedded in the margins of civic life. Most students have no prior design experience and are commonly the first of their family to attend college. The studio is therein charged with a mission to shape students' conception of their role in the built environment while revealing the agency of design thinking. Studio Culture at City Tech nurtures a dialogue from which students discover the nexus of their strengths and interests to create a technically proficient and engaged urban citizen who may advance from marginal positions of survival into urban leadership.

### PRINCIPLES

The studio philosophy upholds the following principles shared by the community of faculty and students:

- **Diversity and inclusion** predicated on respect for one another with recognition of effort, goals, and differences.

The design studio is dependent on trust and active listening skills creating a space to test ideas and develop vision. A plurality of non-technical community stakeholders is invited to the studio to expand student experience while averting a closed self-referential design feedback loop.

- Good students and effective faculty require support and mechanisms for **candid expression and constructive feedback**. They are entwined in a continuous process of development and evolution.

An active learning environment is optimized when instructors and students are engaged in a

dialogue that channels technical, historical and aesthetic knowledge towards a realization of relevancy and context for students. Peer mentors provide support and underpin the communication pipeline between instructor and student. Student Evaluation of Teaching data and instructor observations improve course delivery and classroom environment. Instructors are encouraged to attend department workshops and lectures to model the process of lifelong learning.

- Provide opportunities for students to **discover and develop their voice** on a range of issues pressing upon the built environment.

Gen-Ed skills are an essential component of studio culture. Students utilize reading, writing and research assignments to grapple with relevant current events. They are given opportunities to present issues from their present community or community of origin as a means to interrogate the impact of design on the environment.

- **Nurture camaraderie between students** to promote understanding and connections between communities.

The studio is an opportunity for students, typically without professional connections, to build their own network based on shared experiences and challenges common to this demographic. Mentorships, student clubs and study abroad programs enhance student bonding.

- **Encourage discussion and debate** on the social, political and economic context and impact of design and building.

Consensus building and disagreement resolution are instrumental for students to become successful advocates for their futures and the well-being of their communities. Instructors serve as informed moderators to ensure each student has an opportunity to express an opinion or experience.

- Invite extended communities of creative practices into the studio to **expand and deepen the context for design thinking and processes**.

Increasing the range of student exposure to creative forces improves their access to cultural arbiters and enriches a connection to their own experience. It enhances dialectical thinking and their ability to express ideas and creative processes.

- **Inspire optimism** in the student's approach towards the betterment of their community and the built environment.

The studio is a mechanism for empowering the next generation of urban inhabitants. These students will inherit a grim global landscape based on current climate change projections. This underscores a need for positive vision suffused with technical skills and historical knowledge. Contributions to areas of urban revitalization and environmental justice include projects focused on clean air/water systems, transportation/infrastructure and disaster/resiliency planning. Students must also be involved with designs for the aging and dying, accommodations for the mentally ill and disabled, and transitional planning for the homeless and released inmates. Direct engagement with these challenging topics is encouraged as fundamental responsibilities of

technical designers in the city.

## PLAN FOR IMPLEMENTATION AND MAINTENANCE

### **Periodic review of Studio Culture Policy**

A representative group of upper level students and the Department's Steering Committee periodically review the studio culture policy. The volunteers are from the student club leadership. This process ensures that student voices are integrated into the direction and tone of the department and that the policy is transmitted to the student body by its leaders.

### **Instructional Support**

Online video tutorials and in-class workshops are coordinated to reinforce the software and hardware skills utilized in the studio. The workshops cycle through content to maximize student exposure. Content repetition is utilized to facilitate skill mastery. The workshops are offered at multiple times during weekdays and weekends to accommodate student schedules. Online tutorials increase the opportunity for students to achieve proficiency with digital skills at their own convenience.

### **Studio Evaluations**

Student Evaluations of Teaching are completed each semester. The data and comments are distributed in anonymous aggregate format to both the Department Chair and studio coordinators. Instructors receive the information to improve their course delivery.

Classroom observations are conducted each semester for adjunct faculty who have taught fewer than ten consecutive semesters, and for all untenured full-time faculty that do not have the rank of Full Professor. Tenured faculty and adjuncts who have taught more than ten consecutive semesters are observed once a year. A post-observation conference between observer and observee is required to reinforce the process as a constructive exercise. The Chair reviews SET's and Observations with the Department Appointments Committee, noting trends and anomalies, to determine future teaching assignments.

The department conducts periodic "super-juries" where student work from all studios are reviewed by a group of external academic and industry representatives. Studios are arranged chronologically to illustrate the scaffolding of skills and increasing complexity of content. Review comments are distributed to course coordinators and a summary of the findings is presented by the Chair to the faculty.

### **Health and Wellbeing**

Time management is a central concern for all students of architecture. The current policy resolves that limited studio access allows for students to increase the time spent developing their academic and professional interests off-campus. The department does not condone a twenty-four-hour studio work habit. It is in the program's interest to nurture a student body that can draw connections between the work they do in studio and the greater context of their community.

The following are resources to assist students with academic performance and out-of-classroom concerns:

- **Online Early Intervention Form:** This form enables the college to reach out to the student directly to help with academic performance. It is an easy online form designed to reduce faculty hesitation in recommending a student for assistance.
- **Student Counseling:** The student counseling and advisement center provides academic, career, and personal counseling to help students. Meeting with a counselor in their office, students are encouraged to talk about any problem or situation in their life that is interfering with their success in college. This may include family or relationship problems, financial problems and confusion over major requirements or college regulations.
- A grant from the Milton and Carroll Petrie Foundation allows City Tech to help students through financial emergencies. It is not intended as supplemental financial aid and cannot be used for tuition and fees. It is for the financial emergencies that might lead a student to drop out: loss of a job, pending eviction, overdue utility bills, fire, lack of funds to get to the College, being the victim of a burglary or any of the other unanticipated financial downturns that might impede a student's progress.

### **Mid-Term Evaluations**

Studio instructors are sent guidelines and reminders regarding mid-term grades and feedback. The grades are indicators of student progress, performance and rough indicators of the student's successful course completion. Pass, Low Pass, and Borderline grades facilitate a conversation between student and instructor to determine any action or support required.

### **Studio Reviews**

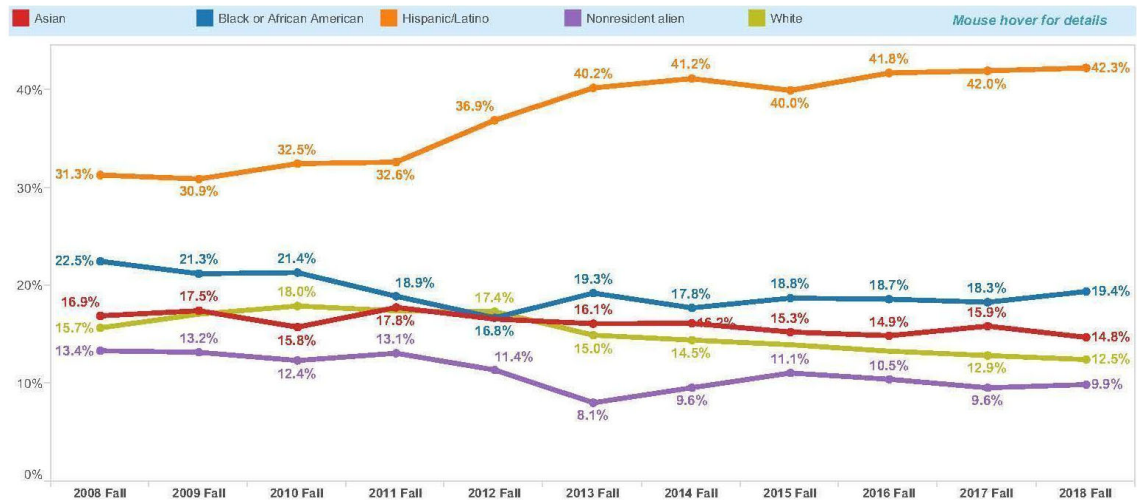
The jury process at City Tech is a constructive and supportive educational process for students. Jurors are expected to engage in an enlightened dialogue to demonstrate the breadth of knowledge and professional behavior required of any person engaged in design and dialectical thinking. Students in the course must attend the full review. Instructors will structure reviews to facilitate the engagement of all students in the course. Students will assign a colleague to take notes on the discussion and feedback given by jurors.

Jurors for studio reviews must reflect a diversity of backgrounds (women and persons of color) with expertise relevant to the studio subject matter or a design thinking approach determined to be of value to the students by the course instructor.

Studio instructors will coordinate with the jurors in advance of their visit and submit their name and title to the department's front office. It is incumbent on the instructor to communicate with the juror the studio problem, schedule, and expectations during the review.

### I.1.3 SOCIAL EQUITY

#### Department of Architectural Technology Fall Enrollment by Ethnicity 2008-2018



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 annual survey by the U.S. News & World 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).

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:

- 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

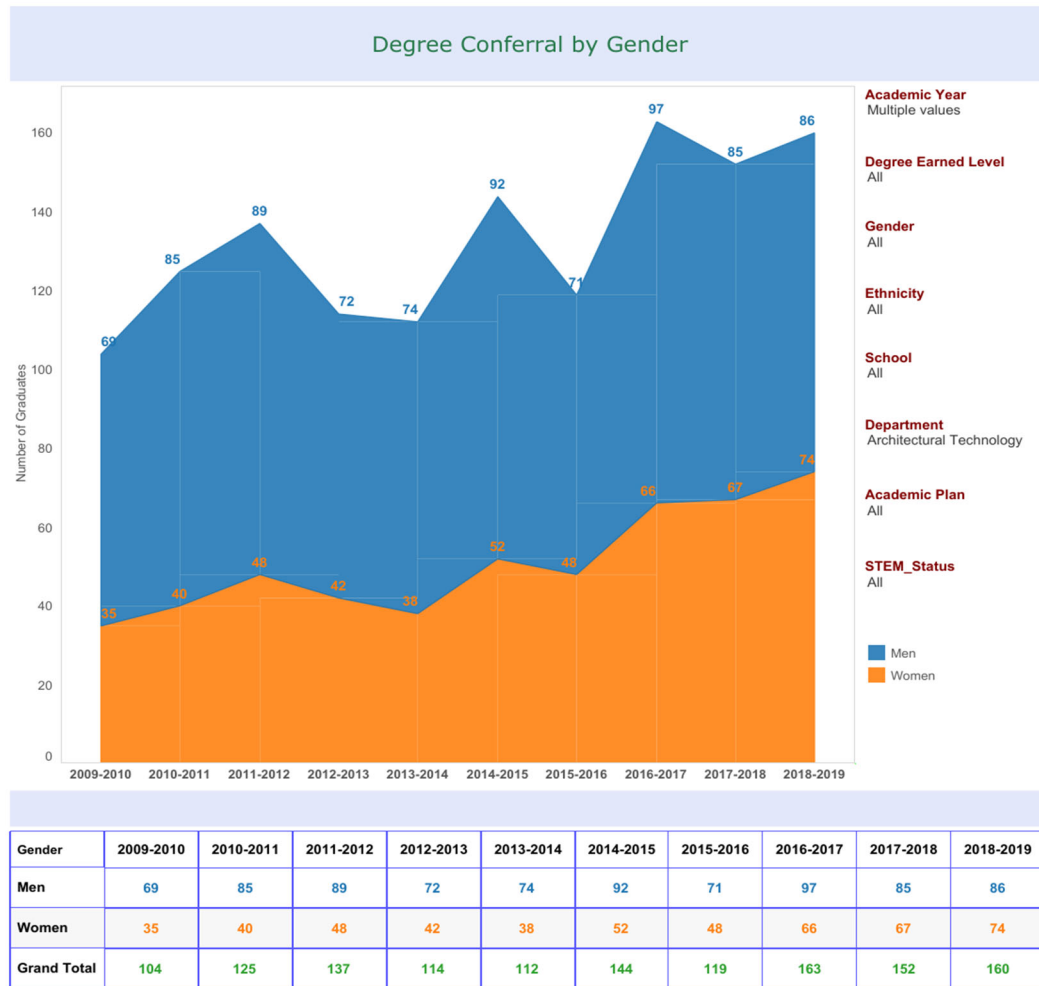


six-year course of study. In 2015 it became one of the New York State P-TECH network of schools and adopted a 6-year model, replacing the trimester with a more traditional semester calendar. The school is a result of a partnership between the Departments of Architectural Technology and Construction Management 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.

- 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 this initiative.
- The Learning Centers: Located across our campus the 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 LaB. 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 diversity of our students is fundamental to our program, and changes to our curriculum and degree programs are examined specifically for their potential impact on student diversity. 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 for our B. Arch degree. As our B. Arch degree program starts up, we will assess the profile of the students who achieve eligibility and compare that profile to our entering first year students. We anticipate 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.



### Graduation Trends by Ethnicity

Asian or Pacific Islander  
 Black, Non-Hispanic  
 Hispanic  
 Nonresident Alien  
 White, Non-Hispanic

**Academic Year**  
Multiple values

**Degree Earned Level**  
All

**Gender**  
All

**Ethnicity**  
All

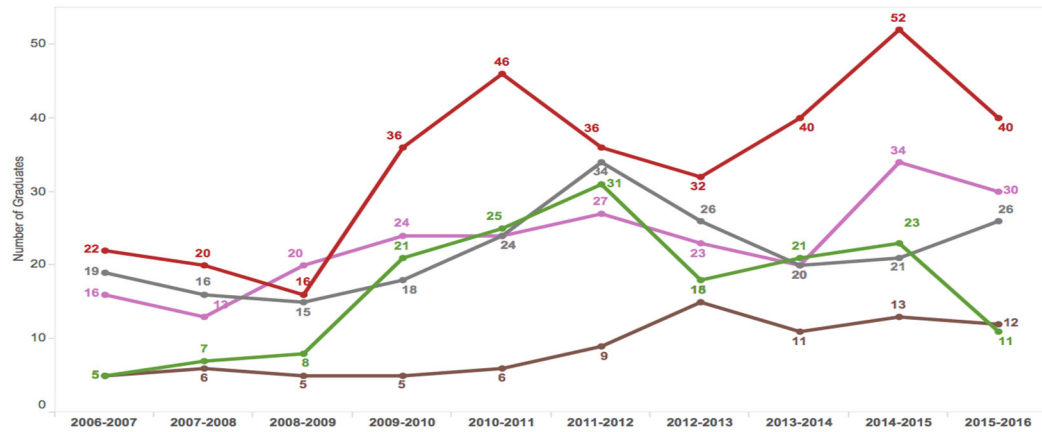
**School**  
All

**Department**  
Architectural Techno..

**Academic Plan**  
All

**Program Title**  
All

**Program STEM Indicator**  
All



Note: variable *Eth.Imp.Group.2.Desc* from IRDB is used to describe the ethnicity.

Academic Year	American Indian or Native Alaskan	Asian or Pacific Islander	Black, Non-Hispanic	Hispanic	Nonresident Alien	White, Non-Hispanic	Grand Total
2015-2016		11	26	40	12	30	119
2014-2015		23	21	52	13	34	143
2013-2014		21	20	40	11	20	112
2012-2013		18	26	32	15	23	114
2011-2012		31	34	36	9	27	137
2010-2011		25	24	46	6	24	125
2009-2010		21	18	36	5	24	104
2008-2009	1	8	15	16	5	20	65
2007-2008		7	16	20	6	13	62
2006-2007		5	19	22	5	16	67
<b>Grand Total</b>	<b>1</b>	<b>170</b>	<b>219</b>	<b>340</b>	<b>87</b>	<b>231</b>	<b>1,048</b>

ANALYSIS OF DEPARTMENT FULL-TIME FACULTY DIVERSITY <sup>8</sup>

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

Our faculty mirrors the wide ethnic background of the Architectural Department's student body. Besides American-born professors, a number of 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 heavy concentration of Hispanic, African/American, and Asian roots.

In interviewing teaching candidates, the Appointments Committee values faculty ethnic diversity that reflects 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.<sup>9</sup>

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<sup>8</sup> Data provided by Patricia A. Cody, Esq, Chief Diversity Officer/Title IX Coordinator/ADA-504 Coordinator, Office of Compliance and Diversity, NYC College of Technology, Link: <http://www.citytech.cuny.edu/compliance-diversity/>

<sup>9</sup> CUNY EEO/Non-Discrimination Policy Link: <http://www2.cuny.edu/wp-content/uploads/sites/4/page-assets/about/administration/offices/hr/policies-and-procedures/CUNYPolicy-Equal-Opportunity-and-Non-Discrimination-010115-procedures.pdf>

## I.1.4 DEFINING PERSPECTIVES

### Collaboration and Leadership

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 in the following ways:

Collaborative Team Studio Projects: Across the studio sequence in both design and building technology, 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.

Placed-Based Learning Opportunities: Using New York City as a living laboratory, 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.

Partnering with the Community: 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.

Interdisciplinary Learning: In keeping with City Tech's requirement that all graduating B. Tech students complete at least one Interdisciplinary (ID) course (one that requires co-teaching with one faculty member from arts and sciences) the faculty of the department of Architectural Technology has both developed and taught courses that encourage our students to study issues from multiple points of view. The ID course "Learning Places" pairs the study of Urban Spaces in NYC with library research techniques.

Closing the Loop: The Closing the Loop Project explored how recent technological advances in the AEC industry have increased the potential of façade performance. In this project we are implementing an interdisciplinary student initiative, where various courses collaborate on portions of the design process of façade panels, and through this process, fully close the design/analysis/fabrication/validation loop. This initiative sequenced courses in building technology, sustainability and fabrication as a capstone project. It was presented at the "Facades+<sup>10</sup>" conference.

Research Initiatives: Advanced curricula in both the design studios and lab electives are focused on research in sustainability, resiliency, and performative design. Students develop

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<sup>10</sup> Facades + is a conference organized by the Architects Newspaper, with the goal of furthering the design and performance of the next generation of façades. <http://2016nyc.facadesplus.com>

confidence in approaching research questions as they work collaboratively to achieve collective results. Research-based curriculum is complemented by the Emerging Scholars program where students work in small groups directly with a professor on a research project that is shared at a judged college-wide public poster presentation at the end of each semester. Each student receives a \$500 stipend for their work.

Supplementing 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:

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.

Design/Build: In the 2014-15 academic year a group of dedicated students under the direction of our faculty members participated in the US Department of Energy Solar Decathlon, a design/build project. Covered in greater detail elsewhere in this report it provided a unique opportunity for hands-on learning in a construction setting and acted as a catalyst for close relationships with industry and professional partners.

Study Abroad: Since the winter break of 2014, and continuing on an annual basis, a select group of students have traveled abroad along with architecture faculty to study environmental concerns and participate in community-based service projects.

TECHNE: An annual publication presenting student and faculty work from across the architecture curriculum, *TECHNE*, now entering 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.

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.

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.

## Design

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. The following aspects are typical of our design sequence:

- 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 as a result of our strong industry ties, are field trips to local architecture, engineering and construction firms, construction sites, and product vendors' offices.

Our studio sequence has undertaken the following special initiatives to reinforce our obligation to nurture students to be well versed in the many issues related to the design of the urban environment:

- Intersections Sponsored originally by our department's NSF FUSE-LAB grant, this annual conference attended by professionals, faculty and students, provides a forum for outside experts well-versed in cutting-edge technologies and initiatives to share their knowledge and experience with other professionals, faculty and our students and provides an opportunity to form relationships with a broader network of prominent professionals. <https://openlab.citytech.cuny.edu/fuselab/event/intersections-2015/>
- Emerging scholars: Mentioned earlier in this report this initiative encourages students to engage directly with their professors to conduct research. Faculty and students have participated in this program to delve more deeply into design-related issues beyond the structure of the design studio. This format has allowed for extended study spanning multiple semesters and has been particularly effective in developing community-based master planning initiatives.
- Solar Decathlon 2015: In 2012 we were one of 18 architecture programs from across the country accepted to compete in the US Department of Energy's biennial Solar Decathlon

Competition. The challenge asked each team of students to design and build a Net-Zero, energy efficient home. This student led competition required that all the power needs of the home be met by a solar powered array. Our students designed home was built locally in the historic Brooklyn Navy Yard and was delivered to the competition site in Irvine California. To facilitate the success of the project a wide range of courses from design and construction detailing to energy analysis and design/build were all focused on the competition. Named DURA (Durable, Urban Resilient and Adaptable) our design solution responded to the impact of 2012's Superstorm Sandy which flooded NYC taking large parts of the city off the power grid. A unique urban solution, our entry called for the development of a low scale four-story building, with four to eight apartment units, each independently powered by a vertical solar array on the south façade, where each unit could survive "off the grid" in the event of another storm. Our entry finished 5th place in engineering and 7th place in Architecture. A model for future design/build initiatives at the college, this seminal experience has redirected careers, opened up new opportunities and has provided our students with the confidence knowledge that when they apply themselves, they will succeed.

The learning culture of the department centers around hands-on, placed-based learning that addresses real and current issues affecting urban living. This manifests itself through both studio and independent research projects with professors, that encourages collaboration with local communities and investigates and analyzes issues related to topics such as resiliency, sustainability, code and regulatory requirements. Since the needs of communities and cities are constantly changing the program ensures that it is addressing current and relevant architectural, technological and urban issues by continuously soliciting feedback from guest jurors at student reviews, organizing course coordination meetings with all full-time and adjunct professors and engaging in discussions with industry partners.

Our program is committed to utilizing the latest software and digital fabrication technologies so that our students graduate with the skills that make them strong candidates in a job market increasingly focused on the technology that drives the profession. Our fabrication lab is equipped with the latest 3D printing and fabrication technologies. The use of these digital tools is encouraged in our curriculum and through extracurricular activities, such as the fabrication club, and independent research projects with professors whose expertise lies in the development and use of these tools.

Unique to our program is the introduction of the Digital Spine which occurred during the extensive revision of our department's curriculum which began in 2010. This highly successful initiative transitioned "software only" courses in our curriculum into integrated technical and studio courses. The teaching and learning of software now occurs within the design and building technology sequences, integrated into the studio curricula as the "Digital Spine."

## Professional Opportunity

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. Some ways in which this is accomplished include:

- Advisory Board Members: The former advisory board is re-conceived and re-structured as the “**Executive Council on Design Education and Engagement**” where members are solicited from a diverse array of the building industry’s associated fields. Members are tasked with building the profile and fundraising arm of the department, for increasing experience, and for exposure and employment opportunities for students
- Adjunct Faculty members are from prominent firms such as KPF, Thornton Thomasetti, SHoP, Diller Scofidio and Renfro, Studio Libeskind, and New York City departments, such as the NYC Department of Design and Construction.
- Workshops and Seminars to support classroom learning. As an example, to teach acoustical modeling, ARUP engineers invited students to their office to test their designs; an engineer from SOM gave a lighting modeling seminar.
- Guest Speakers have included Grimshaw, SHoP, Snohetta, Hadid, Calatrava, and Hebling.
- Intersections For three years from 2013-2015, the department hosted an all-day conference highlighting advances in digital technologies and performative architecture.
- Class Visits to architectural offices and ongoing projects include Eisenman, Selldorf, Perkins Eastman, FXCollaborative, Vinoly, Grimshaw, Snohetta, BIG, and SOM. Visits are also organized by the Architectural Club.
- Workshops in the Department: provide guidance on resume writing, professional portfolios, interviewing techniques, soft skills, and internship requirements.
- The Professional Development Center: one-on-one career coaching, resume critiques, interviewing techniques, soft skills, and workshops on professional development.
- ARCH 4880, a course on professional practice, is required in the fourth year. An internship class is offered to students who are gain employment in architectural offices or city agencies.
- Architectural League: Another venue to enhance student’s learning culture and experience is through the ongoing relationship with the New York Architectural League, a professional organization that highlights excellence in architecture and promotes critical thinking and debate. The League provided no-cost access to approximately twelve students each year to participate in any of their lectures, office visits and of particular relevance the Annual Student Program where students have the opportunity to connect with students from other accredited institutions in the New York area while learning about the profession and making office visits.

Under New York State Education regulations, holders of a B. Tech degree are eligible for architectural licensure with slightly different requirements than those with a B. Arch. Professor

Barbara Mishara maintains contact with the NYS Board of Architecture and advises students. In May 2015, she was appointed an Architect Licensing Advisor with NCARB and attended the yearly conference in August 2015 and 2016.

## **Stewardship of the Environment**

Superstorm Sandy made a direct and lasting impact on the faculty and students of our department. Many were displaced from their homes and were unable to attend classes or complete coursework. Consequently, the rigors of analyzing, evaluating and caring for the immediate urban environment is imbued with a unique level of urgency. The department regularly hosts events dedicated to understanding the fragility of the urban environment. This includes participation with the Brooklyn Waterfront Research Center and faculty coordination of the first symposium on 'Extreme Heat: Hot Cities- Adapting to a Hotter World.' Prof. Azaroff facilitates HURRIPLAN training along with Cal EMA SAP - Safety Assessment Program regularly at the department as well as around the country in conjunction with the AIANY Committee on Design for Risk and Reconstruction. The National Science Foundation funded an Advanced Technology Education grant that has enabled the department to purchase tools such as hardware and software for students to run environmental simulations and verify their findings with field measurements. Faculty have been hired to support this effort and the curriculum is developing a sustainability spine to ensure real, action-oriented skills and knowledge that are integrated into each course. In 2015, students and faculty worked tirelessly to design and build the first Solar Decathlon project from our college. This work illustrates our dedication and commitment to actively engage the environment and appraise our responsibility to it.

## **Community and Social Responsibility**

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.

Social responsibility is important to our program and our students at City Tech. Our student body is 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. Social and community responsibility is a focus that appears in numerous places throughout our curriculum.

