New York City College of Technology

Department of Architectural Technology

10 Year Review Response

Spring 2017

Prepared by Professors Illya Azaroff, AIA and Jason Montgomery, NCARB LEED AP

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Voorhees Hall 186 Jay Street - 8th Floor Brooklyn, NY 11201 t: (718) 260-5262 f: (718) 260-8547

DEPARTMENT RESPONSE SUMMARY

PROGRAM REVIEW BACKGROUND:

The Department of Architectural Technology conducted a program self-review, compiled as a TEN YEAR REVIEW report ompleted in December 2014. After subsequent review by the Provost's office, an external reviewer, Wayne Drummond, FAIA Wayne Drummond, FAIA Dean Emeritus and Professor University of Nebraska-Lincoln, was selected to visit and review the program.

Dean Drummond reviewed our report and visited our department on April 2- 3, 2015. During this visit, Dean Drummond observed classes, participated in student reviews, conducted interviews with students and faculty in addition to his meetings with the Dean's office, Provost's office, and President's office. Dean Drummond prepared a report in May 2015 that records his observations and makes specific recommendations for the department to consider.

PROGRAM REVIEW OBSERVATIONS:

The following points are clear indicators from Dean Drummond that we have distilled to fine points to be recognized as assessment tracks or groups. These points were raised often and summarize the report.

1. Positive feedback on the assets
    - We are parallel with many comparable programs
    - Teaching to the level of accreditation
2. Department was encouraged to seek NAAB accreditation
    - No barriers are in place for this to happen
3. Diversity is seen as an asset
4. Faculty well aligned with NAAB, passionate, professional and committed
5. Technology strong element that is in alignment with the upper tier schools.
6. Design as seen as something that needs improvement
7. Staff numbers seen as insufficient to support number of students, faculty and mission
8. High quality students, faculty, staff, and administration
9. Managed growth well from 2-year degree to 4-year degree
10. "Performance levels of the students are comparable to most of the professional NAAB accredited programs."
11. Part-time faculty provides excellent opportunities for professional and community engagement

12. Emphasis on digital technology is very appropriate for the institution and the students in regard to the fture of the profession

13. Curriculum development is on the leading edge, fully utilizing "the potential of digital technology, the non-residential nature of the student population and their need to concurrently work in the profession."

14. Students are well served by the challenging nature of the program even though the attrition rate is high. High attrition is a common occurrence at NAAB accredited programs, even those with high admission standards. The program is appropriately challenging in relation to the demands of the design and technology focus of the profession.

15. Full time and part time faculty have excellent credentials in both their education and their professional experience and exhibit their strong commitment to the program

16. Grants and community based projects are a strength and sign of excellence.

WEAKNESSES/CHALLENGES:

17. Space/facilities limitations: "faculty offices are scattered, classroom space is shared and even the preliminary and final public reviews have been held in the hallways…"

18. 3rd floor renovations are important to alleviate space deficiencies in the Architectural Technology Department.

19. Design theory is deficient in the curriculum and needs to be addressed to bring the design curriculum into balance.

20. Most NAAB programs requires students to "own, lease, or have access to" specific digital hardware and software technologies, but the open enrollment and low tuition goals at City Tech make this requirement challenging.

PROGRAM RECOMMENDATIONS:

1. Consider the possibility of pursuing the addition of a Bachelor or Masters of Architecture and accreditation by the National Architectural Accreditation Board

2. Continue to focus on the institutional mission of technical preparation for the critical roles in a rapidly evolving architectural profession.