For example, our design curriculum includes projects that require the students to work with specific communities in New York City to address important urban challenges. Academic service-learning projects are developed and executed in courses as part of the integration of High Impact Educational Practices in our curriculum. 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.

### I.1.5 LONG RANGE PLANNING

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. In order 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. 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 to be 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.

Every ten years a departmental self-evaluation is produced by the faculty that reviews and assesses the department’s mission and vision, faculty, student population, resources, curriculum and facilities. This study is presented to an outside evaluator who visits the school and makes recommendations for improvements and offers guidelines for future direction.

Finally, the department uses three frequent methods of periodic self-assessment. Our curriculum review meetings ensure that courses are aligned with the department’s mission and vision; professors are observed each semester by full-time faculty members to confirm that course content is being delivered as expected; Student Evaluations of Teaching (SETs) are a college-wide assessment which documents student evaluations of teaching and provides direct and anonymous feedback to full and adjunct faculty. The data gathered from these assessments is used to inform strategic planning decisions by the department.

Although we have mechanisms in place to help us fulfill our current objectives, we see the accreditation process as an opportunity to revisit our vision and establish new long-term goals. Looking ahead, we can identify several areas in which to advance and improve our program:

- Enhancing a unique studio culture. Currently, 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 students 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.
- Expand the Virtual Desktop Infrastructure (VDI) to improve student access to digital tools. The VDI environment creates greater flexibility within classrooms and activates informal spaces where students typically gather.
- Reassemble a more diverse advisory board -the **Executive Council on Design Education and Engagement** - 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 building and 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.
- 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 year, the Architecture League of New York, The American Institute of Architects, ULI - Urban Land Institute, Enterprise Green Communities, NYCHA - New York City Housing Authority, NY Department of City Planning, MOR - Mayor's office of 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 sent jurors to participate in the review process of student work.

### I.1.6.A PROGRAM SELF-ASSESSMENT

The Department of Architectural Technology has developed a culture of assessment, but one that needs to be broadened and 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 both skills and knowledge specific to the discipline, but also general education skills and knowledge, including the interdisciplinary courses that we have helped develop that are available to the full college community. The foundation of our program around open enrollment and the wide variation in college preparedness and learning styles in our student cohorts requires special attention to the teaching effectiveness of our courses and curriculum flow. This leads 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 particular 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. 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 large 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 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 of 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 all of these initiatives, and also 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: A result of the FUSE Lab project is 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.

### I.1.6.B CURRICULAR ASSESSMENT AND DEVELOPMENT

Department Chair: The chair is responsible for assuring the department assessment process is functioning as required. The chair assigns a faculty member to the liaison position 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.<sup>11</sup>

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.

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

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<sup>11</sup> See this link for list of liaisons: <http://air.citytech.cuny.edu/assessment/liaison/>

responsible to prepare and update the 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. An outgrowth of this process is a new initiative to create sequence coordinators who provide overall coordination for a sequence of related courses, for example building technology or design.

Course 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. During assessment cycles, these faculty implement the assessment vehicle and document the data, reporting back to the course coordinator.

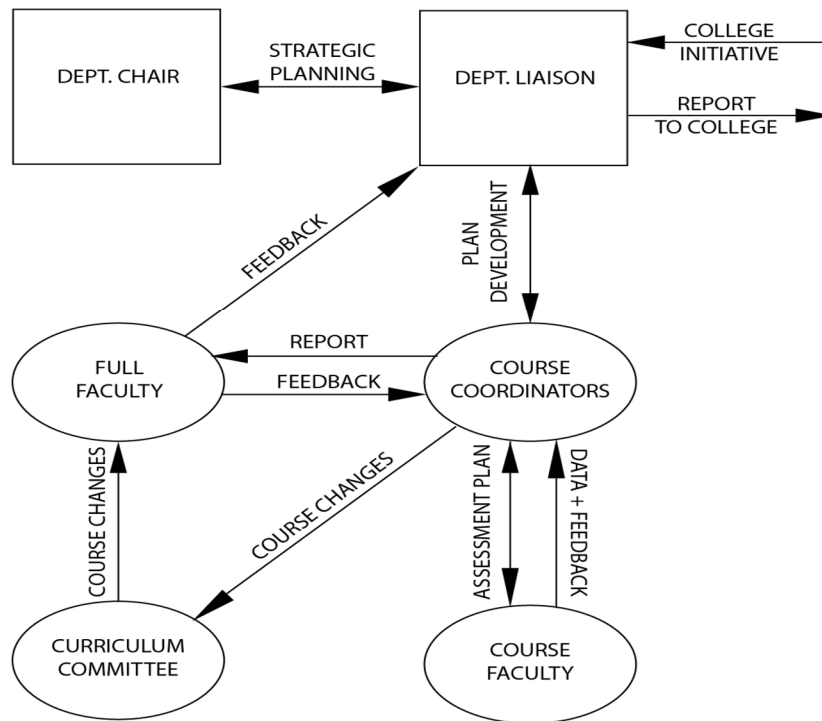
Curriculum Committee: This committee is responsible to review all significant course changes and vet them in the context of the overall curriculum for each degree program. The committee helps finalize adjustments to the course outlines and presents them to the full faculty for approval.

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.

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.

The department is continuing to develop more formal and holistic approaches to assessment that we intend to institute over the next 2-3 years as our first cohort moves through the B. Arch program. These approaches include 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.

## DEPARTMENT OF ARCHITECTURAL TECHNOLOGY ASSESSMENT PROCESS



### Sample of Template for SPC Assignment and Assessment Method

ALIGNMENT OF COURSE LEARNING OBJECTIVES TO NAAB SPC  
ARCH1212 Design Foundations and Visual Studies

**Table 1 Primary Criteria** *(the ~~strickthrough~~ is not covered in the current course objectives).*

Current learning objectives	Relevant SPC	Applicable Assignments (T: team project, Q: Quiz, I: Individual assignment)	Potential Improvements	Quiz or Rubric Attached
1. Implement an iterative design process from problem identification, information gathering, solution generation and evaluation, implementation, presentation, and overall project evaluation. (Knowledge) 2. Incorporate design concepts and vocabulary into design process and presentations. (Knowledge) 5. Communicate ideas and information both verbally and through writing. (Gen Ed) 7. Produce orthographic, axonometric, perspective, and architectural vignette drawings both hand drawn and digitally. (Skill) 8. Demonstrate knowledge of graphic conventions and methods (Knowledge and Skill) 9. Utilize analogue and digital media to create drawings and models. (Skill) 10. Incorporate color and materials into designs and presentations. (Skill)	<u>A.5 Ordering Systems</u> Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design	I1: Project 01: Bridging surfaces I2: Project 02 Vertical stage	I3: add required written component describing project intentions and narrative: clear project statement	

**Table 2 Secondary Criteria** *(the underlined is covered and the ~~strickthrough~~ is not covered in the current course objectives).*

Current learning objectives	Relevant SPC	Applicable Assignments (T: team project, Q: Quiz, I: Individual assignment)	Potential Improvements	Quiz or Rubric Attached
4. Distinguish between media and determine the appropriate method and media required to complete a drawing or model. (Gen Ed) 5. Communicate ideas and information both verbally and through writing. (Gen Ed) 6. Develop and apply professional vocabulary. (Gen Ed) 7. Produce orthographic, axonometric, perspective, and architectural vignette drawings both hand drawn and digitally. (Skill) 8. Demonstrate knowledge of graphic conventions and methods (Knowledge and Skill) 9. Utilize analogue and digital media to create drawings and models. (Skill)	<u>A.1 Professional communications Skills</u> Ability to write and speak effectively and use appropriate representational media both with peer and the general public	I1: Project 01: Bridging surfaces Final presentation I2: Project 02 Vertical stage Final Presentation		



## Section 2. Progress since the Previous Visit

### PROGRESS ON THE PLAN FOR ACHIEVING INITIAL ACCREDITATION

Below is the 10-point plan developed for the Plan for Achieving Initial Accreditation. Each point has the text from the initial plan followed by italicized text of our current activities and status of achieving the action item(s) for that point. The update includes a response to the panel comments noted in the ELIGIBILITY MEMORANDUM dated Dec 19, 2016 (attached below in the APPENDIX.)

#### Update to Course of Action for Achieving Initial Accreditation in Not More than Six Years

##### 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.

*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 is documenting the existing conditions in greater detail and projecting enrollment for the B. Arch, so that we can demonstrate the need for additional space clearly to the administration.*

*This study acknowledges the shortcomings of both our current use of computer labs for studio teaching and our second-floor office space for failing to provide space to support and encourage the full range of faculty roles and responsibilities. The facilities committee studied the layout, furniture, and technology in the rooms to best facilitate multimodal teaching. The committee has developed a vision for the department and pedagogical modalities: analyzing studying space allocation, usage and equipment. A formal report was made and presented to the Provost, Dean and Chief Information Officer. The report takes each teaching space and demonstrates that room's student capacity based on the ease of adjusting the furniture to accommodate at least two if not three or more modes of teaching and learning. The modes of learning depend on the type of learning space. The committee has identified the following types:*

- *Drafting + VDI Studio*
- *VDI Studio Type I*
- *VDI Studio Type II*
- *Digital Lab*
- *General Learning Space*

*The studio spaces each provide at a minimum studio design workspace along with presentation space. Most studios will also allow for seminar configuration and facilitate both individual and group work. The digital lab spaces are for focused software-based learning, offering less modal*

*flexibility. The 3rd floor of the Voorhees building is targeted for additional classroom space. The design of this floor is now complete, and the project has progressed to the funding phase.*

*Additionally, a Virtual Desktop Infrastructure (VDI) system, proof of concept, was successfully installed in one classroom workstations. Based on the success of this pilot, an expansion of the VDI has been submitted as a part of Capital Funding. 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.*

*The New Academic Building on our campus will also enable the department to provide large format lecture courses. The department's master course scheduler is working on implementing this into upcoming semesters.*

*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 has reworked and implemented a distance learning curriculum for at least the remainder of the Spring 2020 semester. The college has distributed 330 iPad and 408 chromebooks to students so that they can continue to learn under the distance learning format. ARCH students were given chromebooks to take advantage of the Virtual Desktop Infrastructure. These devices will continue to be available for loan in the future, promoting students' ability for virtual group work and research.*

*FINANCIAL RESOURCES: Tech Fee and OTPS remain major sources of funds for sustaining the equipment and material streams in the department. 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 in an effort 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. Grant funding is recognized as supplemental rather than essential to the regular advancement of technology and instruction within the department. Capital Funding and GRTI Grants are accessible to faculty to support research/teaching initiatives. There are two major expenditures in process through Capital Funding: a large format plotter and a large scale flat-bed CNC mill. The VDI infrastructure system was recently submitted and is still early in the review and approval process.*

*Supplemental Funding for special department initiatives is being pursued by the department's Steering Committee*

## **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.

*The five-year B. Arch program is 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 faculty to integrate and coordinate skills development into the course. This effort is a core part of our "Digital Spine." In addition, 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. Finally, 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, 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).

*We have replaced CLTS with a new standardized comprehensive series of workshops 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.*

*We have also developed a new system of advisement that occurs every fall to familiarize students with our degree programs and to advise them on possible trajectories. We explain the differences between the B. Tech and B. Arch degrees and their potential eligibility for the new B. Arch degree program. All full-time faculty participate in advising eligible candidates for the B. Arch program. Eligibility requirements, admissions procedures, and the B. Arch curriculum are discussed individually with each student.*

#### 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 (21 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.

*We are maintaining our current faculty capacity and filling course assignments with current full-time or part-time adjunct faculty. We continually re-access faculty capacity as we prepare for each academic year. Due 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

We enrolled the first "eligible" cohort in Fall 2017. All students will start in a uniform curriculum for the first two years, allowing us to maintain the open enrollment culture for our AAS and B. Tech degrees. This curriculum will follow the SPC requirements for the B. Arch degree. Students from this cohort can apply for the B. Arch degree program in the second semester of their second year. Students accepted into the B. Arch program start their third year in the Fall of 2019.

*Pursuant to NYSED's request, we will accept students as first-time freshmen, advanced standing students (after completion of the equivalent of 3-years of full-time study), or transfer students. Our first cohort will consist of advanced standing students that are currently enrolled in our B. Tech program and started in Fall 2017 or after. Since we received NYSED approval in Feb 2020 we are accepting applications for the B. Arch in March 2020. These students will enter the B. Arch program in Fall 2020. Starting in Fall 2020 we will only be accepting applications once a year in December.*

*We have also changed the curriculum map so that the first three years of the B. Arch and B. Tech are identical to provide more students with the opportunity to prepare themselves for consideration into the B. Arch program.*

#### f. Projected Date for Awarding Degrees

The first cohort to be awarded the B. Arch degree is projected to graduate in spring 2022.

*We are continuing to follow this schedule.*

#### g. Plan for Developing and Implementing New Courses/Curriculum

*We are on track to meet our schedule as proposed in the Plan for Achieving Initial Accreditation. We have gained approval of our curriculum changes to years one and two and began to implement them in the fall of 2017. This includes a new course (Intro to Architecture), shifting our technology sequence back one semester, and adding credit hours and contact hours to our studio courses. We are finalizing our changes to the third- and fourth-year courses as well as developing the fifth year courses, and are preparing to submit the application for the new 5 year B. Arch degree program this fall to College Council for review and approval. This keeps us on track to have all the pieces in place for the fall 2017 cohort to move into the B. Arch degree program in their third year, fall 2019.*

#### 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.

*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 on 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 of the students is a continual challenge and institutions that can host and provide instruction for the students are valuable partners. A consequence of the international partners is a critical enhancement of the camaraderie between students, enhancing their leadership and collaborative skills.*

#### i. Plan or Provisions in the Event the Program Does Not Achieve Initial Candidacy

Our department believes that 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.

*We have received initial candidacy and now are proceeding with 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 on 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 a few 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 are able to 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.*

## PROGRAM RESPONSE TO THE INITIAL CANDIDACY VISITING TEAM REPORT

The following is a response to the Visiting Team Report based on their visit February 2018. Comments addressing areas of concern from the VTR noted below. Our response is in italics.

### I.1.2 Learning Culture

#### 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 studio section.

*Beginning Fall 2018, the Architectural Technology department began working with Vincent*

*Roach, Assistant VP for Enrollment in reducing the number of students in many of our first-year studios and building tech courses to eighteen. This is the enrollment cap for the second-year studios. During the third- and fourth-years studios, the enrollment cap decreases to fifteen students. Previously the enrollment was determined to be twenty-two students based on the number of computers and desks, not the learning methodologies.*

- 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.

*The Studio 8 sequence, which focuses on integrated design with building systems and advanced building envelope coordination, will draw from previous courses in the curriculum to allow students to develop a comprehensive project as their final pre-thesis studio requirement. By drawing from courses based in building structures, mechanical systems, environmental analysis, detailing of materials and assemblies and advanced computational tools, the Studio 8 class will focus on the design that will integrate this combined knowledge in a project that is developed to provide the scope and conditions for a comprehensive integrated design proposal. These projects will then be used pedagogically to explore improvements and concentrations within the previous courses that will support continued student improvement within the design sequence.*

- Finding a balance between flexibility and sequence is the goal in addressing this student population's needs.

*Each semester all required courses are offered in the Architectural Technology department. Depending on the number of sections, they are offered during the day and during the evening on various days. This allows our students to take day and/or evening classes and create their schedules to allow for employment, families and commuting. In addition, many of the studios and building tech courses are offered in the summer if a student falls out of sequence.*

- Extend the hours of student access to facilities, since many students have little or no access to hardware or software outside the school.

*In Fall of 2017 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 been submitted as a part of Capital Funding. The VDI system provides students access to nearly the full range of software and computational power outside the classroom via any internet connection. Students with laptops can work in informal areas throughout the campus. This flexibility decouples students from the limited space and access they have to computer labs within the department. A future enhancement to VDI plan is to enable students access off-campus.*

- 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 bonding. A new cohort group advisement structure intends to bring cohorts together to share experiences, communicate, and give feedback to the program.

*In addition to the formation of a Student Council within the department, establishing a chapter of AIAS and NOMAs are in the progress by students in the department. The Brooklyn Chapter*

*of AIA has indicated it may also financially support student membership in AIAS.*

*Another venue to enhance student's learning culture and experience is through the ongoing relationship with the New York Architectural League, a professional organization that highlights excellence in architecture and promotes critical thinking and debate. The League provided no-cost access to approximately twelve students each year to participate in any of their lectures, office visits and of particular relevance the Annual Student Program where students have the opportunity to connect with students from other accredited institutions in the New York area while learning about the profession and making office visits.*

*Furthermore, The Architecture League developed a mentorship program exclusively for students in the department to improve exposure of the students to the profession. In 2019 a total of 23 students were paired with working professionals from high caliber firms such as Richard Meier, Foster + Partners, Thomas Phifer and David Adjaye.*

*The architectural practice of Tod Williams and Billie Tsien has supplemented this effort by developing a similar mentoring program. In 2020, 14 students were paired with mentors within their own studio.*

*For over 35 years, the Architecture Club has helped to bring together the students of City Tech, whether in the major or not, to explore a new world of how buildings are created and what it is like in an actual architecture firm. One important aspect that the club provides for the students is a fun hands-on experience with the field by visiting well-known firms, construction sites, and sponsoring out of state/abroad trips.*

*The club is well known for its spring break trips where we take our students to a country of their choosing to explore a rich culture and its architecture while creating amazing memories. The club is open to members presenting new ideas, and this self-directed nature makes the club special. The students have travelled internationally to Greece, Turkey, France, nationally to Washington DC, Boston and Chicago, and locally to The Glass House, Grace Farms, Dia Beacon and Falling Water. The club meets every Thursday from 12:45pm to 2:00pm. For notices on what will be happening during the meetings on Thursday, we send out weekly emails to all members with a flyer attached stating the program.*

*One of the long-standing special features of the Architecture Club is the invited guest-speaker series. These speakers come from many areas including practitioners within the architectural profession, academics of higher learning, directors and policy makers from city agencies, artists, product and manufacturing representatives ; working graduates from our own department returning to share where they are now, with a seasoned perspective of what their education at City Tech has offered them. Speakers have included: Stefano Paicchi, Zaha Hadid Architects, London; John Chu, Calatrava Architects, NY; Alessandro Ronfini, Senior Designer with ENCLOS, NY; Christopher Hebling PhD, Fraunhofer Institute for Solar Energy Systems, Freiburg, Germany; Eric Johnson, Grimshaw Architects, NY; Ian Colburn, Snohetta Architects, NY Ken Levenson, President, NY Passive House, Brooklyn, NY; Michael Webb and Dennis Crompton of ARCHIGRAM; Allan Wexler, Prof and artist, Parsons Graduate School; Chris Hillyard, Diller Scofidio + Renfro; Ed Gaskin of Zaha Hadid Architects, NY. These talks take place in an informal classroom setting and offer an excellent opportunity for students to engage with folks from the world beyond City Tech.*



*ARCH 4900 Internship class offers visits to high-profile architectural offices exposing most students for the first time to these highly motivated workplaces. Visits have included: Studio Gang NY; Urbahn Architects NY; Handel Architects; Hariri/Hariri Architects; Diller Scofidio + Renfro Architects; SOM Architects/CASE-RPI; BIG (Bjarke Ingels Group) Architects; PerkinsEastman Architects; FXCollaborative Architects; Annabelle Selldorf Architects; Grimshaw Architects; Snohetta Architects; Daniel Liebeskind Architects; Rafael Vinoly Architects; Peter Eisenman Architects; KPF Architects; the late Vito Acconci Artist/Architect.*

- *Our Studio Culture Policy can be found in Section I.1.2 Learning Culture of this report.*

### **I.1.3 Social Equity**

#### **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 aliens. 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/eoo>).

*The APR describes numerous institution-level programs for student support, including departmental workshops that are coordinated with the program curriculum offerings and both required and optional advisement sessions. 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.*

### **I.1.5 Long-Range Planning**

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.

#### **ADVISORY BOARD**

*The former advisory board is re-conceived and re-structured as the “**Executive Council on Design Education and Engagement**” where members are solicited from a diverse array of building industry associated fields. Members are tasked with building the profile and fundraising arm of the department and increasing experience, exposure, and employment opportunities for students. Working with the Steering Committee the Council intends to build connections that may lay the groundwork for a long-term vision for the department. Current activities include targeting institutions and representatives to build alliances and align program outcomes. Raising funds to support special projects for students in the department. Identifying and supporting unique talks for students to expand the conversation on design and culture. In 2020 Dr. Mabel O. Wilson was invited to speak at the college. With the Steering Committee's help and the Executive Council support over two hundred students and faculty were in attendance.*

#### **HISTORY THEORY COURSES**

*The History of Architectural Technology has been rewritten as the ARCH1121: History of World Architecture to broaden the coverage of multiple cultures. Rather than following a historical timeline based on the history of Western Architecture, the revised course connects the history*

*of architecture to a time and place. For example, Gothic Architecture, which is now understood as the “Architecture of France, Germany, and England, 1050-1400,” is succeeded by “Mesoamerican Architecture, 1300-1500,” to place multifarious cultures within their chronological contexts.*

*ARCH3522: History of New York City Architecture continues to explore the history of New York architecture through the lens of the social and political institutions by which its buildings were realized: not as just the consequence of a temporal sequence of stylistic preferences.*

*ARCH4722: The Theory and History of Technology in Architecture is a new course proposed to address the relationship of architecture and technology through the examination of how technology is expressed in architecture and since the digital turn how technology produces architecture. Students will read excerpts from pre-Modernists Ruskin, Violet Le Duc, and Semper, and will explore the writings of the Modernists beginning with the Werkbund, Bauhaus, De Stijl, Wright, and Le Corbusier up through the late-Modernists such as the Metabolists, ARCHIGRAM, and the “High-Tech practitioners.”*

*The second part of the course will explore the theories of computational design, tying the algorithmic principles of Vitruvius, Alberti, and Durand to the digital practices of today and how they shape the creative process.*

*ARCH 4822: Architectural Theory: This course is currently being written. It will focus on the social and political aspects of architectural production.*

#### **VIRTUAL DESKTOP INFRASTRUCTURE**

*In the spring 2018 the Department of Architectural Technology brought its first VMWare Virtual Desktop Infrastructure (VDI) classroom online after two years of planning. The department manages over 200 workstations in 10 classrooms and 8 servers in a data center with a staff of only 2 full-time college lab technicians. This initial pilot lab includes 24 workstations which will need to run over 70 different software programs many with high end graphics requirements. Our motivation was to simplify the management of our expanding IT infrastructure while reducing the in-class footprint, the electrical and heat loads and allowing for a more flexible classroom layout. Implementation required coordination and support of the teaching faculty, the departments IT staff, campus wide IT staff as well as Dell computers which supplied both the hardware and technical and consulting support. We continue to evaluate and modify the implementation of the existing VDI system and to determine how this will impact the long-term planning of our network infrastructure and our classroom layout.*

#### **ARTICULATION AGREEMENTS**

*The department's CTE Memorandum of Understanding connects with 10 separate Career and Technical High Schools throughout the boroughs of New York City. In Fall 2019 the department met with the New York City Department of Education Office of Postsecondary Readiness representatives to further expand on the memo and begin alignment of preparatory education and professional exposure to high school students. This connection is a valuable pipeline for*

*students entering the department as first year B. Tech students or as applicants to the B. Arch program.*

*Currently the department holds an articulation agreement with Queensborough Community College. In spring 2020 City Tech faculty and the Associate Provost held a meeting with the Department Chair and faculty from QCC. The goal of the meeting was to better align course outcomes and share academic resources. While the articulation agreement is strictly for the four-year B.Tech degree, it does establish a pipeline for students that may apply for the B.Arch degree in the future.*

*Fall 2018 saw our 5th Annual College-wide graduate School Fair. To this fair the Arch Tech Dept has invited over 30 Graduate Schools of Architecture, each year adding more. What has been especially useful is the “after fair” event which happens within the walls of the Arch Tech Dept. This event offers an excellent opportunity for students to interface with directors and representatives from graduate programs from the northeast region of the US, and beyond. Graduate school directors present their programs for our students and faculty, with a very informative and vibrant question and answer session to follow. Visiting schools have included: New Jersey Institute of Technology; New York Institute of Technology; NYU Tandon Engineering; NYU Wagner School of Urban Planning; Parsons/The New School; Penn State; Philadelphia University; Rhode Island School of Design; Rensselaer Institute of Technology; SCI-arc (Southern California Institute of Architecture); Stony Brook University; Temple University; The City College of New York; University of Hartford; University of New Mexico and University of Pennsylvania.*

#### **LONG-RANGE PLANNING**

*Our long-range plan for New York City College of Technology Department of Architectural Technology considers the rapid changes and opportunities presented by technological advances in the AEC industry globally. Our view to 2050 is to build an adaptive flexible framework that can engage what we see in emerging trends and aspire to be able to engage the unknown factors of the future. Adaptation to evolving circumstances is the best preparation for uncertainty and key to relevance for our graduates.*

*By 2050 over 70% of the world's population will live in urban centers presenting a host of challenges physical, ecological, societal and material. As an urban institute with a globally diverse student body and faculty of Architecture Technology Department is well positioned to thrive in that future preparing the next generation of students to be successful, provide industry with a testing ground to new ideas and technology while advocating for a stronger more equitable New York City.*

*By 2050, New York City will reduce its carbon output by 80%, increase its population by one million people and move to complete many goals outlined in the One YC & SIRR reports. As an emerging partner with the city and its agencies the department will increasingly serve as a resource and think-tank to make a significant contribution towards accomplishing these goals.*

## LONG-TERM GOALS

*The department's outlook for success to 2050 recognizes key areas of development forming the framework to our success. Our long-term goals include the following*

### **1. Embrace the changing landscape of design and technical education.**

*Our diversity and worldview is our strength. The Architecture Technology department at CUNY is the largest program of its kind in the city, of the over 700 students where 40% were born outside of the US, 58% come from households earning less than \$30k annually. Their composition is reflective of the continued direction of the program committed to global engagement, diversity and inclusion.*

### **2. Create facilities and tools for educating the next generation.**

*Educational facilities/tools for educating the next generation: (redefining place-based learning). As a school founded in technology, recognizing how we transform the way we learn, teach and collaborate is the pathway to envisioning our future. XR technologies liberate traditional place-based learning, expanding our view of the world and opening countless possibilities.*

*Using emerging tools, the department will define the leading edge of XR learning, shaping coursework that responds to the work environments of the future. To realize these goals, up to date tools and the spaces to deploy those tools will be needed. We envision 3d design studios for experiential reality development that rethinks our classroom footprint equipped with real-time engines for computing power. These industry-supported laboratories will test and prototype aspects of new architectures, assemblies, environments and materials on and off campus.*

### **3. Create a pipeline of students from inner city regions to become advocates and agents**

*Encourage students to become engaged, tech savvy, urban citizens cognizant of their responsibilities to the environment, their community and global processes. To be relevant and facile with technology requires a full spectrum of experiences and the ability to understand and sample a full spectrum of disciplines. Seamlessly moving from a variety of experiential environments that embrace culture, geography, data, and architecture will be our measure of success.*

### **4. Develop the pipeline of high-quality instructors that are exposed to and who responsibly engage with the education of such a diverse, underserved, and vulnerable population of students.**

*Increased cross-disciplinary engagement is necessary. Supporting instructors through multidisciplinary partnerships and fostering research opportunities and scholarship are key in developing critical thinking skills that will attract new faculty and open opportunities as direct collaborators with a host of partners.*

### **5. Curricular response to world needs**

*Recognizing current events relevant to our city, and those that directly affect our students is a core responsibility to 21st century education. The department is committed to addressing current and future needs that resonate with our community and by extension*

*the world. At this writing, the department has shifted to distance learning to accommodate our students through the coronavirus pandemic. Students are remaining engaged, tuning in during class time. Use of distance media will further enhance our ability to reach our students regardless of extraneous conditions.*

### **I.1.6 Assessment**

#### **1. Program Self-Assessment Procedures**

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.

*As part of the process of submitting the new program for the CUNY Board of Trustees' approval, learning objectives in all courses were reviewed and updated to conform with a new three-level hierarchy of learning objectives: general education, NAAB SPCs, and course-specific objectives.*

*We assigned all NAAB SPCs to a wide range of our courses. We started to assess the mastery of each subject and substantiation to mastery on each subject, for which we had developed an assessment system with rubrics in spreadsheet format. We began piloting the assessment system in selected courses that we have collected student performance results and work samples. We are currently analyzing them for further course development and coordination of each course. We have been expanding the collection of student work to include courses beyond the design studios.*

*We have begun to formalize the expanded roles of the course coordinators: 1) identify the specific course topic to be utilized to meet each assigned Learning Objective; 2) formulate the specific rubrics or other assessment tools to be used; 3) evaluate student performance and collect student work samples; 4) create the final assessment reports for all sections of the course.*

*While revisiting and refining the existing structure courses and design courses, we have aligned their learning outcomes and objectives to meet NAAB criteria. Architectural Design 10 has been chosen as the critical course of the B. Arch program for it is the culmination of student learning, especially because it includes thesis preparation. The assigned NAAB SPCs include A.1 Professional Communication Skills and A.4 Architectural Design Skills. With our established review system, periodically we began to review the course, by 1) identifying the critical components, 2) aligning student learning outcomes 3) developing course-specific assessment rubrics. We are planning to develop 5th-year courses, prior to the arrival of the first cohort group, which is roughly a year and a half away at the point of this writing.*

*In 2019, the department conducted a comprehensive assessment of the core curriculum with external jurors, called Super Jury. The main purpose of Super Jury is to evaluate the quality of our student work with industry experts and educators in NY. The student work samples of all existing design courses (Design I~VIII), technology courses (Building Tech I~VI) and two electives (Building Performance Workshop and Parametric Computation, Material & Fabrication) were selected and presented by the faculty, which was evaluated by the jurors with prepared surveys. The survey results were reviewed by all full-time faculty members that was followed by a City Tech faculty workshop that gave an opportunity to respond and improve departmental goals to serve our students.*



*Images from Super Jury Fall 2019*

*GenEd goals have been allocated to most courses and we have continued to collaborate with the college assessment office (AIRE) to improve the assessment standards and processes. Additionally, AIRE made an effort to publish the assessment data of all students in our department, which enables us to analyze them in a timely manner. This data has been incorporated into the assessment templates and review process.*

*Periodic reviews are planned for improving student learning outcomes. An assessment system that we are establishing includes a specific calendar for biannual periodic review of courses through student performance (see above). We intend to improve each course with regards to student outcomes of NAAB, GenEd and course-specific objectives. Course coordinators will be responsible to present and discuss with the faculty group and the department chair, and to report on progress.*

*We had refined the program outcomes of existing programs (B. Tech and AAS) in 2017 and currently are in the process of developing the B. Arch program outcomes. We have begun to collect and review sample program outcomes from other NAAB programs and will align and build upon the AAS and B. Tech program outcomes recently re-established.*

#### **B. TECH Program Outcomes (for reference)**

##### **Program Outcome #1: DESIGN COMPLEXITY**

*The B. Tech curriculum advances the Associates'-level knowledge by incorporating increased complexity into design studio briefs. Students grapple with integrating site design, codes, and*

*regulations into their design projects.*

***Program Outcome #2: BREADTH OF TECHNICAL INQUIRY***

*Technical courses at the B. Tech level expand to include envelope systems, material investigations, and performance simulations as a method for reinforcing classroom lessons, information literacy, and intellectual inquiries.*

***Program Outcome #3: DIVERSITY IN PRACTICE***

*Design studios bring state-of-the-art knowledge of the practice through collaborations with industry professionals, which continuously exposes students of advancements in design, construction, and preservation. Students learn professional conduct and a wide range of opportunities available to enter the field or further their studies with an advanced degree.*

***AAS Program Outcomes (for reference)***

***Program Outcome #1: SEEING AND THINKING***

*As the pace and scope of architecture rapidly diversify in an urban environment it is critical that graduates are armed with deeper knowledge about their built environment in meaningful ways. Writing, research, and critical thinking skills are integrated with placed-based learning centered on the recognition of architectural ordering systems. This integrated learning enables students to actively explore and engage with landmark sites throughout the city as a method of learning.*

***Program Outcome #2: DRAWING AND INVESTIGATION***

*Built upon the department's tradition, essential skill sets for architectural drawings are acquired through traditional and contemporary methods that allow students to apply investigative skills, design thinking skills, and programmatic planning skills.*

***Program Outcome #3: TECHNICAL KNOWLEDGE***

*Technical courses within the associate's program provide students with introductory knowledge of materials, assemblies, structural systems, and site design, which they can evaluate and apply to architectural practice.*

***Program Outcome #4: COMMUNICATION AND PROFESSIONALISM***

*The AAS curriculum builds visual, oral, and written presentation skills and methods for constructing effective arguments. This taps into their growing knowledge and understanding of history, math, science and the humanities, which in turn fosters an atmosphere of inclusion, respect, and open-mindedness.*

## **I.2.2 Physical Resources**

**2018 Analysis/Review:**

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.

*The college has responded to the department's request for additional space. This response includes the request to develop an additional study with documentation that demonstrates the*



*need with additional data. The department is currently drafting this new report with the goal of submitting to the Dean's office in spring 2020. One existing studio has been renovated and reconfigured as a beta test of a multimodal studio layout that sits with 4 structural bays of Voorhees Hall. This studio provides a template for the new studios to be developed as well as the renovation and reconfiguration of the remaining existing studios, achieving one of our important priorities for studio instruction.*

*In order to mitigate the lack of new studios in our current scheduling, the department is taking advantage of the newly opened Academic Building that has lecture format classrooms available for our courses that work well in lecture format. This relieves some of the pressure for the new studios. Our latest proposal to the college includes converting our three computer lab spaces on the 8th floor of Voorhees into upper level studios each with the capacity for 18 students. These studios are proposed to be served by the Virtual Desktop Infrastructure (VDI), allowing the furniture to be simple and flexible for multi-model teaching and learning. The student tables will be covered in healable surfaces and large enough to facilitate model making, hand drawing, and laptop computer based digital work.*

*In addition, our latest proposal calls for the relocation of the second-floor faculty offices to the eighth floor in an existing classroom. The loss of this classroom will be made up by converting the existing second floor office suite into two 14 student studios, providing the department with a net gain of one new studio in addition to the above-mentioned converted computer labs. See latest facilities plans in section 3.1.2.2 Physical Resources below.*

#### 2018 Analysis/Review:

The workshop is not large enough for all the students in the program to work, so certain times, like finals, are difficult to manage.

*Our current fabrication/modeling making lab is quickly reaching capacity, to the extent that we are unable to add new equipment without additional space. We are considering in our current study the following strategies to resolve this issue:*

*When additional studio space comes online, V833, which is currently a compromised studio space (due to an undersized footprint), will become an extension of the fabrication lab. This room is already set up with a slop sink and power that can accommodate this use.*

*We are considering a change of furniture in the typical studio that will be multimodal accommodating laptop use with power and hardwired data capability, portable drafting boards for hand drafting, and a self-healing cutting surface for model making. This furniture strategy will reduce the demand of our current fabrication/model lab and distribute some of this demand across the studios themselves.*

#### 2018 Analysis/Review:

There are some limited storage solutions for student work, but it generally appears to be a challenge for students to have dedicated space for non-digital 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.

*As we refine our space planning for our new studios, we are identifying “found space” that can be converted from inefficient circulation to a storage corridor with student lockers for textbooks, drawings, models, and personal items. The Department is working on moving unused lockers from the Pearl Building to the third floor of Voorhees Hall to provide storage of personal items and some course materials. Two studios are proposed to include a custom desk with integral storage. These studios would be used for the foundation and early building tech courses which require the most intensive use of model making and hand drafting.*

2018 Analysis/Review:

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.

*It remains the department’s goal to provide dedicated studio desks for the Fifth Year B. ARCH students. This goal is not likely to be achievable in the near term, but we continue to include it in our facilities programming.*

2018 Analysis/Review:

Faculty office space is also identified as a target need for improvement, since faculty are currently spread across several floors and locations, many faculty members share small offices or are in 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.

*Our department continues to debate the program requirements for proper faculty offices. In the short-term, our study shows a viable strategy that will swap the second-floor office suite with a substandard studio (V817) to achieve the consolidation of faculty offices on the 8th floor with all offices (new and existing) accessible from the front office reception. This swap will also yield a net gain of one new studio. While this strategy is not a consensus approach to faculty offices, it offers the best timeline and budget approach to improve the existing conditions.*

2018 Analysis/Review:

The program intends to form a departmental facilities team to study long-term space needs and work with the institution to implement a plan.

*Our department has a core facilities committee consisting of Prof’s Maldonado, Montgomery, and Baez. They are actively tracking and responding to all departmental current and planned space needs and compiling data and studies for the college administration’s review. This includes per capita studies that place our department in the context of the School of Technology and Design so our students’ needs can be compared to other departments’ allocation of space.*

2018 Analysis/Review:

The newest building on the City Tech campus, a health-sciences building, opened in 2018 and relieves 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.

*The new Academic Building is offering relief in regard to our scheduling classrooms as mentioned above. However, the re-planning of the third floor of Voorhees hall is delayed. Our department is studying alternatives that are not reliant on the full reconfiguration of the third floor. We currently show two of the existing classroom spaces converted to 18 seat computer labs for classes focused specifically on digital learning.*

#### 2018 Analysis/Review:

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.

*Our newly renovated V814 studio is the starting point for a new studio configuration that frees up substantial wall space and floor area to accommodate student pin ups and formal presentations in the studio space itself and relieves the pressure on the pinup space in the 8th floor corridor. This new configuration accommodates special presentations in addition to normal department teaching and learning. This reconfiguration is rooted in the multimodal template for all studios but is a clear improvement in particular for student presentations. Each proposed new studio space has been studied to demonstrate the flexibility of furniture to ensure pin-ups can occur in the studio space.*

### I.2.3 Financial Resources

#### 2018 Analysis/Review:

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.

*The department's operating budget remains funded by the same mechanisms noted in the review. Faculty have made recent applications for large scale grant funding to supplement instruction and pedagogical tools. A recently implemented CUNY contract provides a small annual stipend to Department Chairs to implement special projects. The Steering Committee continues to advocate for the department's mission, seeking funding for special projects and student centered programs.*

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

#### 2018 Analysis/Review:

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.

*In addition to submitting the CUNY Application, transfer students are required to submit the same application documents as the advanced standing students. After being admitted into the B. Arch program, transfer students will have transfer credits evaluated to determine course equivalency. Within CUNY most general education course equivalencies have already been determined and can be reviewed online. For other courses, transfer students who are accepted may be required to submit course syllabi, sample assignments, etc. so that the evaluator can ascertain whether or not learning outcomes are equivalent. Students transferring from other institutions who are accepted into City Tech must provide copies of architecture/architectural technology/ or equivalent syllabi, course descriptions and writing samples or coursework for evaluation.*

*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.*

*Students entering the AAS or BTech in Architectural Technology program in fall 2017 and later may apply to transfer to the BArch program starting September 2020.*

## **PART TWO (II): SECTION 4 – PUBLIC INFORMATION**

### **II.4.2 Access to NAAB Conditions and Procedures**

2018 Analysis/Review:

The program has purposefully avoided indicating the potential NAAB-accredited degree in its materials until at least the initial candidacy review.

*NAAB-required documentation can now be found on the college and department websites since NYSED approval of the degree on Feb 14, 2020. Required documentation can be found here: <http://www.citytech.cuny.edu/architectural/accreditation.aspx>*

# Section 3. Compliance with the 2014 Conditions for Accreditation

## **I.2.1 HUMAN RESOURCES AND HUMAN RESOURCE DEVELOPMENT**

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 21 full-time faculty members in the Department of Architectural Technology. All are registered architects; 20 are registered in the United States and one in Costa Rica. All have advanced degrees and three have PhD's.

Our part-time instructional staff of over 60 adjuncts hold prominent 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. The resumes of full-time faculty are available in Section

#### 4 Supplemental Materials below.

Evaluations of full-time faculty are performed annually by one of the five elected members of the Department's Appointments Committee. These evaluations are filed in the College's Institutional Staff Relations (ISR) office as part of the faculty member's permanent file. Peer observations of faculty teaching are also performed each semester for all faculty.

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.

Students also have the opportunity to evaluate a faculty member's teaching performance each semester. At the end of the semester, students 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 also 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 continually addressed and corrected.

## PROFESSIONAL DEVELOPMENT

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.

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* is a dynamic tool that 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 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 program m. Launched in the spring of 2011, it re-envisioned 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. In addition, most faculty are actively practicing in New York City or further afield. A number of faculty serve on committees in professional organizations including the AIA New York Chapter, where they help organize events for the architectural community in New York but also bring the latest discussions and information to the faculty and students. Some AIA New York chapter events have been hosted by City Tech, bringing experts to campus to discuss the important developments around the world in the design of the built environment. A number of financial resources are available to faculty to support professional development and scholarship. They are outlined in section I.2.3 Financial Resources below.

## FACULTY SCHOLARSHIP AND CREATIVE WORK

The department's full-time faculty are increasingly balancing their teaching activities with their scholarship and creative activities. Many of our faculty are particularly engaged with publications, conferences, and other activities focused on the scholarship of teaching and learning. Profs. Chin and Hernandez-feiks are researching beginning design studio pedagogy and present at national conferences such as the National Conference on the Beginning Design Student. Prof. Chin recently completed a book chapter on interdisciplinary teaching with Prof. Christopher Swift from the Humanities Department. Profs. 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 presented many times to the Society of Industrial Archaeology (SIA) annual conferences. 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, and logic shape architectural thought. He is currently in conversations with a publisher for his book tentatively named "Civic Pride and Public Image: Architecture and Urbanism in Downtown Brooklyn" which documents the political and social history of the borough's public architecture.

A number of faculty have lead 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 critical reviews of contemporary New York City architecture as well as his research on 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 hundreds 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 advising the Ministry of Dominica in the Caribbean on post-Hurricane Maria recovery strategies with the Kalinago people, and contributor to recently released, Keep Safe!, guide to housing recovery for Island communities . 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. In addition to his award winning international architectural practice, Prof. Maldonado has lead multiple efforts for critical projects in New York City, including the successful effort to obtain Landmark District Designation for Tudor City. Prof. Maldonado recently received the Peter Cooper Public Service Award for Exemplary Service to the Public (2017.)

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.

## STUDENT SUPPORT SERVICES

All full-time faculty participate in student advisement. Throughout the semester, faculty maintain office hours for two hours per week. These hours are doubled during Early Advisement and Registration periods in the middle of the semester as well as Late Advisement and Registration periods in the winter and summer between semesters. In addition to this, we have developed a new advisement structure, mentioned earlier in the report, specifically geared towards advising students about the differences between the B. Tech and B. Arch programs.

First-time students are advised in the college's New Student Center, typically the semester or summer before they begin classes. The Center works closely with the department to assure that the students register for the correct courses and shows students how to use the online registration system, CUNYfirst. Subsequently, students receive advisement from program faculty. The department's advisement program serves not only the function of advisement of courses needed to fulfill degree requirements but also provides a time for mentoring students through discussion of career goals.

Students looking for job placement assistance are referred to the department's Job Placement Coordinator, Professor Ken Conzelmann. He maintains a database of student and graduate resumes and employer contacts.

Prof. Barbara Mishara, AIA serves as the Architect Licensing Advisor of our department. She has attended the national conference and organizes student workshops and advisement sessions to guide students through their options for working towards licensure in New York



State. Prof. Mishara maintains contact with the personnel at the New York State Department of Education to ensure a dialogue that benefits our students and keeps her advisement accurate and up to date.

## I.2.2 PHYSICAL RESOURCES

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 faculty cubicles. 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 700-800 students with a full-time faculty of 21 and a part-time faculty of approximately 60. We anticipate our initial B. Arch cohorts will be in the range of 30-45 students. 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.

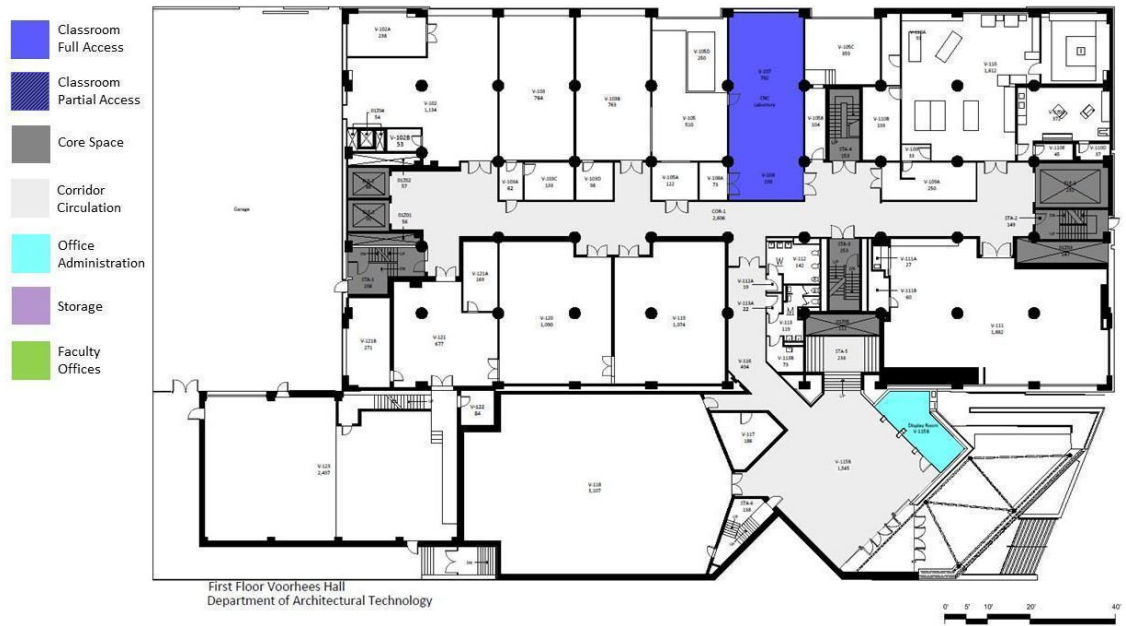
### Current Space Allocation

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 practice, exploration, and synthesis of the broad range of skills and knowledge inherent in the discipline. We are currently making due with our existing space, assigning studio courses into computer labs that are not properly 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 analysis and layout, group discussion, and pin-up presentations.

Space planning initiatives are on hold because of the pandemic. All available resources are diverted to assisting students and faculty with distance learning. The college purchased numerous laptops and tablets for distribution to students without adequate equipment for remote instruction. Faculty are being trained in remote instruction tool 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.

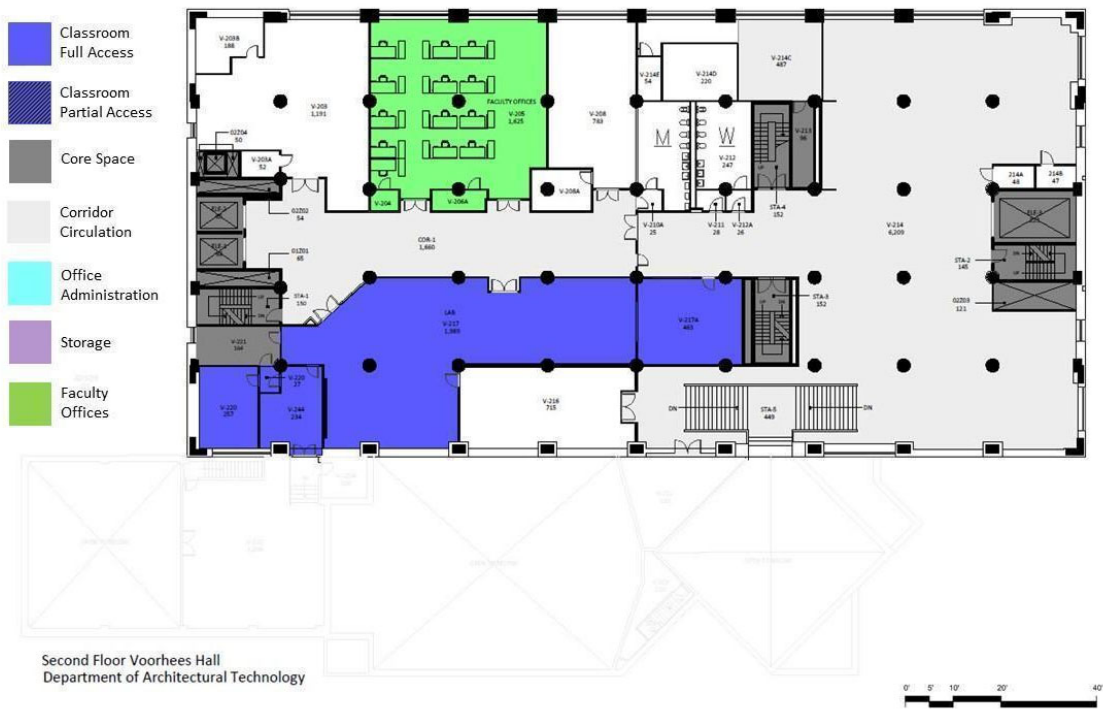
## Existing Floor Plans<sup>12</sup>

### First Floor

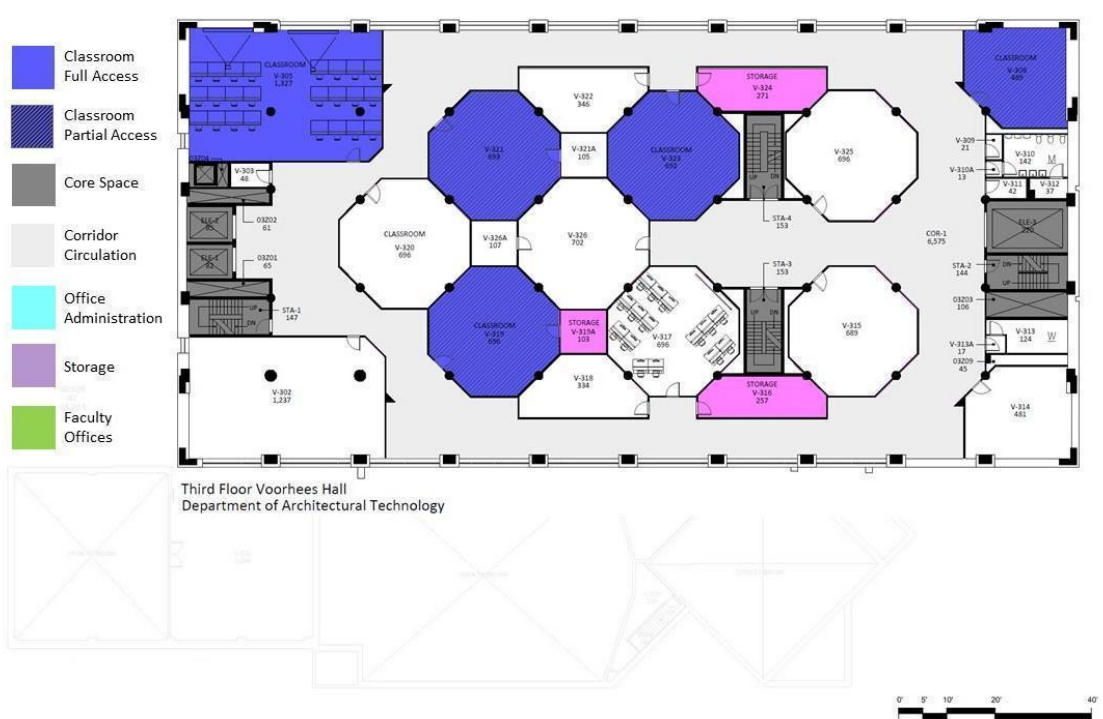


<sup>12</sup> Link to PDF of Floor Plans: <https://www.dropbox.com/s/efrhphte9vgvok5/NYCCT-Vorhees%20Arch%20Floor%20Plans.pdf?dl=0>

## Second Floor



## Third Floor



## Eighth Floor



### 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 (see below)	6	3	2	3
<b>Total New Learning Spaces</b>	<b>2</b>	<b>2</b>	<b>-1</b>	<b>-1</b>

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"<sup>13</sup>, 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.