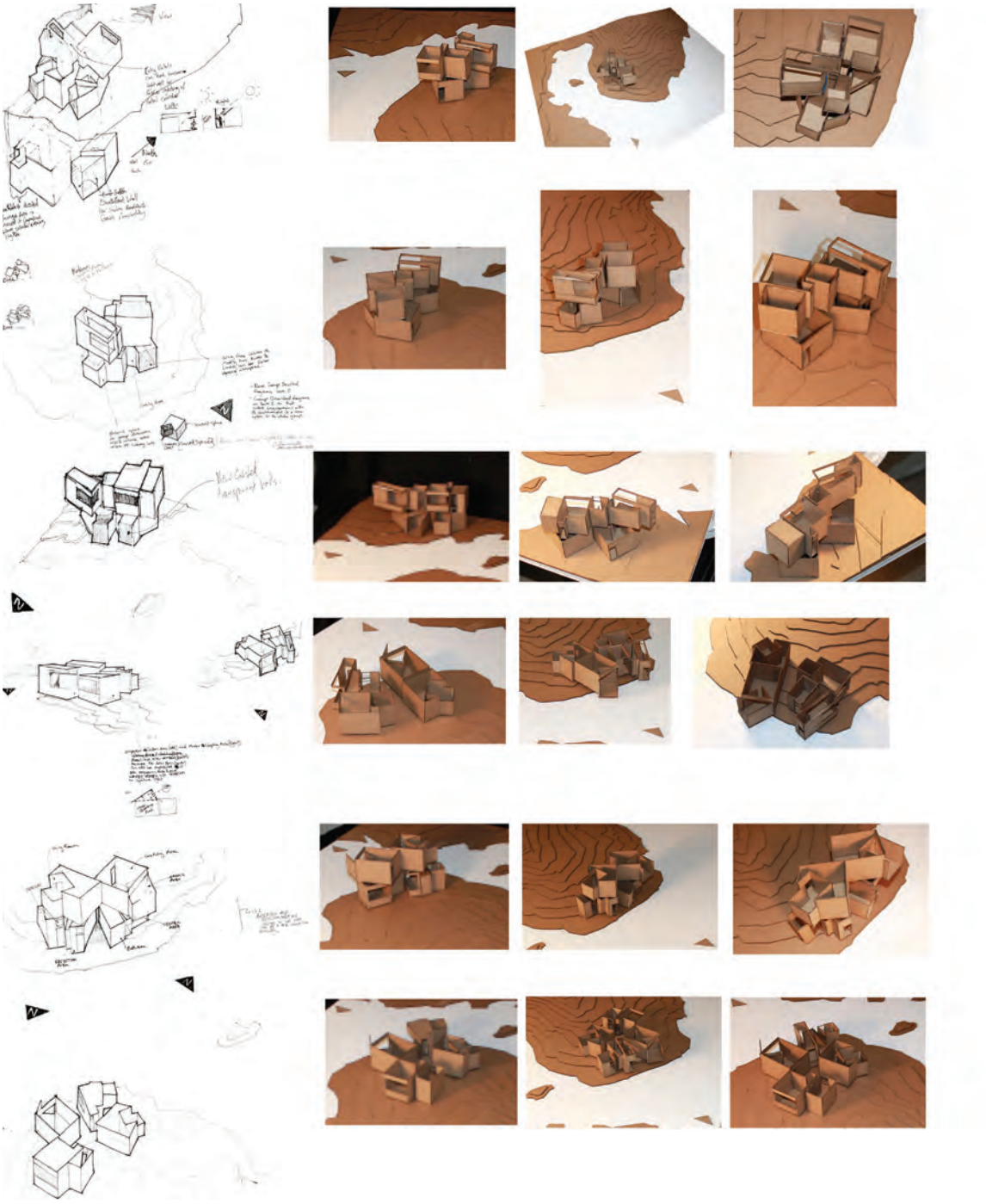
3. Explore the potential and challenges of a "foundations" program with the related professional programs offered within the College of Technology.

4. Focus on the leading edge concepts of the "digital spine" and the impact on continued curriculum development.

5. Recognize the unique qualities of the open admissions program that provides opportunities for students

to demonstrate their commitment and competence.

6. Continue to reinforce and support full time faculty and the engagement with adjunct faculty who are also engaged in the profession and the civic development of the community.
7. Complete the planned and much needed renovation of additional space
8. Continue the investments in digital and fabrication technologies.
9. Consider the expansion of the options that will provide graduates opportunities to attain professional registration.



WHERE DO WE GO FROM HERE?

DEPARTMENT'S NEXT STEPS:	STATUS:
1. Pursue NAAB Accreditation for BARCH degree	in-progress (see timeline)
2. Review program with NAAB Executive Director	completed Dec 8, 2015
3. Form Departmental Executive Committee • Sanjive Vaidya, chair • Phillipe Anzalone, secretary • Ting Chin • Michael Duddy • Barbara Mishara • Jason Montgomery	completed Nov 2015
4. Faculty Workshop to Launch NAAB Application	completed, Jan 14, 2016
5. Research peer BARCH programs in New York State and relevant programs across the country to place ourselves in the context of these programs in regard to: • Curriculum • Students • Facilities • Technology • Open Enrollement vs. High Admissions Standards	in-progress, completion expected completed Jan 25, 2017
6. Develop stratgies for critical maintenance of open enrollement access to BARCH degree	in-progress, completition expected Sept. 2017
7. Develop curriculum proposal for BARCH degree • prepare Major Curriulum Modification for College Council review.	in-progress, completion expected Sept 31, 2017
8. Explore "Comprehensive Foundations Program" • Potential program that combine resources and training amongst allied departments in the college.	academic year 2017-2018
9. Continue investment in digital technology integration in the program.	on-going
10. Continue to leverage New York as an architectural and urban laboratory	on-going
11. Consider specilization tracks for BARCH and/or BTECH degrees.	in-progress, completion expected Sept. 2017

DEPARTMENT RESPONSE NEXT STEPS

PURSUIT OF NAAB ACCREDITATION:

Upon the completion of our 10 Year Review self study and following the recommendation of our Dean and external reviewer, the faculty of the Department of Architectural Technology have agreed to pursue accreditation through the National Architectural Accreditation Board for a Bachelor of Architecture. There are currently 59 institutions listed on the NAAB website[1] offering an accredited BARCH degree or are current BARCH candidate programs, including 8 in New York State. CUNY currently offers one accredited BARCH program at City College. The CUNY Chancellor, City Tech's President and Provost, and the Dean of the School of Technology and Design are all supportive of City Tech's Department of Architectural Technology pursuit of a BARCH accredited degree program.

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. The introduction of the accredited degree will offer our diverse students a stronger path to licensure, increased recognition in the profession, and strengthen their employment opportunities in architectural practice.

NAAB states each BARCH program must require a minimum of 150 semester credit hours, with at least 45 credits dedicated to General Studies, and 10 credits to Optional Studies. Our department is working towards a degree program that will require approximately 160 credits total, earned over a 5 year curriculum, a standard requirement that meets New York State requirements[2] and is similar to the requirements of City College (160 credits), Syracuse University (162 credits), SUNY Alfred State (157 credits), and NYIT (160 credits).

This new degree will be in addition to our current degree programs; we will continue to maintain the existing AAS and Bachelor of Technology degrees, with modifications so that all the degrees coordinate where necessary. Each degree serves our students' varied needs and each offers a different path into the field of architecture and its allied industries.

ADJUSTING THE FIRST TWO YEARS:

In the Spring of 2017 Department has restructured its curriculum of years one and two to bring them into alignment with National Architectural Accreditation Board (NAAB) requirements for an accredited Bachelor of Architecture (BARCH) degree. This curriculum adjustment for years one and two provides

1 http://www.naab.org/architecture-programs/school-search/

2 New York State Office of the Professions recognizes a NAAB accredited degree as contributory to the Education Requirements for Licensure, http://www.op.nysed.gov/prof/arch/archlic.htm.

a stronger basis for all students in the department with its emphasis on Integrated Learning and its application of increased general education as well as scholarship of teaching and learning.

We are putting in place a structure that seeks to prepare as broadly as possible the number of students from our current enrollment that will be eligible for the new BARCH degree. Briefly stated, the changes will involve:

- Alignment of degree requirements with NAAB student performance criteria.
- Enhanced emphasis on foundational knowledge of the discipline and application of the scholarship of teaching and learning to the courses in the first year.
- Shifting introduction of technical content to a later point in the curriculum.
- Increased emphasis on the studio courses to facilitate integrated learning.

STRUCTURE FOR FUTURE 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 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.

DEPARTMENT RESPONSE NEXT STEPS

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.