<sup>13</sup> See the Buildings and Grounds Report on Classrooms and Learning here:  
[https://www.dropbox.com/sh/m09bodhieb1n8tn/AAABd\\_eAQVRqijv66Z23sv62a/03\\_Supplemental%20Materials/Facilities?dl=0&st=&preview=20160819\\_1Reconsidering+the+Classroom+at+City+Tech.pdf&subfolder\\_nav\\_tracking=1](https://www.dropbox.com/sh/m09bodhieb1n8tn/AAABd_eAQVRqijv66Z23sv62a/03_Supplemental%20Materials/Facilities?dl=0&st=&preview=20160819_1Reconsidering+the+Classroom+at+City+Tech.pdf&subfolder_nav_tracking=1)

The administration is in the process of re-planning the third floor of Voorhees Hall, with new studio and lab space being assigned to our department. We will work with the administration to coordinate our specific program requirements for these spaces and confirm their availability.

The configuration of each type of instructional space (both new and existing) will be studied for adaptation to accommodate multi-modal teaching, including facilitating group discussion, teamwork, in-class research, and dynamic presentations. All spaces will need to provide a base level of student access to networked digital technology in addition to the provisions at the instructor podium.

As a continuation to the important efforts of the Solar Decathlon in 2013-2015, as well as in support of a new Design to Build studio, the department requires formal arrangement for access to a wood shop as a complement to our fabrication lab. Currently the department is a guest in the shop of the CMCE department, which does not allow adequate class time and access outside of class times. We will continue to work with the administration to address this need.

Our faculty office space needs should be addressed to improve departmental communication and more efficient and effective access for students during advisement periods. At present faculty offices are spread across several floors and locations on both the 8<sup>th</sup> and 2<sup>nd</sup> floors. We seek to both improve the quality of office space and to consolidate office spaces to provide better access to our 8<sup>th</sup> floor administrative center and to locate these closer to our classrooms. We continue to work with the support of the college administration in this effort.

## Proposed Facility Plan Study

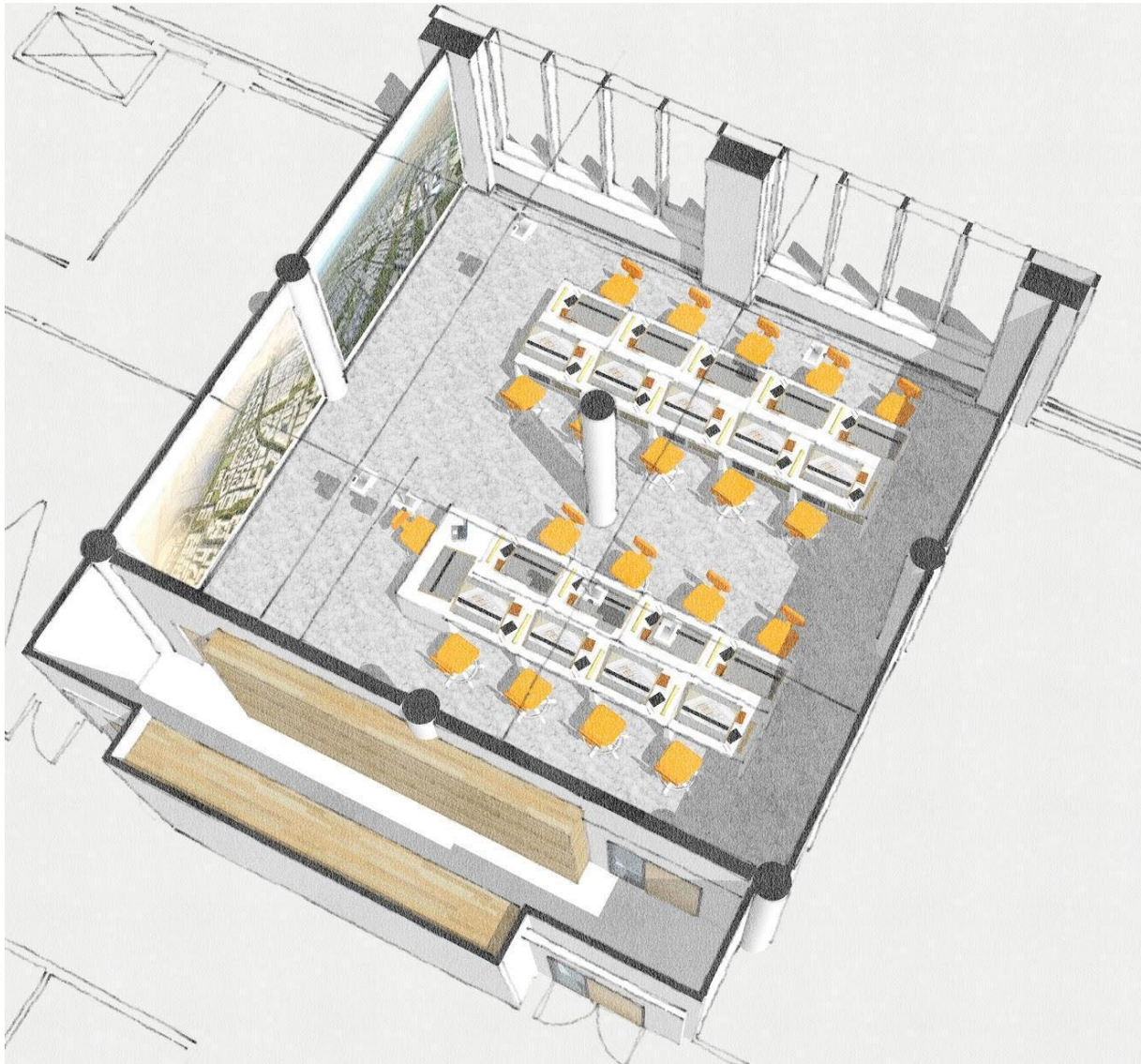
Our current planning addresses our need for more studio space by identifying two types of required studios. The first type, referred to as Drafting + VDI, supports the widest range of studio work including model making, analogue design drawing, digital modeling, documentation, presentation, and research, and analogue technical drafting. The computer services in this studio will leverage the laptop based VDI system to allow for movable furniture that facilitates multimodal



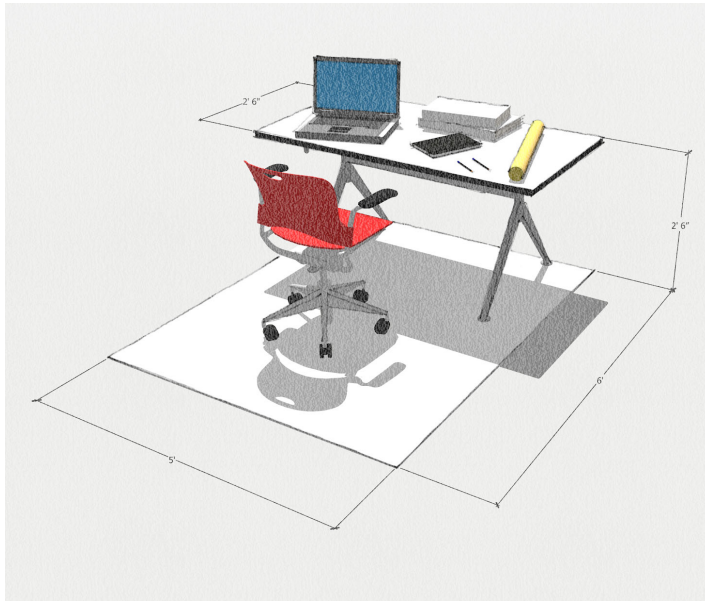
learning. The furniture for these spaces is designed at a plan desk height for better posture during hand drafting work. Also, since the early studios are the most model intensive, these studio desks include integral storage for student materials or temporary model storage. As these tables are larger and less flexible, they require larger classroom footprints to facilitate multimodal



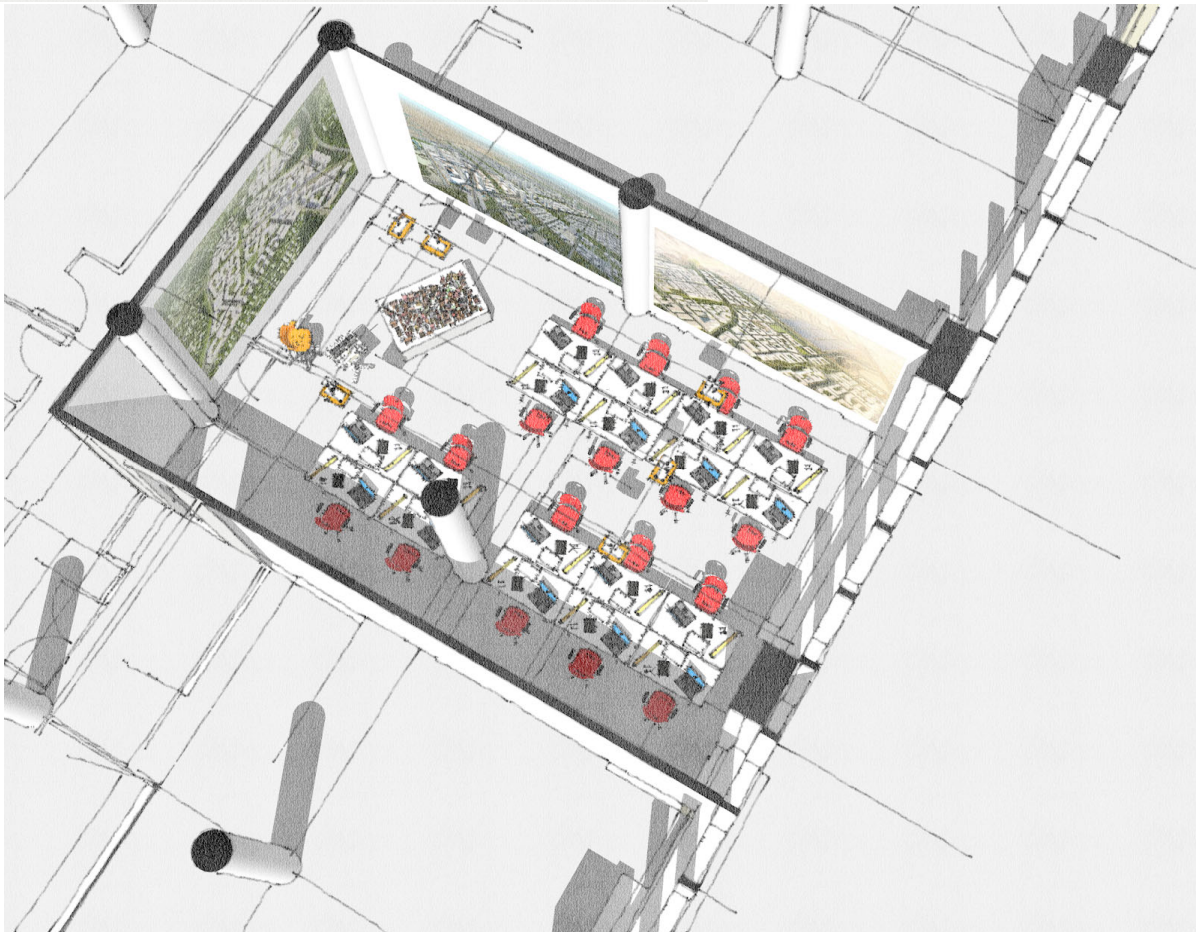
configurations in these studios.



DRAFTING + VDI STUDIO (18 seats plus Professor Desk.)



The second type of studio is focused upper level studios where analogue technical drafting is not anticipated. These studios utilize less deep and lighter weight furniture, tables at standard 30" heights that support model making, analogue design drawing, digital modeling, documentation, presentation, and research. These tables are more easily movable to allow for multimodal learning in more efficient studio spaces. This studio type is to be applied to the three computer labs on the 8th floor, converting them to 18 seat studio spaces. This provides an increase to the department studio count, but also results in one less dedicated computer lab (see table above.)

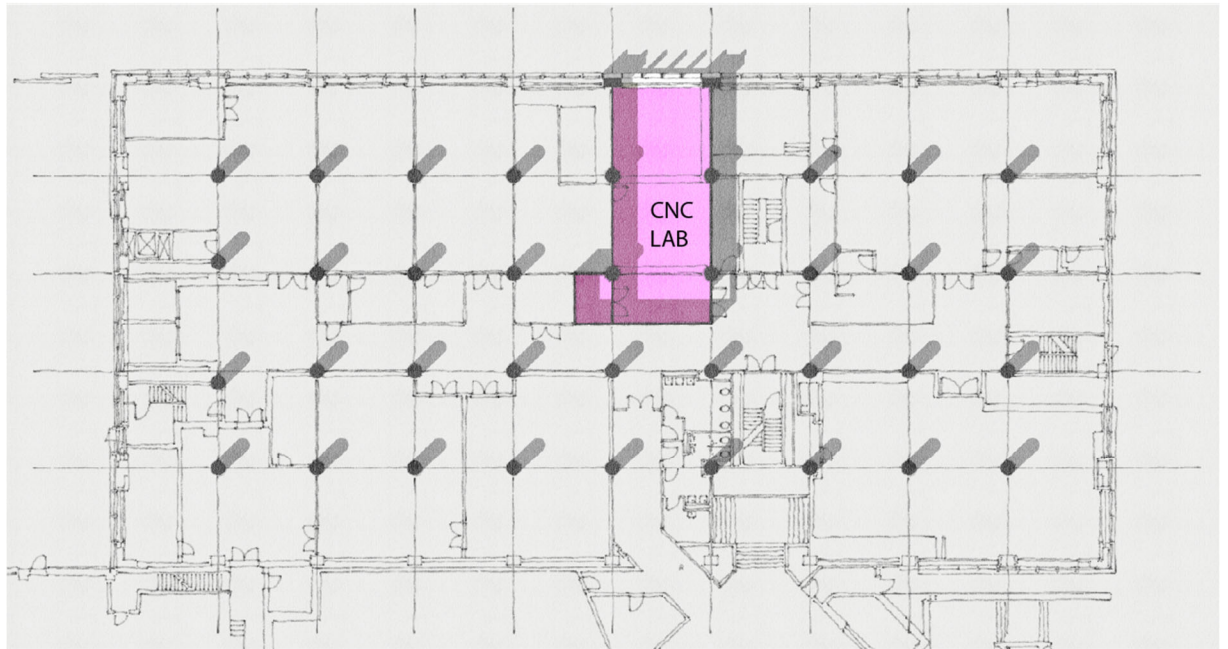


VDI Studio (18 seats + Minimal Professor Podium)

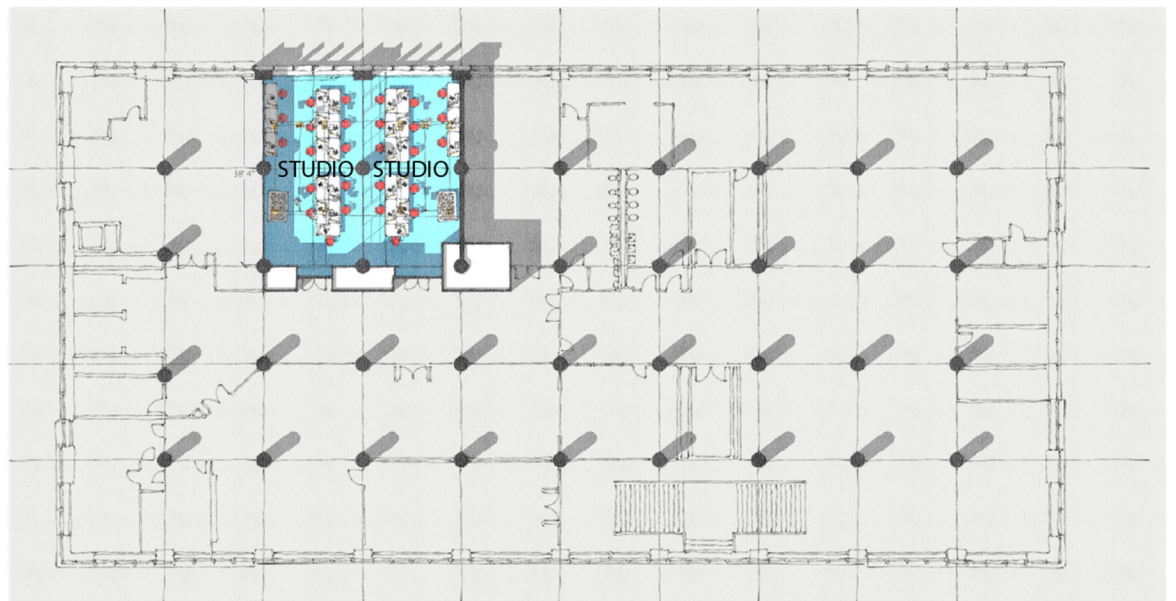


## Proposed Floor Plan Studies

### First Floor

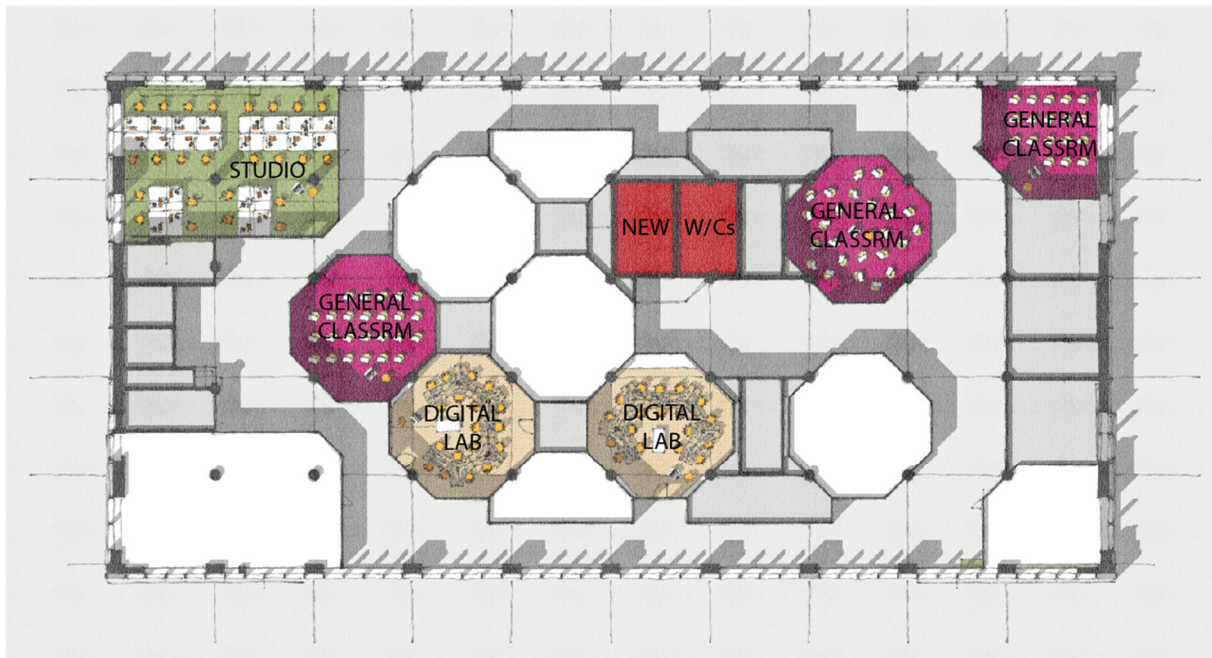


### Second Floor





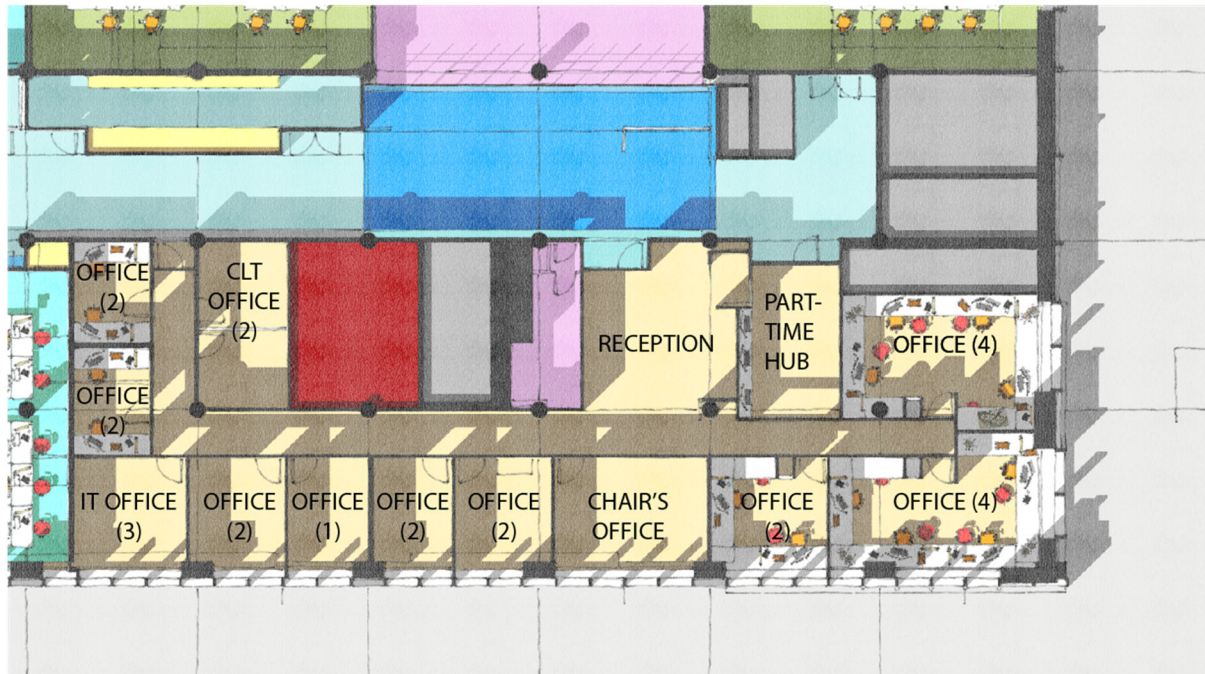
## Third Floor



## Eighth Floor



## Eighth Floor Admin Suite



Admin Suite (Chair + 21 Faculty Offices, Part-time Faculty Hub, CLT Office, IT Office)

### I.2.3 FINANCIAL RESOURCES

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 in an effort 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 a number of 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. Additionally, the Solar Decathlon project offered the opportunity to seek support from local businesses and manufacturers, relationships that we intend to maintain and build on in the future.

While the college has a formal alumni association, the department looks 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 or nontraditional career paths. These efforts will continue and be made more robust over the course of our candidacy to build a better feedback loop for curriculum development and 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<sup>14</sup>**

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.

**EMERGING SCHOLARS PROGRAM<sup>15</sup>**

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 a full year 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<sup>16</sup>**

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<sup>17</sup>**

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<sup>18</sup>**

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.

**I.2.4 INFORMATION RESOURCES**

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,

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<sup>14</sup> Office of Scholarships and Residency Services Link: <http://www.citytech.cuny.edu/scholarships/scholarships.aspx>

<sup>15</sup> Emerging Scholars Program Link: <http://www.citytech.cuny.edu/research/scholars-program.aspx>

<sup>16</sup> Office of Sponsored Programs Link: <https://facultycommons.citytech.cuny.edu/sponsored-programs/>

<sup>17</sup> CUNY Internal Funding Link: <http://www2.cuny.edu/research/faculty-resources/internal-funding/>

<sup>18</sup> PSC-CUNY Research Award Program Link: <https://www.rfcun.org/rfwebsite/research/content.aspx?catID=2930>

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. 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 Library is New York City College of Technology's virtual campus, which is comprised of several building complexes in downtown Brooklyn. The library building 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. 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.

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, ebrary, GreenFILE, Humanities Source, JSTOR journals, Material ConneXion, Oxford Art Online, Oxford Reference and SpringerLink Ebooks. Additionally, 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.

## I.2.5 ADMINISTRATIVE STRUCTURE & GOVERNANCE<sup>19</sup>

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

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<sup>19</sup> Follow this link for charts illustrating structure:  
<https://www.dropbox.com/sh/2a830v6voj6w5x5/AAAkD7KQQRnBNtMkuHABNJzWa?dl=0>

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.

Bonnie August, PhD, is the Provost and Vice President of Academic Affairs. Dr. August has served in this position since February 2005. As the chief academic officer of the College, she oversees faculty members in 27 academic departments, providing guidance for the curricular and instructional development of City Tech's schools of Arts & Science, Professional Studies, and Technology & Design, as well as the Division of Continuing Education, the Library, College Learning Centers, Instructional Technology, Assessment and Institutional Research, and the Faculty Commons.

The college is comprised of 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 dean of the School of Technology and Design is Gerarda Shields, who served since August 2019 as interim dean, and is now the dean.

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 a three-year term. Professor Sanjive Vaidya 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 not only for overseeing the curriculum of the College, but also formulating student-related procedures. In addition, it makes recommendations with regard to budget, the buildings and grounds infrastructure, personnel matters, and governance-related rules and regulations.

### II.1.1 STUDENT PERFORMANCE CRITERIA

The chart below documents the current courses responsible for the demonstration of the student understanding and ability of the required knowledge and skills for each graduate. As guided by our mission statement the Bachelor of Architecture curriculum will focus on the integration of the technical and design skills necessary to prepare students to join a competitive professional workforce.







## Realm B: Building Practices, Technical Skills & Knowledge

STUDENT PERFORMANCE CRITERIA MATRIX				Building Practices, Technical Skills & Knowledge																			
New York City College of Technology Department of Architectural Technology																							
<div>Key to Terms</div> <table><tr><td>A</td><td>Ability</td></tr><tr><td>U</td><td>Understanding</td></tr><tr><td></td><td>Introduce</td></tr><tr><td></td><td>Reinforce</td></tr><tr><td>M</td><td>Master (Assess)</td></tr></table>				A	Ability	U	Understanding		Introduce		Reinforce	M	Master (Assess)										
A	Ability																						
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<table><tr><td>Course No.</td><td>Course Name</td></tr></table>				Course No.	Course Name	REALM B																	
Course No.	Course Name																						
				B.1	B.2	B.3	B.4	B.5	B.6	B.7	B.8	B.9	B.10										
YEAR 1	1	ARCH 1112	FOUNDATIONS I																				
		ARCH 1101	INTRO TO ARCH																				
	2	ARCH 1212	FOUNDATIONS II																				
		ARCH 1231	ARCH 1231- BLDG TECH I																				
		ARCH 1250	SITE PLANNING																				
		ARCH 1121	WORLD ARCH																				
YEAR 2	3	ARCH 2312	ARCH DESIGN III																				
		ARCH 2331	BUILDING TECH II																				
		ARCH 2381	ARCH 2381- STRUCTURES I																				
	4	ARCH 2321	CONTEMPORARY ARCH																				
		ARCH 2412	ARCH DESIGN IV																				
		ARCH 2431	BUILDING TECH III																				
YEAR 3	5	ARCH 2481	ARCH 2481- STRUCTURES II																				
		ARCH 3512	ARCH DESIGN V																				
		ARCH 3531	BUILDING TECH IV			M					M												
	6	ARCH 3522	HISTORY NYC ARCH																				
		ARCH 3612	ARCH DESIGN VI	M	M								M										
YEAR 4	7	ARCH 3631	BLDG SYSTEMS										M										
		ARCH 4712	ARCH DESIGN VII																				
		ARCH 4781	STRUCTURES III				M																
	8	ARCH 4722	HISTORY/ THEORY																				
		ARCH 4812	ARCH DESIGN VIII																				
YEAR 5	9	ARCH 4861	PROF PRACTICE											M									
		ARCH 4822	HISTORY/THEORY																				
YEAR 6	10	ARCH 5112	ARCH DESIGN IX	M																			
		ARCH 5212	STUDIO X						M	M													



## METHODOLOGY FOR ASSESSING STUDENT WORK

Students will be assessed in their ability to master the SPCs in each course based on a number of parameters specific to the course content and format, such as participation, presentation, written work, drawings and models, design solution, and so on. Each parameter in each course will be given a percentage of the final grade, which is indicated on the course descriptions in the APR Report and will be in the course syllabus distributed to students. Assessment percentages of each course will be designed such as to focus on primary goals of achieving mastery in the specific SPC category, along with secondary and soft skills required to support the mastery of the category. It will be considered a failure if the students achieve a total percentage in the course of below 70%, and will require that the student repeat the course. For purposes of assessing work to be reviewed for accreditation, we would consider a high pass to be a student that has achieved over 90% of the parameters, and corresponds to a grade of A as indicated on their transcript. Students will be considered low passing if they have achieved below 80%, but have not failed, and corresponds to a grade of C as indicated on their transcript.

### II.2.1 INSTITUTIONAL ACCREDITATION

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). Individual programs are also accredited by the relevant institution.

Follow this link for Institutional Accreditation documentation:  
[https://www.msche.org/institutions\\_view.asp?idinstitution=67](https://www.msche.org/institutions_view.asp?idinstitution=67)

### II.2.2 PROFESSIONAL DEGREES & CURRICULUM

The development of our Bachelor of Architecture undergraduate degree is a continuation of the trajectory of our curriculum development over the last 16 years.

After a long history of offering an AAS two-year degree with an emphasis on workforce preparation, the department embarked on a series of modifications to our curriculum that were rooted in changes in the profession, improving the general education of our students, and enhancing the pedagogy of our architectural education to better serve our student body.

The first significant change was the introduction of the four-year B. Tech degree in 2003, which added 56-58 credits to the 64 credits required for the AAS for a total of 120 credits. This degree allowed our department to build a higher level of sophistication in our students, introduce a broader range of tools and technical skills, and raise the level of the design studios. This degree still carried a significant emphasis on workforce readiness, with only 21 credits dedicated to design, 34 credits for technical courses, 8 credits for history courses and 6 credits for professional practice courses.

Nine years after the launch of our B. Tech degree, our faculty revisited both degrees to assess:

- The effectiveness of the curriculum
- How to better integrate general education learning outcomes
- How to develop a more integrated approach to teaching design and building technology
- How to provide students with a choice between a more intensive design sequence and a more intensive technological focused sequence.

As part of this redevelopment of our AAS and B. Tech degrees in 2009-2010, we mapped our curriculum and skills to the NAAB Student Performance Criteria, seeking to better align our non-professional degrees to NAAB standards. The result of this round of development is a curriculum that addresses a broad range of NAAB SPC(s).

Table Showing Evolution of Degree Programs Through Allocation of Credits per Thread  
*Arch Curriculum Only (not including electives or common core)*

Degree	Design	Technical	History	Theory	Prof. Pract.	Optional	Total Credits
AAS initial	11	25	5	0	0	3	44
AAS current	14	25	5	0	0	3	44
B. Tech initial	21	34	8	0	6	6	75
B. Tech current (Design Intense)	33	31	8	0	3	9	84
B. Tech current (Tech Intense)	23	41	8	0	3	12	87
B. Arch	56*	29	10	6	3	12	116

\*B. Arch Design Studios with emphasis on Integrative Design

## Bachelor of Architecture Curriculum Overview<sup>21</sup>:

BARCH PROGRAM																							
Running Credit Totals										Credits by Type													
REQUIRED COURSES IN ARCHITECTURAL TECHNOLOGY	SEMESTER 1		SEMESTER 2		SEMESTER 3		SEMESTER 4		SEMESTER 5		SEMESTER 6		SEMESTER 7		SEMESTER 8		SEMESTER 9		SEMESTER 10		Credits by Type		
	14	21 hrs	16	24 hrs	16	23 hrs	18	25 hrs	17	23 hrs	17	21 hrs	17	21 hrs	17	21 hrs	17	21 hrs	11	15 hrs	160	BArch Total	
	ARCH 1112 Foundations I		ARCH 1212* Foundations II		ARCH 2312 Architectural Design III House / Community Center		ARCH 2412 Architectural Design IV Institutional Commercial		ARCH 3512* Architectural Design V Retail		ARCH 3612* Architectural Design VI Collective Housing		ARCH 4712* Architectural Design VII Urban Planning / Cultural		ARCH 4812* Architectural Design VIII Integrated/ Large / Cultural		ARCH 5112* Architectural Design IX Thesis Research & Analysis Schematic Design		ARCH 5212* Architectural Design X Thesis Design Development		113	BArch discipline	
	5	9	5	9	5	9	5	9	5	9	5	9	5	9	5	9	5	9	5	9	50	Design	
	ARCH 1101 Intro to Arch		ARCH 1231 Building Tech I Wood		ARCH 2331 Building Tech II Wood/Masonry		ARCH 2431 Building Tech III Steel (Conc)		ARCH 3531* Building Tech IV Concrete (Steel)		ARCH 3631* Building Systems				ARCH 4801* Professional Practice						3	Prof Practice	
		2	4	3	5	3	5	4	7	3	5	3	3			3	3					18	Technical
					ARCH 1250 Site Planning		ARCH 2381 Structures I Statics & Strength		ARCH 2481 Structures II Wood & Steel				ARCH 4781* Structures III Conc & Systems								2	Intro	
					2	3	2	3	3	3			3	3								8	Structures
					ARCH 1121 World Architecture		ARCH 2321 Contemporary Architecture		ARCH 3522 History of NYC				ARCH 4722* History/Theory I		ARCH 4822 History/Theory II		ARCH ELECTIVE					14	History/Theory
					2	3	3	3	3	3			3	3	3	3	3	3	3	3	3	18	Electives
						ARCH ELECTIVE		RESTRICTED ELECTIVE		ARCH ELECTIVE						ARCH ELECTIVE		ARCH ELECTIVE					
						3	3	3	3	3	3	3				3	3	3	3				
BARCH Program Administration, Advisement and Application Timeline																							
Freshman Orientation Summer prior to enrollment					Cohort Advisement 1	Cohort Advisement 2	BARCH Application Opens Due Jan 1	BARCH Portfolio & Application Review	BARCH Acceptance Letters	Register for BARCH Classes	BTECH/BARCH Graduate School Advisement									Cohort Career & Grad School Advisement			
Service Indicator					0	0		0															
CORE	ENG 1101				CORE	CORE					CORE		CORE		Advanced Liberal Arts		CORE		CORE				
	3	4			3	3	3	3			3	3	3	3	3	3	3	3	3	3			
	MATH 1275		PHYSICS				ENG 1121				Speech/Oral Communication		Interdisciplinary		Additional Liberal Arts		CORE						
	4	4	4	4			3	3			3	3	3	3	3	3	3	3	3	3	47		
FLEXIBLE CORE (LIBERAL ARTS) 47 credits, 45 required by NAAB, 42 required by City Tech 47 credits (liberal arts) + 113 credits (architecture) = 160 credits 150 credits are required by NAAB. In New York State all the undergraduate architecture programs have 160 credits.																							

As we launch the B. Arch degree program, we build upon the strong foundation of our B. Tech program. Our assessment of the current curriculum identifies the need to reinforce the design studio as the core of our student education. Our B. Arch curriculum reflects this need, with a significant increase in the allocation of credit hours for design courses with continued emphasis on the integration of technical knowledge. This emphasis will provide our commuter-based student body with more interaction with design faculty as well as their classmates, and a greater degree of guidance in their studio assignments.

The second major goal of the B. Arch curriculum is to develop a coordinated history/theory sequence. This sequence begins with a new introductory (ARCH 1101), course that looks to better prepare our students for both our design and technical sequence of courses as well as to orient incoming students to the profession of architecture. As with much of our curriculum this place-based course looks to take advantage of New York City as a learning laboratory.

The third focus is to support integrative learning through a stronger alignment of our design and building technology sequences. We have shifted the start of the technical sequence back one semester to begin in the second semester of the first year so that topics covered by the technical sequence are more in line with topics covered in the design sequence.

The B. Tech and B. Arch programs will continue to complement each other, the former working

<sup>21</sup> Follow this link for higher resolution curriculum chart: [https://www.dropbox.com/sh/m09bodhie1n8tn/AADMWIXAGemr-w0HO3zpnM3Wa/03\\_Supplemental%20Materials/II.2.2%20Professional%20Degrees%20%26%20Curriculum?dl=0&preview=BArch\\_20200901+Program+Chart.pdf](https://www.dropbox.com/sh/m09bodhie1n8tn/AADMWIXAGemr-w0HO3zpnM3Wa/03_Supplemental%20Materials/II.2.2%20Professional%20Degrees%20%26%20Curriculum?dl=0&preview=BArch_20200901+Program+Chart.pdf)

towards a high level of technological expertise and the latter preparing graduates for leadership in design, technical proficiency, administration, and management.

We have developed outlines for all of the courses in the B. Arch program. Development of all courses that are part of the first two years of the B. Arch program (taken as an AAS student) have been completed and approved by our college council and the first cohort enrolled into this new sequence entered our program in the fall of 2017.

At this time, we are not offering specific minors or concentrations, but our elective offerings will allow students to advance their skills in specific focal areas, such as fabrication, building performance, advanced detailing, or historic preservation.

In addition to our elected B. Arch directors, who will have generally oversight over the program, each sequence (Design, Technical, History/Theory, Structures) of the B. Arch program will be directed by a faculty team that will steer the sequence, coordinate faculty assignments for each course, and will oversee adjustments to course content with the guidance of the departmental curriculum and appointments committees. The sequence coordination team will also be responsible for assessment of the courses in the sequence and submission of documentation and reports for faculty review and NAAB APR submissions.

Currently our appointments committee is responsible for all faculty hiring. The chair is responsible for teaching assignments. As part of the appointment process the committee members consult with course coordinators, review faculty teaching observations conducted by full time faculty and SETS (Student Evaluations of Teaching) scores for each instructor. We look to find the best match between faculty and professional experience, the requirements of our curriculum, the needs of particular courses and the level of our students.

## II.3 EVALUATION OF PREPARATORY EDUCATION

To apply for degree admission to New York City College of Technology, applicants must file a formal application prior to the semester in which they plan to register. Application to all campuses of The City University of New York (CUNY) is done electronically through the University Application Processing Center (UAPC). Students are required to select their intended major during the application process as they will be applying directly to a specific curriculum and session (day or evening).

Students file as a freshman if they are: a high school senior; a student who has earned an equivalency diploma or passed the General Educational Development (GED) examination; an applicant to the SEEK program; a foreign applicant whose only previous secondary education has been in the United States and who never attended college; or a student who never attended college.

The college has established a minimum standard for direct admission. Students are evaluated for admission according to a formula that considers the student's preparation in high school English and Mathematics, high school grade point average, and College Preparatory Initiative Units. These criteria will remain for all students entering the department of Architectural Technology, irrespective of their eventual degree.



## II.4 PUBLIC INFORMATION

The department currently maintains several different online sites to serve a variety of operational functions. These sites are to be linked into a single site that will reflect the multiple levels of activity in the program: professional, academic, social, and institutional. The current college website is being revised to allow for easier updating and control by each department. All NAAB related information was added and made available to the public only after our program achieved Candidacy status.

The required public information can be found here:

<http://www.citytech.cuny.edu/architectural/accreditation.aspx>

### II.4.1 STATEMENT ON NAAB--ACCREDITED DEGREES

All catalog and promotional materials, online and in print, will include the required text as it is worded in Appendix 5 of the *NAAB 2014 Conditions for Accreditation*.

### II.4.2 ACCESS TO NAAB CONDITIONS AND PROCEDURES

These documents will be linked directly to the program website: *NAAB Conditions for Accreditation*, and the *NAAB Procedures for Accreditation* (referencing edition currently in effect). Updates to the most current additions will be made as necessary.

### II.4.3 ACCESS TO CAREER DEVELOPMENT INFORMATION

These resources will be made available to all students, parents, staff and faculty, and linked to the following websites:

[www.aia.org](http://www.aia.org)

[www.aia.org](http://www.aia.org)

[www.acsa-arch.org](http://www.acsa-arch.org)

<https://www.ncarb.org>

<http://archcareers.blogspot.com>

*The NCARB Handbook for Interns and Architects, Toward and Evolution of Studio Culture, and The Emerging Professional's Companion.*

### II.4.4 PUBLIC ACCESS TO APRS AND VTRS

To promote transparency in the process of accreditation in architecture education, the program will make the following documents available to the public:

- Annual Reports, including this narrative
- All NAAB responses to the Annual Report
- The final decision letter from the NAAB



- The most recent APR
- The final edition of the most recent Visiting Team Report, including attachments and addenda

These documents will be housed in the School of Technology and Design office and accessible to all. PDF versions will be available for download from the program's website.

#### II.4.5 *ARE PASS RATES*

Not Applicable for APR-CC

#### II.4.6 *ADMISSION AND ADVISING*

##### **Advisement Timeline**

City Tech's Architectural Technology Department is strongly committed to the belief that students benefit from receiving regular information on their academic progress, career options, and career-readiness. Therefore, participation in individual or group advisement sessions/workshops will be required for persistence in the BArch. Following is the advisement timeline.

PROGRAM ADVISEMENT TIMELINE (typical program progression for First Year BArch Students)					
	Major credits:		Total credits:		Notes
	Semester	Total	Semester	Total	
					Freshman Orientation: Summer prior to enrollment
Semester 1	7	7	14	14	
Semester 2	12	19	16	30	
Semester 3	13	32	16	46	Advisement with Portfolio Review
Semester 4	15	47	18	64	Advisement with Portfolio Review
Semester 5	14	61	17	81	
Semester 6	11	72	17	98	
Semester 7	11	83	17	115	Career & Graduate School Advisement
Semester 8	11	94	17	132	
Semester 9	11	105	17	149	
Semester 10	8	113	11	160	Career & Graduate School Advisement

PROGRAM ADVISEMENT TIMELINE (typical program progression for Advanced Standing Students)					
Semester 5 and 6	Degree requirements in the first three years of the BArch and BTech at City Tech are identical; therefore, BTech students may apply to change their program of study to the BArch as advanced standing students by December 2 <sup>nd</sup> of the 5 <sup>th</sup> semester.				
	Major credits:		Total credits:		Notes
	Semester	Total	Semester	Total	
Semester 7	11	83	17	115	Career & Graduate School Advisement
Semester 8	11	94	17	132	
Semester 9	11	105	17	149	
Semester 10	8	113	11	160	Career & Graduate School Advisement

Through the development of a more structured advisement timeline we are looking to provide all of our students (AAS, B. Tech & B. Arch) with uniform and regular advisement and guidance. These guidance and advisement sessions will be offered as both large group sessions, that occur at multiple times during both the day and evening sessions to accommodate the schedules of our student body and required individual sessions with faculty.

This begins with freshman orientation which takes place the summer prior to entry into the first semester of the AAS program. By the end of the first semester of their second year, all students will be required to attend group cohort advisement session #1. The purpose of this orientation is to discuss the difference between the B. Tech and B. Arch programs. It is intended to help students make an informed decision about their future in the department and to explain career possibilities within the design and construction industry.

By the end of the second year all students will be required to attend individual advisement session #2. This session will review the differences between the B. Tech and B. Arch programs, help students make an informed decision about their choice of degree program, and explain how to prepare their applications and portfolios for the B. Arch program if applicable. Additional topics would include options within the B. Tech program, and review of accreditation, licensure and options for graduate school.

During year 4, a group graduate school advisement session would occur timed to align with the colleges' annual graduate school fair and during year 5 a group cohort advisement session for B. Arch students would focus on licensure, career and graduate school.

## Admissions

The program accepts students as first-time freshmen, advanced standing students (after completion of the equivalent of 3-years of full-time study), or transfer students.

### FIRST YEAR STUDENTS

- The CUNY Application is required for admission to a bachelor's program at New York City College of Technology.
- Admission to the BArch requires additional materials described below.

The department will accept students for the fall semester only. There are no spring class admissions. Applications for first year admission must be submitted by December 2nd. Admissions to the BArch program is competitive and requires the following:

1. **General Academic Requirement:** Applicants must have a High school diploma with a 75 or higher average or a minimum score of 2750 on the High School Equivalency (GED), TASC, HSET exam.

Applicants must meet current CUNY standards for proficiency in mathematics and English.

SAT/ACT scores are not required for admission.

2. **Creative Challenge:** Applicants must respond to a number of separate prompts developed by faculty to allow students an opportunity to demonstrate their imaginative potential, visual and digital literacy and to describe why they are interested in the BArch program.

Each creative challenge prompts will require a response in one of the following formats: essay (500 words maximum), video clip (3 minutes max), drawings and a mixed media collage. All materials will be submitted digitally to the department.

3. **References:** Applicants should provide the names and contact information of no more than two teachers or professional mentors who have agreed to comment on their work and potential for success in the program.
4. **Description of extracurricular activities** (optional): To highlight an applicant's unique qualities they may submit one of the following: an essay (500 words maximum), a video clip (3 minutes max.), drawings or mixed media artwork further demonstrating their engagement and/or expertise in non-academic activities. All materials will be submitted digitally to the department.

## ADVANCED STANDING STUDENTS

Degree requirements in the first three years of the BArch and BTech at City Tech are identical; therefore, BTech students may apply to change their program of study to the BArch as advanced standing students by December 2nd of the 5th semester. The following information needs to be submitted:

1. **Portfolio:** Applicants must submit the portfolio directly to the Department of Architectural Technology. The portfolio should consist of 10-15 pages of exemplary visual work. It can include assignments based or self-directed projects and may contain multimedia work, photography, drawings, sketches, models, sculpture or furniture design.

Portfolios must demonstrate competence in writing, design, building technologies and use of digital tools. The portfolio will showcase a student's capacity to work independently and/or in teams, with their contribution clearly indicated. Each project must clearly illustrate the ability to develop a design idea and explain it visually using graphics or models. All materials will be submitted digitally to the department.

2. **References:** Applicants should provide the names and contact information of no more than two discipline professors or professional mentors who can comment on their work and potential for success in the program.
3. **Description of extracurricular activities** (optional): To highlight an applicant's unique qualities they may submit one of the following: an essay (500 words maximum), a video clip (3 minutes max.), drawings or mixed media artwork further demonstrating their engagement and/or expertise in non-academic activities. All materials will be submitted digitally to the department.
4. **Academic performance (GPA):** A minimum 2.5 cumulative GPA is required for transfer into the program.
5. **Minimum grade for transfer:** For architectural design studios, visual studies classes, and building technology courses a minimum grade of "C" is required to be eligible to receive transfer credit.

## TRANSFER STUDENTS

In addition to submitting the CUNY Application, transfer students are required to submit the same application documents as the advanced standing students. After being admitted into the BArch program, transfer students will have transfer credits evaluated to determine course equivalency. Within CUNY most general education course equivalencies have already been determined and can be reviewed online. For other courses, transfer students who are accepted may be required to submit course syllabi, sample assignments, etc. so that the evaluator can ascertain whether or not learning outcomes are equivalent. Students transferring from other institutions who are accepted into City Tech must provide copies of architecture/architectural technology/ or equivalent syllabi, course descriptions and writing samples or coursework for

evaluation.

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.

Students entering the AAS or BTech in Architectural Technology program in fall 2017 and later may apply to transfer to the BArch program starting January 2020.

#### PROGRESSION REQUIREMENTS

Once students are accepted into the BArch degree program they may remain in the program as long as they meet progression requirements, as detailed below:

1. A **minimum grade** of "C" is required in the following courses in the major: Architectural Design Studios (ARCH 1112, ARCH 1212, ARCH 2312, ARCH 2412, and ARCH 3512) and all required Building Technology courses (ARCH 1231, ARCH 2331, ARCH 2431, ARCH 3531).
2. **Academic performance** (GPA): A minimum 2.3 cumulative GPA to qualify for continuation in the program.
3. **Advisement**: Students must participate in formal advisement and portfolio review sessions, scheduled by the department.

Students who do not meet progression requirements are given one semester (or more at the discretion of the department) to improve their grades, GPA and/or participate in the formal advisement sessions. Students who are not able to maintain the BArch progression requirements or opt to change programs, will be given the opportunity to transfer to the AAS or BTech degree programs and graduate with these degrees. The AAS degree requirements correspond to the first two years of the BArch. The BTech. and BArch. share the same requirements for the first three years.

## II.4.7 STUDENT FINANCIAL INFORMATION

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 (These new rates are effective for the Fall 2019) 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 (These new rates are effective for the Fall 2019)

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>

### III.1 ANNUAL STATISTICAL REPORTS

See Section 4.

### III.2. INTERIM PROGRAM REPORTS

Not Applicable for APR-CC

## Section 4. Supplemental Information

Links are in alphabetical order:

### ADMINISTRATIVE STRUCTURE & GOVERNANCE

[https://www.dropbox.com/sh/m09bodhieb1n8tn/AAAJfT84u3ZWxjWNsFZIJfasa/03\\_Supplemental%20Materials/II.2.5%20Administrative%20Structure%20%26%20Governance?dl=0](https://www.dropbox.com/sh/m09bodhieb1n8tn/AAAJfT84u3ZWxjWNsFZIJfasa/03_Supplemental%20Materials/II.2.5%20Administrative%20Structure%20%26%20Governance?dl=0)

### ACADEMIC INTEGRITY

City Tech's Policy on Academic Integrity is available in the College Catalog. Refer to page 57.