NAAB's primary tool for assessing programs seeking to achieve or maintain accreditation status is the Student Performance Criteria (SPC) described in the most recent Conditions for Accreditation[3] published by NAAB. The 2014 edition of this document states,

> "The accredited degree program must demonstrate that each graduate possesses the knowledge and skills defined by the criteria below. The knowledge and skills defined here represent those required to prepare graduates for the path to internship, examination, and licensure and to engage in related fields. The program must provide student work as evidence that its graduates have satisfied each criterion."[4]

The SPC are broken down into four "realms" covering Critical Thinking and Representation, Building Practices, Technical Skills, and Knowledge, Integrated Architectural Solutions, and Professional Practice. For each criterion, NAAB specifies that the student work must demonstrate either "understanding" or "ability". As we seek to align our curriculum to these to ensure all graduates meet these standards, we must determine which courses will meet particular SPC.

EMPHASIS ON GENERAL EDUCATION:

A number of the changes in this proposal are directly tied to the emphasis on General Education at City Tech and the initiatives that have supported research, training, integration, and practice of building students' foundational skills to support higher levels of learning as they advance through their degree programs. Using the city as laboratory and placed-based learning are critical components of the pedagogy of this enhanced AAS curriculum. Active learning is emphasized with more problem-based learning. Active learning through problem-based learning is facilitated by reallocation of credits and contact hours to increase lab time for some courses. This approach to the new curriculum has strong potential to increase retention.[5]

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3 http://www.naab.org/accreditation/program-resources/current-conditions-and-procedures/

4 http://www.naab.org/wp-content/uploads/01_Final-Approved-2014-NAAB-Conditions-for-Accreditation.pdf

5 See below for research support for improving retention through active learning and problem-based learning pedagogy.

ADJUSTMENT TO TECHNICAL SEQUENCE:

With the first year courses designed to build foundational knowledge and build General Education skills, some technical content has been shifted to later semesters. Technical content has historically been a central feature of our AAS degree when it was focused on training architectural technicians and CAD drafters. [6]Our changes seek balance between this vocational legacy and the professional preparation at the core of the accredited BARCH degree. While not all students will be eligible for the BARCH degree, all students including the BARCH students will move through the AAS curriculum. These changes maintain and enhance the viability of the AAS degree as a stand-alone degree that offers our students a strong foundation in hard skills, soft skills, and knowledge of the discipline that will allow graduates to pursue employment or further education.

ADJUSTING STUDIO EMPHASIS IN CURRICULUM:

Our department's changes position the first two years of the current degree programs to reflect important commonalities of accredited BARCH programs across the country while maintaining critical qualities of our program that are distinctive and distinguish our program from our peers. Studio is the core of BARCH programs across the country, as reflected in the credits and contact hours dedicated to studio courses. Changes address our current inadequate studio credit allocation and contact hours. At the same time, important elements of our current curriculum will remain, including our "digital spine" and a slightly adjusted building technology sequence.

EVOLUTION OF THE LEARNING CULTURE IN THE DEPARTMENT:

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.

6 See AAS description in 2016 catalogue, page 197.

DEPARTMENT RESPONSE NEXT STEPS

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 pursing an increase to 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 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.

DEPARTMENT RESPONSE NEXT STEPS

SPECIFIC ACTIONS REQUIRED FOR NAAB ACCREDITATION:

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 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 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.

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.

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 in used to inform strategic planning decisions by the department.

DEPARTMENT RESPONSE NEXT STEPS

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:

1. 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.
2. 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.
3. Introduce Virtual Desktop Infrastructure (VDI) to demonstrate a model for an interactive design classroom.
4. Reassemble a more diverse advisory board: to include diverse professionals representing institutional authorities, community interests and activists as well as technical and design professionals.
5. Continue to improve our assessment methodologies
6. 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.
7. Establish our department as a community resource for: building and neighborhood assessment, planning, retrofitting, and analysis.
8. Establish industry research and analyses facilities at the department: this may include building systems mock up testing, fabrication, and simulations.

PHYISCAL 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.

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.

ANALYSIS OF DEPARTMENT SPACE RESOURCE NEEDS:

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

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,

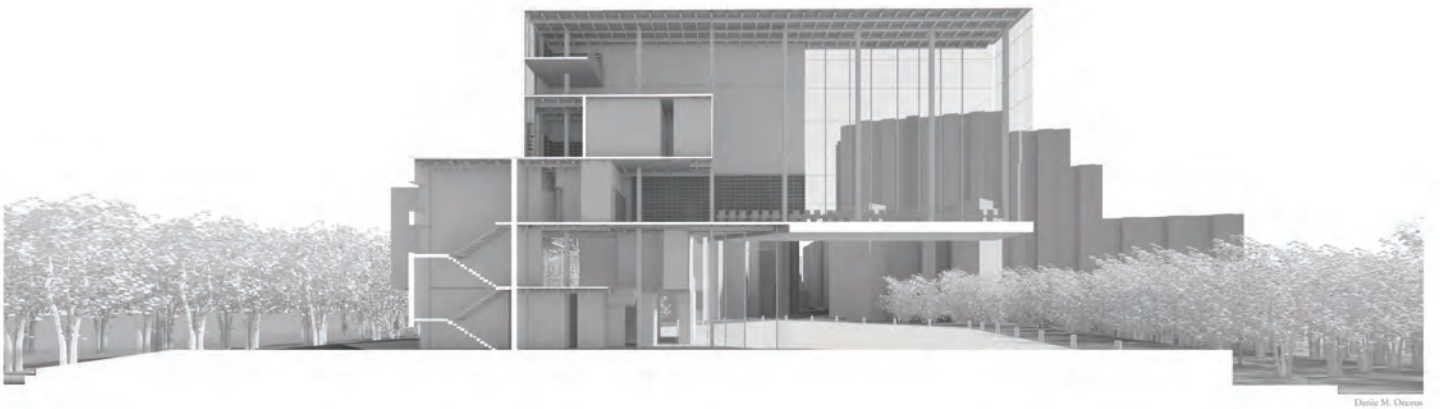
which does not allow adequate class time and access outside of class times. We will continue to work with the administration to address this need.

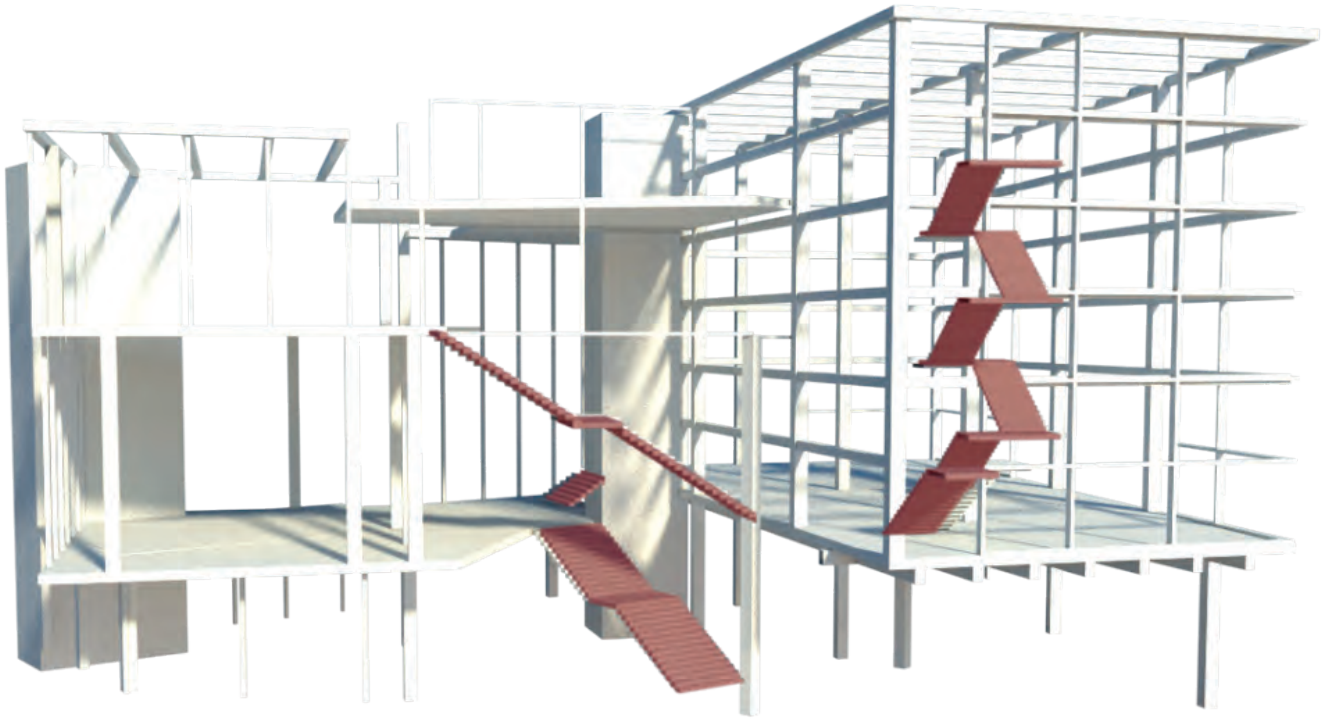
Our faculty office space also needs to be addressed to improve departmental communication and more efficient and effective access for students during advisement periods. The primary challenge in the current configuration is the dispersed condition of having a small set of offices within the department's 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.