<http://www.citytech.cuny.edu/catalog/docs/catalog.pdf>

### ANNUAL STATISTICAL REPORTS

[https://www.dropbox.com/sh/m09bodhieb1n8tn/AAAVm38fAUPcczPuqAwawKs3a/03\\_Supplemental%20Materials/III.1%20Annual%20Statistical%20Reports?dl=0](https://www.dropbox.com/sh/m09bodhieb1n8tn/AAAVm38fAUPcczPuqAwawKs3a/03_Supplemental%20Materials/III.1%20Annual%20Statistical%20Reports?dl=0)

### NATIONAL CENTER FOR EDUCATION STATISTICS:

<https://nces.ed.gov/collegenavigator/?q=New+York+City+College+of+Technology&s=all&id=190655>

### B. ARCH. COURSE DESCRIPTIONS

[https://www.dropbox.com/sh/m09bodhieb1n8tn/AADRC7-m-tQHhbb4T-FU1jS9a/03\\_Supplemental%20Materials/BARCH%20Course%20Descriptions?dl=0](https://www.dropbox.com/sh/m09bodhieb1n8tn/AADRC7-m-tQHhbb4T-FU1jS9a/03_Supplemental%20Materials/BARCH%20Course%20Descriptions?dl=0)

### B. ARCH. CURRICULUM

[https://www.dropbox.com/sh/m09bodhieb1n8tn/AADMWIXAGemr-w0HO3zpnM3Wa/03\\_Supplemental%20Materials/II.2.2%20Professional%20Degrees%20%26%20Curriculum?dl=0&preview=BArch\\_20200901+Program+Chart.pdf](https://www.dropbox.com/sh/m09bodhieb1n8tn/AADMWIXAGemr-w0HO3zpnM3Wa/03_Supplemental%20Materials/II.2.2%20Professional%20Degrees%20%26%20Curriculum?dl=0&preview=BArch_20200901+Program+Chart.pdf)

### CITY TECH HUMAN RESOURCE POLICIES ON FACULTY

[http://www.citytech.cuny.edu/ofsr/docs/instructional\\_staff\\_handbook.pdf](http://www.citytech.cuny.edu/ofsr/docs/instructional_staff_handbook.pdf)

### CITY TECH MIDDLE STATES ACCREDITATION

[https://www.msche.org/institutions\\_view.asp?idinstitution=67](https://www.msche.org/institutions_view.asp?idinstitution=67)

### CITY TECH OFFICE OF SCHOLARSHIPS & RESIDENCY SERVICES

<http://www.citytech.cuny.edu/scholarships/scholarships.aspx>

### CITY TECH POLICY INFORMATION ON EEO/NON-DISCRIMINATION

Refer to page 50.

<http://www.citytech.cuny.edu/about-us/docs/non-discrim.pdf>

## CITY TECH POLICY ON AFFIRMATIVE ACTION

[http://www.citytech.cuny.edu/about-us/docs/pol\\_af\\_ada.pdf](http://www.citytech.cuny.edu/about-us/docs/pol_af_ada.pdf)

## CUNY POLICY ON EEO/NON-DISCRIMINATION

<http://www2.cuny.edu/wp-content/uploads/sites/4/page-assets/about/administration/offices/hr/policies-and-procedures/CUNYPolicy-Equal-Opportunity-and-Non-Discrimination-010115-procedures.pdf>

## DEPARTMENT PHYSICAL RESOURCES

[https://www.dropbox.com/sh/m09bodhie1n8tn/AACQEL4bRr3AD4txfwLf-Zqia/03\\_Supplemental%20Materials/I.2.2%20Physical%20Resources?dl=0](https://www.dropbox.com/sh/m09bodhie1n8tn/AACQEL4bRr3AD4txfwLf-Zqia/03_Supplemental%20Materials/I.2.2%20Physical%20Resources?dl=0)

## FACULTY MATRIX

[https://www.dropbox.com/sh/m09bodhie1n8tn/AABqAMhxyB18YmdlRSSQ6lrWa/03\\_Supplemental%20Materials/Faculty%20Matrix?dl=0](https://www.dropbox.com/sh/m09bodhie1n8tn/AABqAMhxyB18YmdlRSSQ6lrWa/03_Supplemental%20Materials/Faculty%20Matrix?dl=0)

## FACULTY VITAE

[https://www.dropbox.com/sh/m09bodhie1n8tn/AABnRUHUmBjla-lagkQzJFRSa/03\\_Supplemental%20Materials/Faculty%20Vitae?dl=0](https://www.dropbox.com/sh/m09bodhie1n8tn/AABnRUHUmBjla-lagkQzJFRSa/03_Supplemental%20Materials/Faculty%20Vitae?dl=0)

## GENERAL LINK TO CITY TECH POLICIES

<http://www.citytech.cuny.edu/about-us/policies.aspx>

## INFORMATION RESOURCES POLICIES

<https://library.citytech.cuny.edu/about/policies/collectionDev.php>

## STUDENT PERFORMANCE CRITERIA MATRIX

[https://www.dropbox.com/sh/m09bodhie1n8tn/AADSfhLWusfd2SscSa0rMj89a/03\\_Supplemental%20Materials/II.1.1%20Student%20Performance%20Criteria?dl=0&preview=BArch\\_20200831+NAAB+SPC+Full+Chart.pdf](https://www.dropbox.com/sh/m09bodhie1n8tn/AADSfhLWusfd2SscSa0rMj89a/03_Supplemental%20Materials/II.1.1%20Student%20Performance%20Criteria?dl=0&preview=BArch_20200831+NAAB+SPC+Full+Chart.pdf)

## SELF-ASSESSMENT POLICIES AND OBJECTIVES

College:

<http://air.citytech.cuny.edu/assessment/city-tech-assessment-plan/>

Department:

[https://www.dropbox.com/sh/m09bodhie1n8tn/AADSXdleP5R5UVdXRQrGLIDAA/03\\_Supplemental%20Materials/I.1.6%20Program%20Self-Assessment?dl=0](https://www.dropbox.com/sh/m09bodhie1n8tn/AADSXdleP5R5UVdXRQrGLIDAA/03_Supplemental%20Materials/I.1.6%20Program%20Self-Assessment?dl=0)

## STUDIO CULTURE POLICY

[https://www.dropbox.com/sh/m09bodhie1n8tn/AACr8yEFX7IV3RjNkauT8yVka/03\\_Supplemental%20Materials/Studio%20Culture%20Policy?dl=0](https://www.dropbox.com/sh/m09bodhie1n8tn/AACr8yEFX7IV3RjNkauT8yVka/03_Supplemental%20Materials/Studio%20Culture%20Policy?dl=0)



# APPENDIX:

Eligibility Memo

Plan for Achieving Initial Accreditation

Plan for Achieving Initial Accreditation Addendum

Previous Visiting Team Report

Letter Granting Initial Candidacy

# APPENDIX Plan for Achieving Initial Accreditation



## NEW YORK CITY COLLEGE OF TECHNOLOGY

The City University of New York  
300 Jay Street, Namm Hall 319  
Brooklyn, N.Y. 11201

### OFFICE OF THE PRESIDENT

Tel: 718 260 5400 Fax: 718 260 5406

February 5, 2016

Andrea S. Rutledge, CAE, Hon. AIA  
Executive Director,  
National Architectural Accrediting Board  
1101 Connecticut Ave, NW Suite 410  
Washington, DC 20036

Dear Ms. Rutledge:

I write as President of New York City College of Technology, CUNY, to confirm the institution's commitment to supporting the establishment of a Bachelor of Architecture degree to be offered by the College's Department of Architectural Technology.

This initiative is founded upon intensive planning by the Department's faculty working in collaboration with leading industry partners who serve as members of the Department's advisory board. The development of a Bachelor of Architecture program was also supported in the Report of the Architectural Technology Department's external evaluator, Wayne Drummond, Dean Emeritus of the University of Nebraska College of Architecture. In support of this initiative Dean Drummond highlighted the strengths and unique qualities that our graduates would bring to the profession.

The Associate and B.Tech degrees currently offered by the Architectural Technology Department empower our students with sophisticated technical skills in the areas of BIM, Digital Fabrication and Building Energy Modeling. The Department is proposing to offer a transformative five-year B.Arch. curriculum which will prepare students for 21st century leadership roles in the urban arena. Students would benefit from the existing foundation and network of interdisciplinary collaboration, research funding, and industry engagement.

Overall, New York City College of Technology offers both two-year and four-year programs in more than twenty technical areas to a diverse student population which is 32% Hispanic, 31% Black, and 19% Asian/Pacific Islander. Since the introduction of the Bachelors of Architectural Technology degree in 2003, total student enrollment nearly doubled to approximately 700 students. More recently noted is an increase in the number of students applying to graduate school to both further specialized interests and move towards licensure. The College is recognized by NSF as a Model Replication Institution and is the recipient of several NSF grants, including a CCLI grant for the creation of an interdisciplinary inquiry-based STEM course specifically designed for AEC students (*The Brooklyn Waterfront 2050*) in partnership with the Earth Institute of Columbia University, and a five-year *I<sup>3</sup> grant-The City Tech I<sup>3</sup> Incubator: Interdisciplinary Partnerships for Laboratory Integration*. The *I<sup>3</sup> Incubator* weaves together all the College's NSF projects to create synergies for laboratory practice, shared goals of diversity, outreach, industry integration, and faculty development.

Our collaborators include prominent leaders from the AEC industry and education: Transsolar Climate Engineering, Grimshaw Architects, Arup Engineers, Buro Happold, Thornton Thomasetti, University of Calgary, and Carnegie Mellon University. Representatives from these highly regarded firms continue to actively participate in the development of new curriculum and serve as a resource for symposia and workshops.

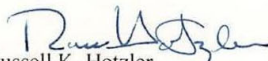
In support of this significant initiative the Department has further developed state-of-the-practice computer labs and tools for simulation, associative modeling, and building analysis computation, as well as additive/subtractive fabrication and powerful 3-D laser scanning. Faculty expertise in these areas is being supported and recognized, and new hires reflect continued investment.

In essence, the Bachelor of Architecture degree will allow us to further develop and retain our best students while fusing a technology-intensive curriculum with the rigors of professional practice in the complex urban arena of New York City. As the goals of the new five-year degree are realized, our students - many of whom are underrepresented in the AEC fields - will significantly benefit from the opportunity to attain the leadership qualifications that an accredited degree program fosters.

The College's Accreditation Committee plans to submit their report on Candidacy Eligibility prior the 2016 fall semester. We expect that will formally engage the accreditation process.

Please know that I greatly appreciate your guidance and consideration. Should any additional information prove helpful feel free to contact me directly.

Very truly yours,

  
Russell K. Hotzler  
President

cc: Dean Kevin Hom AIA, School of Technology & Design

New York City College of Technology  
City University of New York  
Department of Architectural Technology

## **Plan for Achieving Initial Accreditation**

**Bachelor of Architecture 160 credits**

**Year of the Previous Visit:** None

**Current Term of Accreditation:** None

Submitted to: The National Architectural Accrediting Board  
Date:

# **SUBMISSION DOCUMENT**

12 October 2016

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<b>Chief Academic Officer of the Institution</b>	Bonne August, Ph.D. <i>Provost and VP for Academic Affairs</i> 300 Jay Street Namm-320 Brooklyn, New York 11201 <a href="mailto:BAugust@citytech.cuny.edu">BAugust@citytech.cuny.edu</a> 718-260-5560
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<b>Individual submitting the Architecture Program Report and individual to whom questions should be directed</b>	Sanjive Vaidya, Chair <i>Department of Architectural Technology</i> 186 Jay Street Voorhees-818 Brooklyn, New York 11201 <a href="mailto:SVaidya@citytech.cuny.edu">SVaidya@citytech.cuny.edu</a> 718-260-5262
<b>Accreditation Committee Members</b>	Jason Montgomery, <i>Assist. Professor</i> Barbara Mishara, <i>Assist. Professor</i> Ting Chin, <i>Assist. Professor</i> Phillip Anzalone, <i>Assist. Professor</i> Michael Duddy, <i>Assist. Professor</i>

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## **PART ONE**

### **PART I INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT**

#### **Section 1 Identity and Self-Assessment**

##### **I.1.1 History and Mission**

New York City College of Technology (City Tech) 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 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 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 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 and 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, a B. Tech. degree requires a minimum of 30 credits in liberal arts courses. 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. Encouraging lifelong learning, this curriculum helps students prepare for challenging, high-level professional opportunities, not merely for technical jobs.

The annual growth rate of the college has experienced a significant upward trend in the past decade. There are 17,424 students currently matriculated across the college in the various bachelors and associates degree programs and that number continues to grow each year. Under construction is a 350,000 square-foot academic building equipped with state-of-the-art science and engineering 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 the elevators are currently being replaced. Labs and studios in the department are continually being 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). Individual programs are also accredited by their relevant institutions.



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The mission statement of the college reads:

*New York City College of Technology is the designated college of technology of The City University of New York, currently offering baccalaureate and associate degrees, as well as specialized certificates. New York City College of Technology serves the city and the state by providing technically proficient graduates in the technologies of the arts, business, communications, health and engineering; human services and law-related professions; technical and occupational education; and liberal arts and sciences. The College provides access to higher education for New York City's diverse population and assures high quality in its programs by a commitment to outcomes assessment. The College also serves the region by developing partnerships with government agencies, business, industry and the professions and by providing technical and other services.*

*Education at New York City College of Technology provides students with both a command of skills necessary in their respective career areas, and the educational foundation for lifelong learning. All degree programs are built upon a liberal arts and science core curriculum designed to foster intellectual curiosity, an appreciation for the aesthetic dimension of life and work and a respect for cultural diversity. Students obtain practical experience in their chosen fields in a variety of settings. The College further encourages student growth and development through academic and student support services and a wide array of student activities.*

The entire mission statement of the college is available in the President's message on the college's website: <http://www.citytech.cuny.edu/about-us/mission.aspx>, and in the latest college catalog. The college catalog is available online at: <http://www.citytech.cuny.edu/academics/academic-catalog.aspx>.

### **Departmental History and Mission**

*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.*

In its role as the senior college of technology of The City University of New York (CUNY), our department offers the most accessible architectural education in the metro area, with competitive tuition and a large enrollment capacity. NYCCT'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 location in Downtown Brooklyn allows the department to use New York City and its environs as a laboratory and an extension of the classroom.

Our twenty full-time faculty are practicing, licensed professionals, and our part-time instructional staff of over sixty adjuncts hold prominent positions in city agencies, at prestigious public or not-for-profit institutions and with the region's leading private architecture, design and engineering firms. Our faculty are being increasingly recognized regionally and nationally for their important contributions to the profession. The department has been awarded notable grants that have provided significant resources and research opportunities to our faculty and students. Our faculty and students participate in City Tech programs such as Emerging Scholars, which provides advanced study and an opportunity to conduct research alongside professors as an extension of a student's educational experience. Faculty and students have presented research at professional conferences garnering 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) Brooklyn Chapter.



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

Students are encouraged to create, participate in, and be leaders of the many student initiated clubs, activities and travels around the world. Students are active members of, and have won design competition awards from, the AIA Student Chapter and the Society of American Registered Architects (SARA). Recently, our students participated in the 2015 Solar Decathlon, an international competition sponsored by the U.S. Department of Energy, finishing 5th in engineering and 7th in architecture.

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, 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 degree was established in 2003. The two-year AAS program remained in place and was updated. The Bachelor of Technology and the Associate of Applied Science degrees in Architectural Technology are the only programs of their kind in the City University of New York system. The offering of the four-year degree proved popular and our student population expanded significantly. Currently our enrollment varies year to year in the range of 700-800 students total.

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

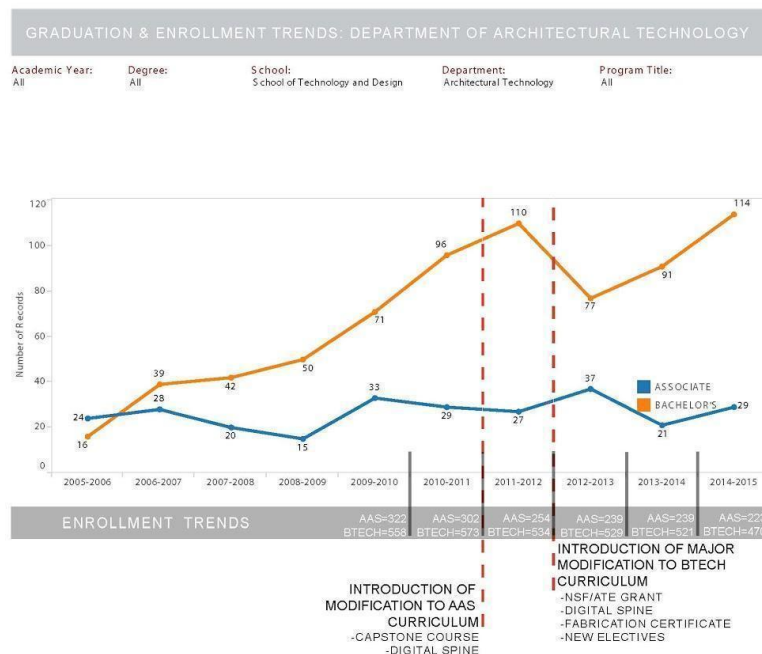
To support this new curriculum the department hired eight new full-time faculty, bringing the total to 20, including some with significant specializations to enhance our offerings of cutting-edge courses. These courses cover topics of sustainability, high-performance building envelopes, digital fabrication and advanced design. At the same time we added to our resources a significant range of equipment including 3d printers, laser cutters, a CNC mill, 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.

The department is a growing center for academic and scholarly activity in cutting-edge design and technologies that impact the field. A symposium series titled "Intersections" has brought academics and practitioners to the college to explore potential applications of techniques, software and tools that increase building performance and enhance project delivery. The faculty and students with more regularity are exploring important issues of development in Brooklyn and bringing these to the public through exhibitions and symposia. Professional development workshops sponsored by our department provide both students and local professionals opportunities to develop new skills in software and tools to enhance their practice.

From 2013-2015 we compiled a ten-year self study of our department, a process which 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 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, 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 is to formally pursue NAAB accreditation.

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Our enrollment and graduation data illustrates that an increasing number of our students are seeking our four-year B. Tech. degree, demonstrating the demand for higher levels of education and 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 students earning the B. Tech. degree increased 160%, rising from 71 graduates in 2010 to 114 graduates in 2015. We are compiling data on where our graduates go after earning their degrees, but current findings indicate a significant increase of interest and applications to graduate school where students can earn an accredited professional degree. In addition, we are seeing an increasing number of students placed in more prominent 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 viability in the marketplace.



These trends support our position and Dean Drummond's recommendation of taking the next step to evolve our program further by offering an accredited five-year B. Arch. degree, thus providing a significant underserved 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.

In fulfilling our mission to provide a high-quality architectural education to an underserved population, the college administers fees collected to offset the costs of equipment and materials used by the students in the department. In demonstrating its commitment to institute an accredited professional degree program in architecture, the college intends to seek additional financial support for the fifth-year of the BARCH students.

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**Course of Action for Achieving Initial Accreditation in Not More than Six Years**

*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. In **Section 2, I.2.2** 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.

*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. The schedule for approval requires us to submit our initial changes in September 2016 in order to achieve approval by December 2016, allowing us to launch new courses by Fall 2017. We detail below in **Part Two** the timeline and process for institutional approvals required for the B. Arch. degree program.

*c. Plan for Recruiting and Retaining Students*

Our current enrollment fluctuates between 700-800 students. We anticipate our initial cohorts being drawn from students who are already attracted to our department based on our existing degrees, reputation, and tuition costs. Many of our current students articulate their ambition to earn a professional accredited degree, demonstrating the demand already in place in our department. Judging by our highest performing students in our current programs, there will typically be a pool of approximately 35-45 students that will likely meet or exceed our anticipated portfolio, GPA, and interview requirements for acceptance into the B. Arch. program. Therefore, we can launch the degree program without a major recruitment effort. That said, as our program draws close to achieving accreditation, we will tap our existing outreach and coordination with local high schools to communicate the significance of the opportunity to earn a professional degree in our program, targeting the highest quality students that may not have previously considered applying to City Tech for their architectural education.

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 faculty to integrate and coordinate skills development into the course. This effort is a core part of our "Digital Spine." In addition, 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. Finally, 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, their hopes for a career. Our maximum class size of 24 students, with many

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courses with 18 student 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).

*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.

*e. Proposed Date for Enrolling the First Cohort*

We are planning to enroll the first "eligible" cohort in Fall 2017. All students will start in a uniform curriculum for the first two years, allowing us to maintain the open enrollment culture for our AAS and B. Tech. degrees. This curriculum will follow the SPC requirements for the B. Arch. degree. Students from this cohort can apply for the B. Arch. degree program in the second semester of their second year. Students accepted into the B. Arch. program start their third year in the Fall of 2019. For more context for this sequence, see the timeline in **Part Two** below.

*f. Projected Date for Awarding Degrees*

The first cohort to be awarded the B. Arch. degree is projected to graduate in spring 2022. For more context for these projected dates, see the timeline in **Part Two** which follows.

*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. A curriculum map has been drafted, outlining each sequence of the curriculum (Studio, History/Theory, Structures, Building Technology, and Professional Practice) and the distribution of credit hours for each course. Course outlines are in development (see **Part Three: Supplemental Materials, 3.1** below) showing the specific NAAB SPC's each course will address. Our full-time faculty will review our initial curriculum changes in Sept. 2016. For detailed information regarding the flow of the curriculum and the history and logic behind its development, see **II.2.2** below. For more detail on the assignment of SPC's to specific courses, see **II.1.1** which follows.

With confirmation of Initial Candidacy, we will implement the first two years of this new curriculum in the Fall of 2017. We will finalize and implement the remaining years 3-5 starting in the Fall of 2019. For more context for the implementation of the curriculum, see the timeline in **Part Two** below.

*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. For more detail on our current efforts and future plans, see **Section 2, I.2.3** below.

*i. Plan or Provisions in the Event the Program Does Not Achieve Initial Candidacy:*

Our department believes that 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

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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.

*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 a few 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.

### **I.1.2 Learning Culture**

There are a number of factors that 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 the ease of 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. Many students have jobs while they are attending college, requiring them to be particularly efficient with their time. In addition, 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 to work in while on campus outside of their class time. All of 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 currently meet 2 days a week, with 3-4 credit hours allocated for the first five studio courses, and 5 credits for the final three studio courses. The limitations on class time due to low credit hour allocations put more pressure on the students to execute significant amounts of their project work outside of class time, where they often toil without guidance or feedback either from faculty or peers. While some students are able to manage their time out of class well, many struggle 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 limits the amount of one-on-one desk critique interaction that is critical to the pedagogy of the design studio. Our assessment of these challenges provides the motive to modify our design curriculum as part of our development of the B. Arch. degree curriculum.

We are preparing a curriculum proposal for submission to our college council that will increase the credit allocation for the second-year through fifth-year studios to 5-6 credits per course with 9-12 nominal lab hours total divided into two or three class periods each week. At the same we are working with the college to reduce the number of students in each studio section, allowing higher allocation of time per student. The longer meeting time and more frequent contact should allow for increased interaction and guidance of each student's development of design skills as well as monitoring and help developing their time-management. This adjustment will also allow students to execute more of their design work in the supportive and guided environment of the studio. This higher allocation of studio credits will also offer more opportunity to integrate knowledge from across the curriculum in the studio work, an important pedagogical goal for our department.



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where we place a high level of emphasis on building technology. This integrative approach to studio is already supported by a wide range of workshops that offer students supplemental support in their development of technical skills. Along with this modified studio curriculum, the department will prepare a draft outline for a B. Arch. Studio Culture Policy. The full development of the B. Arch. Studio Culture Policy will begin once we have the first cohort of B. Arch. students accepted into the third year so that it will include this cohort's input. This full development of the policy will include a plan and mechanism for assessing and updating the policy. Any updates will be developed with all stakeholders, including all cohorts of B. Arch. students at the time of revision.

Our students typically need to be more focused on efficient time-management and work-school-life balance than students at residential colleges. This factors into our management of the studio work-load and student access to their studios. As so many of our students do not have the resources at home to support their studio assignment work, we hope 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". Through rigorous attendance policies and 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 is a critical aspect of the preparation of our students for the workforce.

The nature of our program within an open enrollment college presents a conundrum in regard to the sequence of the curriculum; many students take courses at different paces based on their level of academic preparation as well as outside factors such as simultaneous employment, meaning that some are following our recommended sequence but many are not. We currently emphasize the flexibility of our curriculum as it allows students to adjust to the many challenges of working towards their degree, but this comes at the price of integration and reinforcement of learning objectives between specific courses. Our curriculum modifications seek to continue to find the right balance between a reinforced integrated sequence and flexibility, but we anticipate that the final three years of the B. Tech. degree will require a tighter adherence to the sequence.

Residential colleges with 24/7 access to studios have the potential for strong bonds forming between students over the long hours spent together in the studio. These bonds are an important aspect of architectural education, both in the sense of camaraderie that encourages students to persist through the challenges as well as the peer learning that is a significant augmentation to faculty-student learning. While the department is not seeking to develop 24/7 access, there are other opportunities to improve the bonds between students and to facilitate peer learning outside the classroom. The participation in the Solar Decathlon was a significant pursuit that brought students together across a number of classes in an intense and challenging environment. Another contribution to the development of relationships between students is made by clubs on campus and their culture of support and building friendships. Our students support an active Architecture Club, Digital Fabrication club, and as well as a few specialized clubs, with combined membership of over 100 students, which host lectures, workshops, and sponsor travel, both local and international, to visit significant architectural works. The department continues to explore methods and look for opportunities to build the camaraderie between our students.

### **I.1.3 Social Equity**

City Tech offers a diverse, multicultural learning environment. 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.

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**Enrollment by Ethnicity as of Fall 2015**

	Students				Faculty				Staff			
	College		Department		full time		adjunct*		full time		part time	
	total	%	total	%	total	%	total	%	total	%	total	%
<b>American Indian or Alaskan Native</b>	68	0.4%	---		---							
<b>Asian</b>	3,425	19.7%	106	15.3%	3	15.0%						
<b>Black or African American</b>	5,260	30.2%	130	18.8%	1	0.5%			2	67%		
<b>Hispanic/Latino</b>	5,573	32.0%	277	40.0%	3	15.0%			1	33%		
<b>White</b>	2,015	11.6%	97	14.0%	13	65.0%						
<b>Native Hawaiian or Pacific Islander</b>	77	0.4%	---		--							
<b>Two or more races</b>	174	1.0%	4	0.1%	--							
<b>International</b>	829	4.8%	77	11.1%	--							
<b>Grand total</b>	<b>17,424</b>		<b>693</b>		<b>20</b>				<b>3</b>			

Source: AIM Data Overview at [http://air.citytech.cuny.edu/air/Data\\_Overview.aspx](http://air.citytech.cuny.edu/air/Data_Overview.aspx)

\*data not available

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

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:

- **City Poly High:** City Polytechnic High School of Engineering, Architecture and Technology, which opened in fall 2009, is one of New York City's first four 9-13 year high schools, 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.
- **SEEK:** The Percy Ellis Sutton SEEK (Search for Education, Elevation and Knowledge) program provides promising students with financial assistance beyond tuition, as well as offering a wide range of counseling and academic support services, including career and academic planning, personal counseling, a state-of-the-art computer lab, tutoring in many subject areas and academic coaching.