FINANCIAL RESOURCES:

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.





DEPARTMENT OVERVIEW STATISTICS

NOTES:

- Our students are precisely the demographic that the national architectural licensure and accreditation bodies are seeking to balance the profession's profile.
- City Tech Department of Architectural Technology will offer an important accessible and affordable path to professional licensure for students from economically disadvantaged familes.
- City Tech's Department of Architectural Technology's continued emphasis on technology is a logical counterbalance to peer institutions with empahsis on conceptual design and addresses national trend showing architectural graduates' struggles with technical sections of licensure exam. At the same time, peer review suggests City Tech must improve quality of students' design work.

Enrollment at a Glance

Data last updated: Dec. 3, 2015.

Enroll Term	Admission Type	Degree Level	Full-Time/Part-Time
2015Fall	All	All	All

Gender	School	Department	Program Title
All	All	Architectural Technology	Architectural Technology

Enrollment by Degree Level and Admission Type

Enroll Time	Admission type (group)	Associate	Baccalaureate	Grand Total
2015Fall	First-Time Freshman	85	56	141
	Continuing	107	348	455
	Transfer	13	44	57
	Readmit	18	22	40
Grand Total		223	470	693

*Note: **Others** includes "college now", "missing/unknown ,"Continuing non-degree student", "middle college","Non-degree Readmit ", "First-Time non-degree student" and "Baac to Assoc", etc.*

Enrollment by Gender and Ethnicity

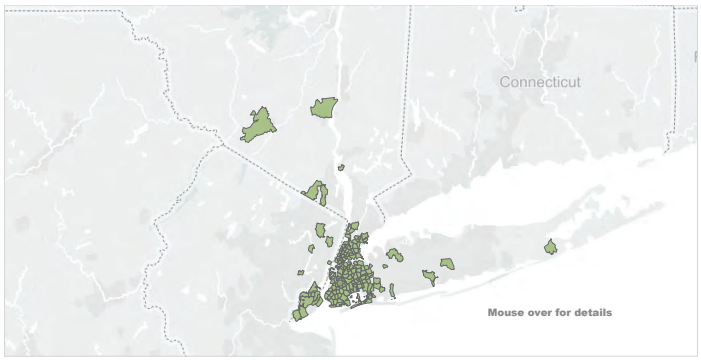
Note: Pell status and Ethnicity info for 2015 Fall are still waiting to be updated. They are supposed to be ready in January 2016.

Gender	Ethnicity (IPEDS)	2015Fall
Female	available January 2016	233
	Total	233
Male	available January 2016	460
	Total	460
Grand Total		693

Enroll Term	Full-Time/Part-Time	Degree Level	Admission Type	Gender
2015Fall	All	All	All	All

Ethnicity	School	Department	Program Title
All	School of Technology and Design	Architectural Technology	Architectural Technology

Enrollment by Zipcode



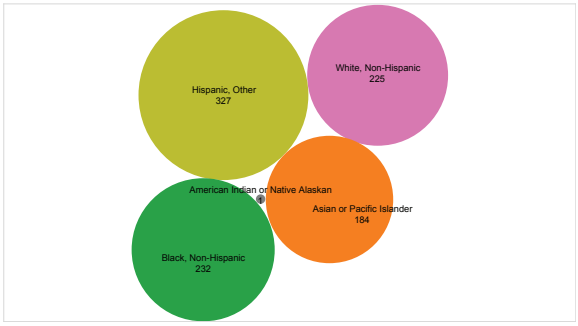
Enrollment by Residency

Residency (group)	2015Fall
NYC Resident (TAP)	547
NYS Resident (TAP)	24
USA Resident--but not NYS (No TAP)	20
Foreign Resident--pays Res Tuition (No TAP)	54
Foreign Resident--pays Non-Res Tuition (No TAP)	23
Missing/Unknown	25
Grand Total	693

Enrollment by Citizenship

Citizenship (group)	2015Fall
United States	419
Permanent Resident	181
Alien Permanent	3
Student Visa Holder	17
Temporary Visa Holder	22
Undocumented	37
Other/Unknown	14
Grand Total	693

Graduation by Ethnicity

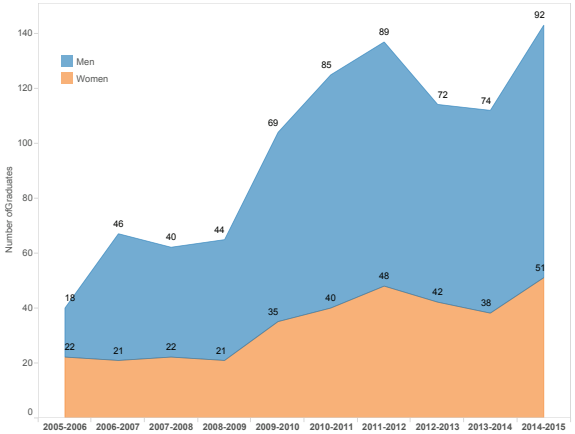


Academic Year: All
Degree: All
School: All
Department: Architectural Technology
Program Title: Architectural Technology
Number of Records: 1 – 969

***Note:** one student's ethnicity is unknow, therefore, the total number of graduates is off by 1.*

Academic Year	American Indian or Native Alaskan	Asian or Pacific Islander	Black, Non-Hispanic	Hispanic, Other	White, Non-Hispanic	Grand Total
2014-2015		27	23	57	36	143
2013-2014		22	25	44	21	112
2012-2013		23	29	37	25	114
2011-2012		32	39	36	30	137
2010-2011		27	26	47	25	125
2009-2010		23	20	36	25	104
2008-2009	1	11	16	16	21	65
2007-2008		7	21	20	14	62
2006-2007		5	23	23	16	67
2005-2006		7	10	11	12	40
Grand Total	1	184	232	327	225	969

Graduation by Gender



Academic Year: All
Degree: All
School: School of Technology and ..
Department: Architectural Technology
Program Title: Architectural Technology
Number of Graduates: 18 – 969

Gender	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009	2007-2008	2006-2007	2005-2006	Grand Total
Men	92	74	72	89	85	69	44	40	46	18	629
Women	51	38	42	48	40	35	21	22	21	22	340
Grand Total	143	112	114	137	125	104	65	62	67	40	969

NCARB BY THE NUMBERS

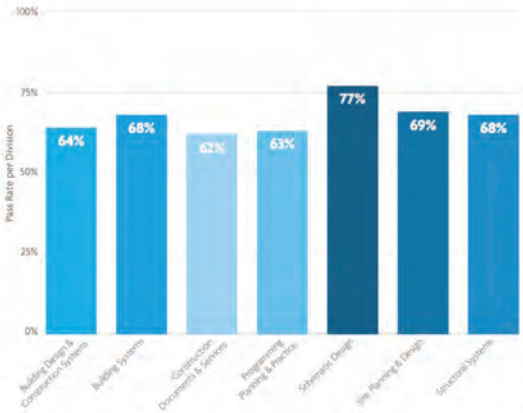
Insights on NCARB Data and the Path to Licensure