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- ASAP: As a university wide initiative for community colleges, ASAP (Accelerated Study in Associate Programs) was started in fall 2015 at City Tech. 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 recent 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 this initiative.
- The Learning Centers: Located at the central Namm building on campus, the 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 Lab Technicians (CLT's) provide one-on-one and small group support to students on a regular schedule or by appointment. Additionally CLT's provide in-class support to assist faculty in the teaching of software and advanced technical skills. CLT's are typically hired from among our more advanced students and adjunct faculty.
- Design Serv: Emerging architects in the New York City architectural community are recruited to serve as mentors to our students

#### Enrollment by Gender as of Fall 2015

	College		Department		Faculty		National*
	total	%	total	%	total	%	
<b>Female</b>	7,640	43.8%	233	33.6%	7	35%	45%
<b>Male</b>	9,784	56.2%	460	66.4%	13	65%	55%
<b>Grand total</b>	<b>17,424</b>		<b>693</b>		<b>20</b>		

\*[http://www.naab.org/accreditation/statistics/NAAB\\_2015AnnualReport\\_Part1\\_Final-4.pdf](http://www.naab.org/accreditation/statistics/NAAB_2015AnnualReport_Part1_Final-4.pdf)

#### I.1.4 Defining Perspectives

##### A. Collaboration and Leadership

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 in the following ways:

- Collaborative team studio projects: Across the studio sequence in both design and building technology, students participate in team projects that supplement their individual work. Collaboration involves merging individual ideas into unified concepts, disseminating workflows among team members and managing time efficiently.



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- Placed-based learning opportunities: Using New York City as a living laboratory, 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 a community liaisons (Chinatown Partnership, Brooklyn Tech Triangle, Industry City) to guide the students' project work.
- Partnering with the community: 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.
- Interdisciplinary learning: In keeping with City Tech's new requirement that all graduating B. Tech. students complete at least one Interdisciplinary (ID) course (one that requires co-teaching with one faculty member from arts and sciences) the faculty of the department of Architectural Technology has both developed and taught courses that encourage our students to study issues from multiple points of view. The ID course "Learning Places" pairs the study of Urban Spaces in NYC with library research techniques. The "Closing the Loop" initiative sequenced courses in building technology, sustainability and fabrication as a capstone project that has been presented at the "Facades Plus" conference.
- Research initiatives: Advanced curricula in both the design studios and lab electives are focused on research in sustainability, resiliency, and performative design. Students develop confidence in approaching research questions as they work collaboratively to achieve collective results. Research-based curriculum is complemented by the Emerging Scholars program where students work in small groups directly with a professor on a research project that is shared at a college-wide public presentation at the end of each semester.

Supplementing these curriculum-based initiatives are a number of programs in which students develop collaborative and leadership skills that help prepare them to enter the professional world:

- 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. As funds are available the club sponsors international travel to visit significant architectural works abroad and local travel that makes use of New York City and its environs as an extension of the classroom.
- Design/Build: In the 2014-15 academic year a group of dedicated students under the direction of our faculty members participated in the US Department of Energy Solar Decathlon, a design/build project. Covered in greater detail elsewhere in this report it provided a unique opportunity for hands-on learning in a construction setting and acted as a catalyst for close relationships with industry and professional partners.
- Study abroad: Since the winter break of 2014, and continuing on an annual basis, a select group of students have traveled abroad along with architecture faculty to study environmental concerns and participate in community-based service projects.
- TECHNE: A publication presenting student and faculty work from across the architecture curriculum, *TECHNE*, now entering its fourth 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.
- Professional Organizations: Students and faculty participate in a wide range of activities sponsored by both 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 organizations (AIA, SARA) and continue to serve as member of local executive councils.
- Internship Program: Our well-developed internship program has given our students professional working experience while still enrolled in our program and has provided direct access to full time employment.

## B. Design

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. The following aspects are typical of our design sequence:

- 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: As mentioned earlier in this report under *Collaboration*, 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 as a result of our strong industry ties, are field trips to local architecture, engineering and construction firms, construction sites, and product vendors' offices.

Our studio sequence has also undertaken the following special initiatives to reinforce our obligation to nurture students to be well versed in the many issues related to the design of the urban environment.

- Intersections: Sponsored originally by our department's NSF FUSE-LAB grant this annual conference provides a forum for outside experts well-versed in cutting-edge technologies and initiatives to share their knowledge and experience with other professionals, faculty and our students and provides an opportunity to form relationships with a broader network of prominent professionals. <https://openlab.citytech.cuny.edu/fuselab/event/intersections-2015/>
- Emerging scholars: Mentioned earlier in this report this initiative encourages students to engage directly with their professors to conduct research. Faculty and students have participated in this program to delve more deeply into design-related issues beyond the structure of the design studio. This format has allowed for extended study spanning multiple semesters and has been particularly effective in community-based master planning initiatives.
- Solar Decathlon 2015: In 2012 we were one of 18 architecture programs from across the country accepted to compete in the US Department of Energy's biennial Solar Decathlon Competition. The challenge asked each team of students to design and build a Net-Zero, energy efficient home. The competition required that the power needs of the home be met by a solar powered array and that it be designed and built locally and delivered to the competition site in California. To facilitate the success of the project a wide range of courses from design and construction detailing to energy analysis and design/build were all focused on the competition. Named DURA (Durable, Urban Resilient and Adaptable) our design solution responded to the impact of 2012's Superstorm Sandy which flooded NYC taking large parts of the city off the power grid. A unique urban solution, our entry called for the development of a low scale four-story building, with four to eight apartment units, each independently powered by a vertical solar array on the south façade, where each unit could survive "off the grid" in the event of another storm. Our entry finished 5th place in engineering and 7th place in Architecture. A model for future design/build initiatives at the college, this seminal experience, has redirected careers, opened up new opportunities and has armed our students with the knowledge that when they apply themselves they will succeed.

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The learning culture of the department centers around hands-on, placed-based learning that addresses real and current issues affecting urban living. This manifests itself through both studio and independent research projects with professors that encourage collaboration with local communities and investigate and analyze issues related to topics such as resiliency, sustainability and code and regulatory requirements. Since the needs of communities and cities are constantly changing the program ensures that it is addressing current and relevant architectural, technological and urban issues by continuously soliciting feedback from guest jurors at student reviews, organizing course coordination meetings with all full-time and adjunct professors and engaging in discussions with industry partners.

Our program is committed to utilizing the latest software and digital fabrication technologies so that our students graduate with the necessary skills to make them strong candidates in a job market increasingly focused on the technology that drives the profession. Our fabrication lab is equipped with the latest 3D printing and fabrication technologies. The use of these digital tools is encouraged in the course curriculum and through extracurricular activities, such as the fabrication club, and independent research projects with professors whose expertise lies in the development and use of these tools.

Unique to our program is the integration of the Digital Spine which occurred during the extensive revision of our department's curriculum which began in 2010. This highly successful initiative removed "software only" courses from our curriculum which freed up credit hours allowing for the introduction of new courses. The teaching and learning of software now occurs within the design and building technology sequences and is integrated into the studio curricula as the "Digital Spine."

### C. Professional Opportunity

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 soft skills such as analytical thinking and written and verbal communication. The department is a bridge between academia and the profession. Some ways in which this is accomplished are as follows:

- Advisory board members are active in leading architectural and engineering firms.
- Adjunct faculty members are hired from prominent firms such as KPF, Thornton Thomasetti, SHoP, Diller Scofidio and Renfro, Studio Libeskind, and New York City departments, such as the NYC Department of Design and Construction.
- Workshops and seminars to support classroom learning. As an example, to teach acoustical modeling, ARUP engineers invited students to their office to test their designs; an engineer from SOM gave a lighting modeling seminar.
- Guest speakers include staff from Grimshaw, SHoP, Snohetta, Hadid, Calatrava, and Hebling.
- Intersections For three years from 2013-2015, the department hosted an all-day conference highlighting advances in digital technologies and performative architecture.
- Class visits to architectural offices and ongoing projects include Eisenman, Acconci, Selldorf, Perkins Eastman, FXfowle, Vinoly, Grimshaw, Snohetta, BIG, and SOM. Visits are also organized by the Architectural Club.
- Yearly workshop series on "Getting Ready for Work" covers resume writing, professional portfolios, interviewing techniques, soft skills, and internship requirements.
- ARCH 4880, a course on professional practice, is required in the fourth year. An internship class is offered to students who are employed in architectural offices or city agencies.

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Under New York State Education regulations, holders of a B. Tech. degree are eligible for architectural licensure with slightly different requirements than those with a B. Arch.. Professor Barbara Mishara maintains contact with the NYS Board of Architecture and advises students. In May 2015, she was appointed an Architect Licensing Advisor with NCARB and attended the yearly conference in August 2015 and 2016.

#### **D. Stewardship of the Environment**

Superstorm Sandy made a direct and visceral impact on the students in our department. Many were displaced from their homes and unable to attend classes or complete coursework. Consequently, the rigors of analyzing, evaluating and caring for the immediate urban environment is imbued with a unique level of urgency. The department regularly hosts events dedicated to understanding the fragility of the urban environment. This includes participation with the **Brooklyn Waterfront Research Center** and faculty coordination of the first symposium on **'Extreme Heat: Hot Cities- Adapting to a Hotter World.'**<sup>9</sup> **HURRIPLAN** training is run annually at the department in conjunction with the **AIANY Committee on Design for Risk and Reconstruction**. The **National Science Foundation** funded an Advanced Technology Education grant that has enabled the department to purchase tools such as hardware and software for students to run environmental simulations and verify their findings with field measurements. Faculty have been hired to support this effort and the curriculum is developing a sustainability spine to ensure real, action-oriented skills and knowledge that are integrated into each course. In 2015, students and faculty worked tirelessly to design and build the first **Solar Decathlon** project from our college. This work illustrates our dedication and commitment to actively engage the environment and appraise our responsibility to it.

#### **E. Community and Social Responsibility**

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.

Social responsibility is important to our program and our students at City Tech. Our student body is 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. Social and community responsibility is a focus that appears in numerous places throughout our curriculum.

For example, our design curriculum includes projects that require the students to work with specific communities in New York City to address important urban challenges. Academic service learning projects are developed and executed in courses as part of the integration of High Impact Educational Practices in our curriculum. 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.

##### **I.1.5 Long Range Planning**

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. In order to ensure we are meeting our long-term objectives we engage an advisory board, conduct intensive 10-year reviews and engage in periodic self-assessment through student evaluations, course-coordination meetings and course presentations to the entire faculty.

Our advisory board consists of established architectural practitioners, academics and industry partners. Our faculty meets with the board every year to review our curriculum and receive feedback as to whether or not we are addressing relevant content and teaching appropriate skills. This feedback helps to ensure we are producing graduates who meet and exceed current industry expectations.

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Every ten years a departmental self-evaluation is produced by the faculty that reviews and assesses the department's mission and vision, faculty, student population, resources, curriculum and facilities. This study is presented to an outside evaluator who visits the school and makes recommendations for improvements and offers guidelines for future direction.

Finally, the department uses three frequent methods of periodic self-assessment. Our curriculum committee meets regularly to ensure that courses are aligned with the department's mission and vision; professors are observed each semester by full-time faculty members to confirm that course content is being delivered as expected; Student Evaluations of Teaching (SETs) are a college-wide assessment documenting student evaluations of teaching which provides direct and anonymous feedback to full and adjunct faculty. The data gathered from these assessments is used to inform strategic planning decisions by the department.

Although we have mechanisms in place to help us fulfill our current objectives we see the accreditation process as an opportunity to revisit our vision and establish new long-term goals. Looking ahead, we identify several areas in which to advance and improve our program:

- Building a studio culture. Currently, architecture students do not have dedicated facilities in which to do their work and must rely on home resources and the availability of space at school. A dedicated studio spaces for the B. Arch. students will ensure that students have full accessibility to the resources of the department and will also 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 the study of architecture cultures outside the Western tradition.
- Introduce Virtual Desktop Infrastructure (VDI) to demonstrate a model for an interactive design classroom.
- Reassemble a more diverse advisory board: to include diverse professionals representing institutional authorities, community interests and activists as well as technical and design professionals.
- Continue to improve our assessment methodologies
- Establish articulation agreements with 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 MArch degrees for our graduates.
- Establish our department as a community resource for: building and 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.

#### **I.1.6 Assessment**

The Department of Architectural Technology has developed a culture of assessment, but one that needs to be broadened and 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 level and course level. Our assessment focuses on both skills and knowledge specific to the discipline, but also general education skills and knowledge, including the interdisciplinary courses that we have helped develop that are available to the full college community.

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



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adjustments and future initiatives. Copies of the documents of our recently completed review are available through the Chair's office.

The current course level assessment process in our department consists of periodic course reviews that are conducted during faculty meetings to gain an insight into student performance and the assessment by the course coordinator of the current challenges the students and faculty are contending with in the course.

The department is developing more formal and holistic approaches to assessment which we intend to institute over the next 2-3 years as our first cohort moves through the B. Arch. program. These approaches include assessing student reading through the college wide 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 through the institution of e-portfolio through the college's OpenLab platform. 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.

## **Section 2. Resources**

### **I.2.1 Human Resources and Human Resource Development**

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 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.

Our part-time instructional staff of over 60 adjuncts hold prominent 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. The resumes of full-time faculty are available in **Part Three, 3.2** below.

Evaluations of full-time faculty are performed on an annual basis by one of the five elected members of the Department's Appointments Committee. These evaluations are filed in the College's Institutional Staff Relations (ISR) office as part of the faculty member's permanent file. Peer observations of faculty teaching are also performed on a biannual basis for full-time and adjunct faculty.

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.

Students also have the opportunity to evaluate a faculty member's teaching performance each semester. At the end of the semester, students are given 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 also included a faculty member's permanent file at the ISR office.

### **Professional Development**

Professional development for faculty and staff are 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).

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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. 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.

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. The website is a dynamic tool that 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 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.
- Open Lab is an internet 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.
- Living Lab Faculty Fellows participate in the Living Lab's General Education Seminar. The seminar offers the opportunity to share a rich and collegial learning experience with faculty members from other disciplines and to contribute to the success of a truly 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 program. Launched in the spring of 2011, it aims to re-envision 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 college-wide initiative which provides workshops and individualized faculty professional development, to support the adoption of strategies in classroom instruction and assignment design to improve student reading comprehension.

### Student Support Services

All full-time faculty participate in student advisement. Throughout the semester, faculty maintain office hours for two hours per week. These hours are doubled during Early Advisement and Registration periods in the middle of the semester as well as Late Advisement and Registration periods in the winter and summer between semesters.

First-time students are advised in the college's New Student Center, typically the semester or summer before they begin classes. The Center works closely with the department to assure that the students register for the correct courses, and shows students how to use the online registration system, CUNYfirst. Subsequently, students receive advisement from program faculty. The department's advisement program serves not only the function of advisement of courses needed to fulfill degree requirements but also provides a time for mentoring students through discussion of career goals.

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Students looking for job placement assistance are referred to the department's Job Placement Coordinator, Prof. Ken Conzelmann. He maintains a database of student and graduate resumes and employer contacts.

See section I.1.4 for further discussion of student support services.

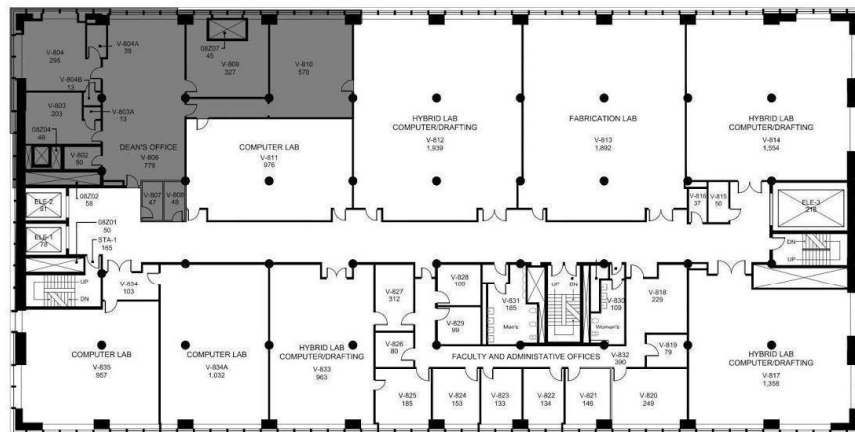
### I.2.2 Physical Resources

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 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 also a drafting studio as well as some standard lecture classrooms on the third floor.

Voorhees Hall underwent a \$38 million renovation funded by CUNY-Wide Condition Assessment Funds; this was completed in spring 2013. Work included a new glass facade and lobby improvements. Additional windows were added to increase natural lighting. The project was managed by the Dormitory Authority of the State of New York (DASNY) and was completed under budget. 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.

**COURSE OF ACTION: Physical Resources** (*Course of Action Item 3.a*): The Department of Architectural Technology is currently serving a large student body of 700-800 students with a full-time faculty of 20 and a part-time faculty of approximately 60. We anticipate our initial B. Arch. cohorts will be in the range of 30-45 students. 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.

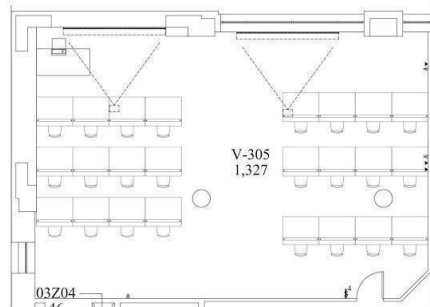
#### Current Space Allocation:



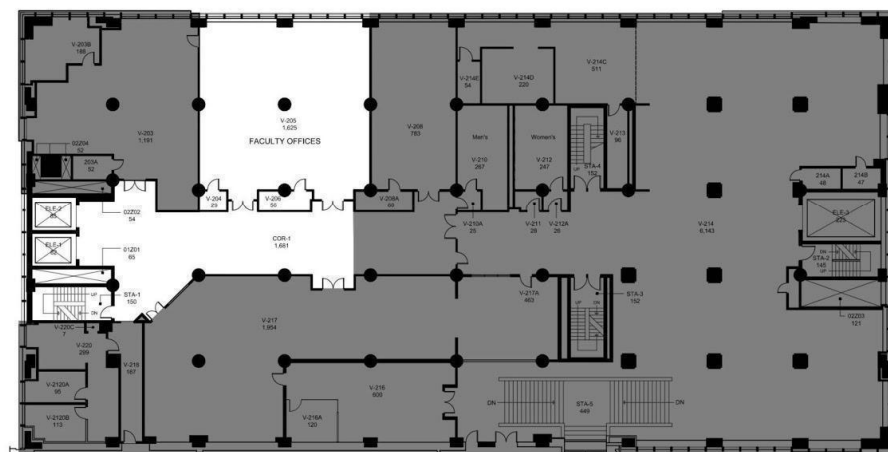
Department of Architectural Technology Primary Floor Plan (8th Floor, Voorhees Hall)



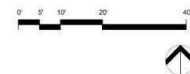
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Additional Classrooms (3rd Floor, Voorhees Hall) (Particular Classroom Varies)



Second Floor Voorhees Hall  
Department of Architectural Technology



Additional Faculty Offices (2nd Floor, Voorhees Hall)

## ANALYSIS OF DEPARTMENT SPACE RESOURCE NEEDS

	Studios (Hybrid Labs)	Studio	Computer Labs	General Classrooms
Existing	4	1	3	4-5
<b>Required 2017-2018</b>	<b>6</b>	1	<b>4</b>	4-5
<b>Required 2019-2023</b>	<b>8</b>	1	<b>4</b>	4-5
<b>Total New Classrooms</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>

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 practice, exploration, and synthesis of the broad range of skills and knowledge inherent in the discipline. We are currently making due with our existing space, assigning studio courses into computer labs that are not properly setup for the range of activities that take place in studio courses (hand sketching and drawing, desk critiques, model making, large format drawing analysis and layout, group discussion, pin-up presentations...). An analysis of the modified curriculum for the AAS program as well as the new B. Arch. program reveals that the department will require 2 new studio spaces by the fall of 2017 as well as one additional computer lab. Another 2 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 our department. We will work with the administration to coordinate our specific program requirements for these spaces and confirm their availability by the required dates.

The configuration of each type of instructional space (both new and existing) will be studied for adaptation to accommodate multi-modal teaching, including facilitating group discussion, teamwork, in-class research, and dynamic presentations. All spaces will need to provide a base level of student access to networked digital technology in addition to the provisions at the instructor podium.

As a continuation to the important efforts of the Solar Decathlon in 2013-2015, as well as in support of a new Design to Build studio, the department requires formal arrangement for access to a wood shop as a complement to our fabrication lab. Currently the department is a guest in the shop of the CMCE department, which does not allow adequate class time and access outside of class times. We will continue to work with the administration to address this need.

Our faculty office space also needs to be addressed to improve departmental communication and more efficient and effective access for students during advisement periods. The primary challenge in the current configuration is the dispersed condition of having a small set of offices within the department's administrative space on the 8th floor and the remaining offices and support space 6 floors below, disassociated from both the administrative center as well as the majority of studios and classrooms. We will continue to work with the administration to consolidate our faculty offices so that they provide direct access for faculty, staff, and students.

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

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:

1. Full- and part-time faculty salaries (PS)
2. Other than personnel services (OTPS): the operating budget for general supplies/ laboratory materials replenishment, tools, office supplies, etc.
3. Temporary services (TS); supports temporary administrative and teaching laboratory support personnel
4. 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.

**COURSE OF ACTION: External Support** (*Course of Action Item 3.h*): The Department of Architectural Technology is eager to continue the project of gaining external support outside of the college and the university. The department has pursued a larger visibility and professional community engagement through a number of 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 has offered the department important feedback and support 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. Additionally, the Solar Decathlon project offered the opportunity to seek support from local businesses and manufacturers, relationships that we intend to maintain and build on in the future.

While the college has a formal alumni association, the department has been building direct communication and tracking of 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 or nontraditional career paths. These efforts will continue and be made more robust over the course of our candidacy to build a better feedback loop for curriculum development and database to track and analyze the performance of our graduates.

### **I.2.4 Information Resources**

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,

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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. 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 variety 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, ebrary, GreenFILE, Humanities Source, various JSTOR journals, Material ConneXion, Oxford Art Online, Oxford Reference and SpringerLink Ebooks.

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.

### **1.2.5 Administrative Structure & Governance**

City Tech is one of the seventeen senior colleges of the City University of New York. CUNY is governed by a Board of Trustees. The Board of Trustees 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. Since June 2014 the University is headed by Chancellor James B. Milliken, formerly president of the University of Nebraska system, and a nationally prominent leader in public higher education, as the seventh Chancellor of CUNY.

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. 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.

Bonnie August, PhD, is the Provost and Vice President of Academic Affairs. Dr. August has served in this position since February 2005. As the chief academic officer of the College, she oversees faculty members in 27 academic departments, providing guidance for the curricular and instructional development of City Tech's schools of Arts & Science, Professional Studies, and Technology & Design, as well as the Division of Continuing Education, the Library, College Learning Centers, Instructional Technology, Assessment and Institutional Research, and the Faculty Commons.

The college is comprised of 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,

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Environmental Control Technology and Mechanical Engineering Technology. The dean of the School of Technology and Design is Kevin Horn, R.A, who has served since October 2010.

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 a three-year term. Professor Sanjive Vaidya served as interim chair of the Architectural Technology Department in the 2015-2016 academic year and was elected to a full three-year term starting in 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 not only for overseeing the curriculum of the College, but also formulating student-related procedures. In addition, it makes recommendations with regard to budget, the buildings and grounds infrastructure, personnel matters, and governance-related rules and regulations.

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## PART II EDUCATIONAL OUTCOMES AND CURRICULUM

### II.1.1 Student Performance Criteria

As guided by our mission statement the Bachelor of Architecture curriculum will focus on the integration of the technical and design skills necessary to prepare students to join a competitive professional work force. Using the required criteria as set forth by NAAB, below are Student Performance Criteria Curriculum Matrices evaluating the existing B. Tech. program as compared to the proposed B. Arch. degree curriculum. The courses that demonstrate the greatest evidence of student achievement for each of the required criteria have been indicated.

As demonstrated by the matrices, although our current B. Tech. curriculum meets most of the required criteria, the criteria is not well integrated within the different types of courses offered or throughout the duration of a student's tenure at City Tech. The proposed curriculum for the B. Arch. degree is designed to remedy this by meeting each of the required criteria multiple times across the entire curriculum. This will help students to more fully grasp complex and interrelated ideas as they are presented repeatedly and in different scenarios throughout the curriculum.

### B. Tech.: Student Performance Criteria Curriculum Matrix

*Current Required Arch Curriculum Only (not including electives or common core) for B. Tech. Degree*

STUDENT PERFORMANCE CRITERIA MATRIX- CURRENT BTECH PROGRAM																													
		A	A	A	A	A	A	U	U	A	A	A	A	A	A	U	U	U	U	U	U	A	A	U	U	U	U	U	
		Prof Comm Skills	Design Thinking Skills	Investigative Skills	Arch Design Skills	Ordering Systems	Use of Precedents	History and Culture	Cultural Diversity	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Bldg Env Sys + Assembly	Bldg Mtn + Assembly	Bldg Services Systems	Financial Considerations	Research	Int. Eval + Decision Making	Integrative Design	Stakeholder Roles in Arch.	Project Management	Business Practices	Legal Responsibilities	Professional Conduct		
		REALM A								REALM B										REALM C					REALM D				
		A.1	A.2	A.3	A.4	A.5	A.6	A.7	A.8	B.1	B.2	B.3	B.4	B.5	B.6	B.7	B.8	B.9	B.10	C.1	C.2	C.3	D.1	D.2	D.3	D.4	D.5		
YEAR 1	ARCH 1110- FOUNDATIONS I																												
	ARCH 1191- VISUAL STUDIES I																												
	ARCH 1130- BTECH I																												
	ARCH 1210- FOUNDATIONS II																												
	ARCH 1291- VISUAL STUDIES II																												
	ARCH1121- HIST ARCH TECH																												
	ARCH 1230- BTECH II																												
YEAR 2	ARCH 1250- SITE PLANNING																												
	ARCH 2310- STUDIO III																												
	ARCH 2321 - HIS ARCH 1900-PRES																												
	ARCH 2330- BUILDING TECH III																												
	ARCH 2370- BLDG. SYS.																												
	ARCH 2410- STUDIO IV																												
	ARCH 2430- BUILDING TECH IV																												
YEAR 3	ARCH 2480- STRUCTURES I																												
	ARCH 3510- STUDIO V																												
	ARCH 3580- STRUCTURES II																												
YEAR 4	ARCH 3610- STUDIO VI																												
	ARCH 4710- STUDIO VII																												
	ARCH 4810- STUDIO VIII																												
	ARCH 4851- PROF PRACT																												



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### B. Arch.: Student Performance Criteria Curriculum Matrix

*Required Arch Curriculum Only (not including electives or common core) for B. Arch. degree*

		STUDENT PERFORMANCE CRITERIA MATRIX																									
		A	A	A	A	A	A	U	U	A	A	A	A	A	A	U	U	U	U	U	U	A	A	U	U	U	U
		Prof Comm Skills	Design Thinking Skills	Investigative Skills	Arch Design Skills	Ordering Systems	Use of Precedents	History and Culture	Cultural Diversity	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Bldg Env Sys + Assembly	Bldg Mtds + Assembly	Bldg Services Systems	Financial Considerations	Research	Int. Eval + Decision Making	Integrative Design	Stakeholder Roles in Arch	Project Management	Business Practices	Legal Responsibilities	Professional Conduct
		REALM A								REALM B								REALM C				REALM D					
		A.1	A.2	A.3	A.4	A.5	A.6	A.7	A.8	B.1	B.2	B.3	B.4	B.5	B.6	B.7	B.8	B.9	B.10	C.1	C.2	C.3	D.1	D.2	D.3	D.4	D.5
YEAR 1	ARCH 1110- ARCH DESIGN I																										
	ARCH 1101- INTRO TO ARCH																										
	ARCH 1210- ARCH DESIGN II																										
	ARCH 1205- BLDG TECH I																										
	ARCH 1221- HISTORY I																										
YEAR 2	ARCH 2310- STUDIO III																										
	ARCH 2305- BUILDING TECH II																										
	ARCH 2350- SITE PLAN + SUSTAIN																										
	ARCH 2321- ARCH HISTORY II																										
	ARCH 2410- STUDIO IV																										
YEAR 3	ARCH 2330- BUILDING TECH III																										
	ARCH 3510- STUDIO V																										
	ARCH 3505- BUILDING TECH IV																										
	ARCH 3580- STRUCTURES I																										
	ARCH 3610- STUDIO VI																										
YEAR 4	ARCH 3605- BLDG SYSTEMS																										
	ARCH 3680- STRUCTURES II																										
	ARCH 3621- THEORY I																										
	ARCH 4710- STUDIO VII																										
	ARCH 4780- STRUCTURES III																										
YEAR 5	ARCH 4810- STUDIO VIII																										
	ARCH 5910- STUDIO IX																										
	ARCH 5921- THEORY II																										
	ARCH 5961- PROF PRACTICE																										
	ARCH 6010- THESIS																										

## II.2.1 Institutional Accreditation

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). Individual programs are also accredited by the relevant institution.

## II.2.2 Professional Degrees & Curriculum

The development of our Bachelor of Architecture undergraduate degree is a continuation of the trajectory of our curriculum development over the last 13 years.

After a long history of offering an AAS two-year degree with an emphasis on workforce preparation, the department embarked on a series of modifications to our curriculum that were rooted in changes in the profession, improving the general education of our students, and enhancing the pedagogy of our architectural education to better serve our student body.

The first significant change was the introduction of the B. Tech. four year degree in 2003, which added 56-58 credits to the 64 credits required for the AAS for a total of 120 credits. This degree allowed our department to build a higher level of sophistication in our students, introduce a broader range of tools and technical skills, and raise the level of the design studios. This degree still carried a significant emphasis on workforce readiness, with only 21 credits dedicated to design, 34 credits for technical courses, 8 credits for history courses and 6 credits for professional practice courses.

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Six years after the launch of our B. Tech. degree, our faculty revisited both degrees to assess:

1. The effectiveness of the curriculum
2. How to better integrate general education learning outcomes
3. How to develop a more integrated approach to teaching design and building technology
4. How to provide students with a choice between a more intensive design sequence or a more intensive technological focused sequence.

As part of this redevelopment of our AAS and B. Tech. degrees in 2009-2010, we mapped our curriculum and skills to the NAAB Student Performance Criteria, seeking to better align our non-professional degrees to the NAAB standards. The result of this round of development is a curriculum that addresses a broad range of the NAAB SPC(s).

**Table Showing Evolution of Degree Programs Through Allocation of Credits per Thread**  
*Arch Curriculum Only (not including electives or common core)*

Degree	Design	Technical	History	Theory	Prof. Pract.	Optional	Total Credits
AAS initial	11	25	5	0	0	3	44
AAS current	14	25	5	0	0	3	44
B. Tech. initial	21	34	8	0	6	6	75
B. Tech. current (Design Intense)	33	31	8	0	3	9	84
B. Tech. current (Tech Intense)	23	41	8	0	3	12	87
B. Arch.	56*	29	10	6	3	12	116

\*B. Arch. Design Studios with emphasis on Integrative Design

**COURSE OF ACTION: Plan for Implementing New Courses/Curriculum** (*Course of Action Item 3.g*):  
The following tables outline the curriculum of the existing B. Tech. and the current B.Arch. proposal.





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As we launch the B. Arch. degree, our latest iteration of the B. Tech. degree is a strong foundation to build on. In our assessment of the current curriculum, we identify the need to reinforce the design studio as the core of our students' education. Our B. Arch. curriculum reflects this need, with a significant increase in the allocation of credit hours for the design courses. This allocation allows not only greater emphasis on design and integration of technology, it also provides our commuter students with more interaction with the design faculty as well as their classmates, and a greater degree of guidance on their studio assignments.

The second major need for the B. Arch. curriculum is to develop a coordinated history/theory sequence. This sequence includes a new introductory, place-based course, developed around the theme of *Experiencing Architecture*, that specifically addresses the need to build the prior knowledge and first-hand experience of architecture for our City Tech students.

The third focus of our B. Arch. development is the alignment of our strong building technology sequence with the design sequence to support integrative learning. We are shifting the sequence back, allowing room for first year introductory survey courses that aid the students in developing an understanding of the discipline and their passion for it before embarking on technically focused courses. The first building technology course will leverage New York City as a laboratory for studying how buildings are made, their materiality and performance, and the relationship between structure, material, and tectonics. This course will survey both historical and cutting-edge materials and methods of construction.

Our B. Arch. curriculum also needs to respond to the crucial characteristic of our college's culture: to provide broad opportunity to people in our community through open enrollment. The B. Arch. will respond to this condition as one of three possible degrees for our department's students. All students will start in the AAS program. We are still developing the mechanism for identifying the students eligible for the B. Arch. after completion of the first four semesters. One possibility is that as students complete their fourth semester, they will have the opportunity to apply for a position in the B. Arch. program or to continue in the B. Tech. program. The B. Arch. "gateway" will include an interview, review of each student's GPA and their portfolio, and letters of recommendation.

The B. Tech. and B. Arch. programs will complement each other, the former working towards a high level of technological and fabrication expertise and the latter preparing graduates for leadership in design, technical proficiency, administration, and management.

We have developed outlines for all of the courses in the B. Arch. program, included below in the supplemental materials section (**Part Three, Section 3.1**). We have completed development of the courses for the first two years of the B. Arch. program as part of our major curriculum modification submission to college council in September.

Each sequence of the B. Arch. will be directed by a faculty team that will steer the sequence, coordinate faculty assignments for each course in the sequence with the appointments committee, and oversee adjustments to course content. The sequence coordination team will also be responsible for assessment of the courses in the sequence and submission of documentation and reports for faculty review and NAAB APR submissions.

Currently our appointments committee is responsible for all faculty teaching assignments. The committee members consult the course coordinators as part of the appointments process. We are exploring enhancing the faculty assignment process to ensure the best match between the faculty member's teaching and discipline expertise with the course content as well as the position of the course in the curriculum and the level of the students.

We have evaluated our existing physical resources and our needs to fully implement the B. Arch. program above. This analysis reveals the need for four new studios (hybrid) as well as a new computer lab. In addition, scholarship 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

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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.

### **II.3 Evaluation of Preparatory Education**

To apply for degree admission to New York City College of Technology, applicants must file a formal application prior to the semester in which they plan to register. Application to all campuses of The City University of New York (CUNY) is done electronically through the University Application Processing Center (UAPC). Students are required to select their intended major during the application process as they will be applying directly to a specific curriculum and session (day or evening).

Students file as a freshman if they are: a high school senior; a student who has earned an equivalency diploma or passed the General Educational Development (GED) examination; an applicant to the SEEK program; a foreign applicant whose only previous secondary education has been in the United States and who never attended college; or a student who never attended college.

The college has established a minimum standard for direct admission. Students are evaluated for admission according to a formula that considers the student's preparation in high school English and mathematics, high school grade point average, and College Preparatory Initiative Units. Freshman applicants are responsible for submitting directly to the college their most recent NYS regents, SAT, and ACT scores.

These criteria will remain for all students entering the department of Architectural Technology, irrespective of their eventual degree. The department endeavors to keep the program a robust interaction between students interested in the multifarious aspects of design and building technology and attend courses that fit within their busy work schedules.

Students will apply to the Bachelor of Architecture program during their fourth semester or when completing approximately 60 credits. A committee of architecture faculty will make all evaluations and decisions to admission into the B. Arch. program. The admissions process will consider:

- GPA overall and in architectural studies
- Evaluation of creative thinking, interpretation and expression based on work that demonstrates a student's unique qualities and strengths. This may include creative writing, visual expression videos, fabrication talent, and or digital/computational demonstrations. Rather than limit this review to a traditional portfolio submission, the department endeavors to recognize that the expression of talent, skill, and interest are currently manifested in a large array of digital and physical mediums.
- A personal interview between a faculty member and the candidate - online or in person.
- Two letters of recommendation from instructors or employers.

Applications from transfer students, alumni, or students currently enrolled in the Bachelor of Technology program will involve:

- Official College Transcripts
- College cumulative GPA of B or better (to be confirmed)
- Creative thinking, interpretation and expression evaluation (see above description)
- Portfolio of work:
  - For transfer students it is required only if students are seeking credit for courses completed in another program.
  - For NYCCT students/alumni a portfolio must illustrate academic work and/or projects completed after graduation.
- A personal interview between the faculty member and the candidate - online or in person.
- Two letters of recommendation from former instructors or employers.

#### II.4 Public Information

The department currently maintains several different online sites to serve a variety of operational functions. These sites are to be linked into a single site which will reflect the multiple levels of activity in the program: professional, academic, social, and institutional. The current college website is being revised to allow for easier updating and control by each department.

##### II.4.1 Statement on NAAB-Accredited Degrees

All catalog and promotional materials, online and in print, will include the required text as it is worded in Appendix 5 of the *NAAB 2014 Conditions for Accreditation*.

##### II.4.2 Access to NAAB Conditions and Procedures

These documents will be linked directly to the program website: *NAAB Conditions for Accreditation*, and the *NAAB Procedures for Accreditation* (referencing edition currently in effect). Updates to the most current additions will be made as necessary.

##### II.4.3 Access to Career Development Information

These resources will be made available to all students, parents, staff and faculty, and linked to the following websites: [www.aia.org](http://www.aia.org), [www.aiaa.org](http://www.aiaa.org), [www.acsa--arch.org](http://www.acsa--arch.org), [www.NCARB.org](http://www.NCARB.org), [www.ARCHCareers.org](http://www.ARCHCareers.org), *The NCARB Handbook for Interns and Architects*, *Toward and Evolution of Studio Culture*, and *The Emerging Professional's Companion*.

##### II.4.4 Public Access to APRs and VTRs

To promote transparency in the process of accreditation in architecture education, the program will make the following documents available to the public:

- Annual Reports, including this narrative
- All NAAB responses to the Annual Report
- The final decision letter from the NAAB
- The most recent APR
- The final edition of the most recent Visiting Team Report, including attachments and addenda

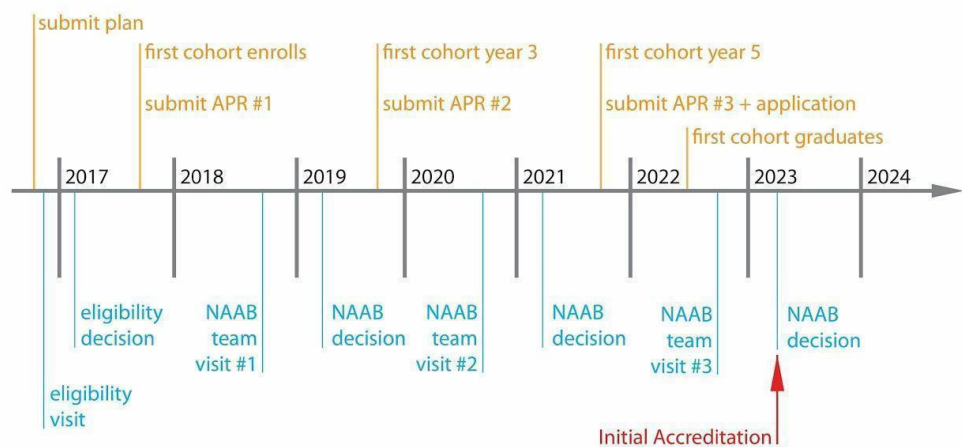
These documents will be housed in the School of Technology and Design office and accessible to all. PDF versions will be available for download from the program's website.

## **PART TWO**

### **Timeline for Achieving Initial Accreditation**

#### **NAAB Process:**

#### CITY TECH Bachelor of Architecture Accreditation Timeline



#### **College Approval Process:**

#### CITY TECH Bachelor of Architecture Curriculum Timeline



**New York City College of Technology**  
Plan for Achieving Initial Accreditation  
October 2016

There are two critical timelines we will be following to achieve initial accreditation within the six year limit:

The first is the NAAB timeline. With the submission of this plan in the fall of 2016, we anticipate confirming our eligibility in early 2017. We intend to enroll the first cohort eligible for the B. Arch. degree in the fall of 2017. This cohort will enter the AAS/B. Tech. degree programs through our on-going open enrollment process. As they embark on their first year, we will finalize and submit the first Architecture Program Report to NAAB in preparation for the candidacy visit in 2018. In the spring semester of our first cohort's second year, students desiring acceptance to our B. Arch. program will submit an application along with a transcript and portfolio. Transfer students will also be eligible to apply as outlined above. The first cohort of students accepted to the B. Arch. program will commence their third year in the fall of 2019, coinciding with our preparation of our second APR as required for our second candidacy visit in 2020. This cohort will reach graduation in the spring of 2022, followed by the final candidacy visit that fall, with the Initial Accreditation decision rendered in early 2023.

**COURSE OF ACTION: Securing Institutional Approvals** (Course of Action Item 3.b): The second critical timeline is our college timeline for submission and approval of the new degree program and curriculum modifications including new courses and adjustments to existing courses. The first submission will consist of the application for the new degree program and the new courses for the first two years of all of our degree programs, (AAS, B. Tech., and B. Arch.) which will be uniform. The approval of this first submission is anticipated to occur in December 2016, allowing implementation in the fall of 2017. A second submission will be prepared for the fall of 2017. This submission will consist of all remaining curriculum changes for the B. Arch. program, namely the third, fourth, and fifth year courses. The approval of the second submission is anticipated to occur in December 2017, allowing implementation in the fall of 2018, one year ahead of the acceptance of the first B. Arch. cohort into the third year.

**Detailed Timeline:**

Year	Month	City Tech	NAAB
2016	Oct	Submit: Application and <i>The Plan for Achieving Initial Accreditation</i> to NAAB	
		Submit: <i>Years 1 and 2 Curriculum Modifications</i> to College Council	
	Nov		Eligibility Visit
	Dec	College Council Approval of <i>Years 1 and 2 Curriculum Modifications</i>	



**New York City College of Technology**  
 Plan for Achieving Initial Accreditation  
 October 2016

2017	Feb-Mar		NAAB Decision regarding Eligibility Status
	Aug	1st B. Arch. Eligible Cohort Enrolls	
	Sept	Submit: <i>Architectural Program Report</i> to NAAB	
		Submit: <i>New Academic Program Proposal</i> to College Council And Years 3, 4, and 5 Curriculum Modifications to College Council	
	Dec	College Council Approval of Years 3, 4, and 5 Curriculum Modifications and New Academic Program	
2018	Fall		<b>NAAB Team Visit #1:</b> Candidacy for Initial Accreditation
2019	Spring		NAAB Decision regarding Continued Candidacy for Initial Accreditation
		1st B. Arch. Eligible Cohort Applies for B. Arch. Status	
	Fall	1st B. Arch. Cohort Starts 3rd Year	
		Submit: <i>Architectural Program Report</i> to NAAB	
2020	Fall	1st B. Arch. Cohort Starts 4th Year	<b>NAAB Team Visit #2:</b> Candidacy for Initial Accreditation

**New York City College of Technology**  
 Plan for Achieving Initial Accreditation  
 October 2016

2021	Spring		NAAB Decision regarding Continued Candidacy for Initial Accreditation
	Fall	1st B. Arch. Cohort Starts 5th Year	
		Submit: <i>Application for Initial Accreditation</i>	
2022	Spring	1st B. Arch. Cohort Graduates	
	Fall		<b>NAAB Team Visit #3:</b> Candidacy for Initial Accreditation
2023	Jan-Feb		NAAB Decision on Initial Accreditation



# APPENDIX Plan for Achieving Initial Accreditation

## Addendum

New York City College of Technology  
Plan for Achieving Initial Accreditation  
October 2016

### **ADDENDUM: PART ONE**

November 14, 2016

#### **PART II EDUCATIONAL OUTCOMES AND CURRICULUM**

##### **II.4.6 ADMISSION AND ADVISING**

Admission requirements to the program at CITY TECH are as follows:

Associate Degree Programs:

High school diploma with minimum of a 70 average or a minimum score of 2700 on the GED/HSE exam.

Bachelor's Degree Programs:

High school diploma with a 75 or higher average or a minimum score of 2750 on the GED/HSE exam.

Incoming students are required to take the CUNY proficiency exam in English and Math.

Students are exempt from this test if they have minimum scores of 480 (Verbal) / 500 (Math) in SAT; or 20 (English) / 21 (Math) in ACT; or 75 (English) / 80 (Math) in New York State Regents examinations.

Transfer Students Requirements:

Minimum GPA of 2.0; Prove college level competency in English and Mathematics;

A grade of a C or better in non-remedial courses from an accredited college or university or from appropriate test scores from the SAT, ACT, NYS Regents, or CUNY Proficiency Examinations; Transcripts from all post-secondary institutions attended; Proof of High School Graduation, or HSE0; If applicable, proof of any name change; Proof of immunization.

Complete admission requirements can be found online at:

<http://www.citytech.cuny.edu/admissions/requirement.aspx>

##### **II.4.6 STUDENT FINANCIAL INFORMATION:**

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 (These new rates are effective for the Fall 2015)

Full-time matriculated: \$3,165 per semester

Part-time matriculated: \$275 per credit

All Non-degree: \$400 per credit (no limit)

Senior citizen fee: \$65 per semester or session

All Non-Resident Students (These new rates are effective for the Fall 2015)

**New York City College of Technology**  
Plan for Achieving Initial Accreditation  
October 2016

Full-time matriculated: \$560 per credit  
Part-time matriculated: \$560 per credit  
All Non-degree: \$840 per credit (no limit)

Complete up to date financial costs can be found at:  
<http://www.citytech.cuny.edu/admissions/tuition-general.aspx>



# APPENDIX Eligibility Memo



National Architectural Accrediting Board

OFFICE OF THE PRESIDENT  
RECEIVED

2017 MAR 20 A 10: 21

March 13, 2017

Russell K. Hotzler, Ph.D.  
President  
New York City College of Technology  
300 Jay Street, Namm-320  
Brooklyn, New York 11201

t. 202.783.2007

f. 202.783.2822

e. info@naab.org

w. naab.org

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,

A handwritten signature in black ink, appearing to read "Judith Kinnard".

Judith Kinnard, FAIA  
President

cc: Sanjive Vaidya, Chair  
Kevin Horn, FAIA

Enc: Final Visiting Team Report



National Architectural Accrediting Board, Inc.

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)

t. 202.783.2007

f. 202.783.2822

e. info@naab.org

w. naab.org

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.

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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

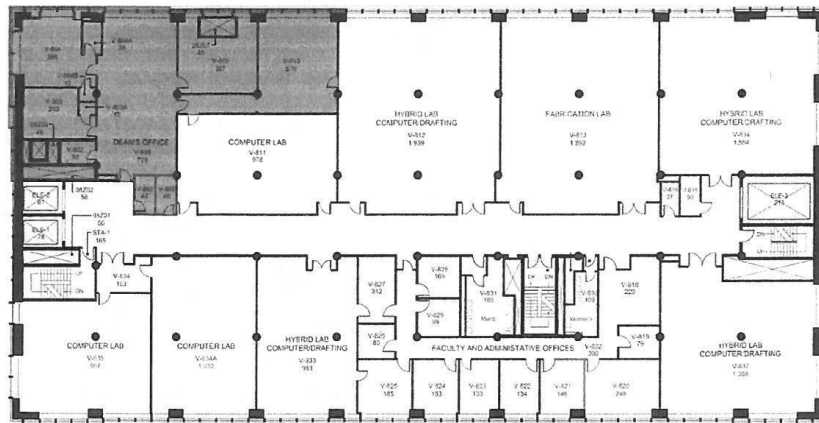
### Physical Resources

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

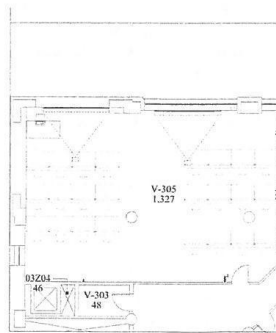
National Architectural Accrediting Board, Inc.

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)



Architectural Technology  
V305 Equipment and Furniture Layout-New Proposed

Apr 5, 2012

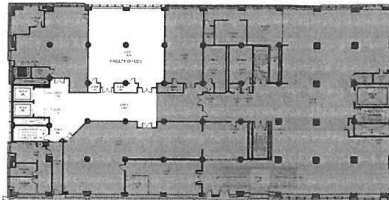
Additional Classrooms (3rd Floor, Voorhees Hall) (Particular Classroom Varies)



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Second Floor Voorhees Hall  
Department of Architecture 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

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National Architectural Accrediting Board, Inc.

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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.

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## **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 Horn, 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.

## APPENDIX Previous Visiting Team Report



**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.

**New York City College of Technology**  
*Visiting Team Report*  
February 3-7, 2018

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**New York City College of Technology***Visiting Team Report*

February 3-7, 2018

**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.



**New York City College of Technology**  
*Visiting Team Report*  
 February 3-7, 2018

#### **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 1971, 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.



**New York City College of Technology**  
*Visiting Team Report*  
 February 3-7, 2018

*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

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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.cuny.edu/affirmativeaction/eoo>).

**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.



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### **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:**

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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.

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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 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



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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 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/cafe 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

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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



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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/ofs/docs/policies/governancePlan.pdf>.

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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**

**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**

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**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.



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- 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.

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- 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.

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**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.



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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

**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

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**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.

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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**

**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.

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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**

**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.



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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] 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.<sup>1</sup>

<sup>1</sup> This is understood to be the APR from the previous visit, not the APR for the visit currently in process.

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- 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.



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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] 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.

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**V. Appendices**

**Appendix 1. Conditions Met with Distinction**

**2018 Team Assessment:** Conditions Met with Distinction is not applicable at this time.

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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.

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.

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### **Appendix 3. The Visiting Team**

#### **Team Chair, Educator**

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#### **Practitioner**

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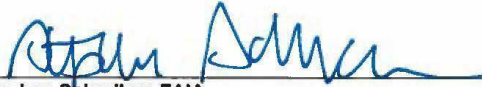
#### **NAAB Representative**

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VI. Report Signatures

Respectfully Submitted,



Stephen Schrelber, FAIA  
Team Chair



Jennifer Charzewski, AIA  
Team Member



John Senhauser, FAIA  
Team Member

NAAB Representative

# APPENDIX Letter Granting Initial Candidacy



**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,

A handwritten signature in black ink, appearing to read 'Judith Kinnard', written over a horizontal line.

Judith Kinnard, FAIA  
President

cc: Sanjive S. Vaidya, Department Chair  
Stephen Schreiber, FAIA, Team Chair