JUNE 2015

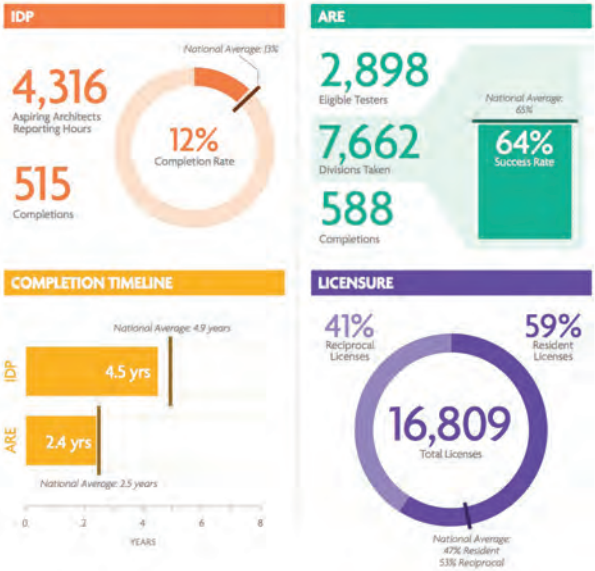
ARE Division Pass Rates Between 62 and 77 Percent

Schematic Design had the highest pass rate at 77 percent in 2014.

The ARE 4.0 division with the lowest pass rate was Construction Documents & Services. Exam Candidates must pass all seven divisions to complete the ARE.



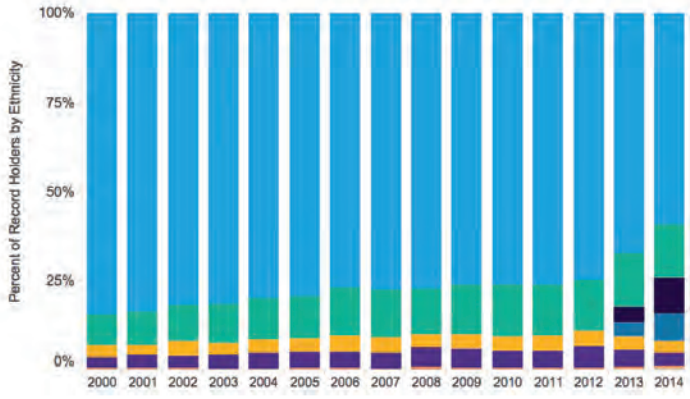
New York



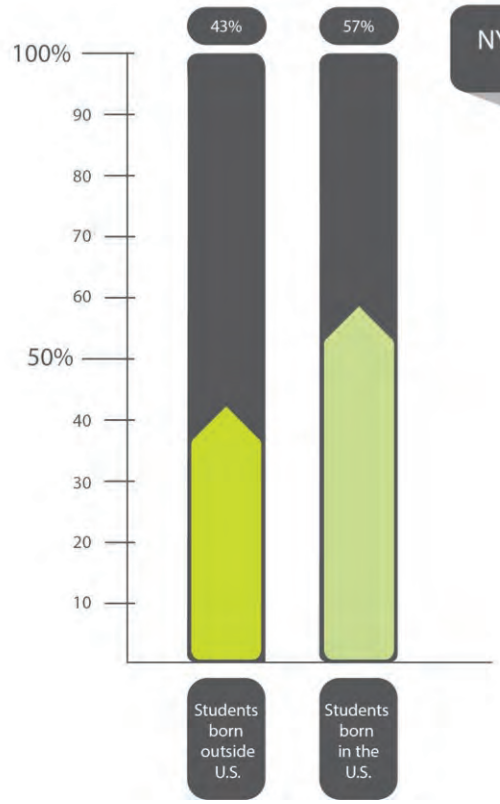
Ethnicity Adds to the Expanding Mosaic

The percentage of NCARB Record holders who are Hispanic/Latino was on the rise in 2014.

When Hispanic/Latino ethnicity is factored in, minorities made up 41 percent of the talent pool in 2014. This compares to 38 percent of racial and ethnic minorities who make up the U.S. population, based on the 2010 U.S. Census Bureau data. The largest minority groups were: 15 percent Asian, 10 percent Other (Hispanic/Latino), 4 percent Other (Not Hispanic/Latino), and 4 percent Black or African-American

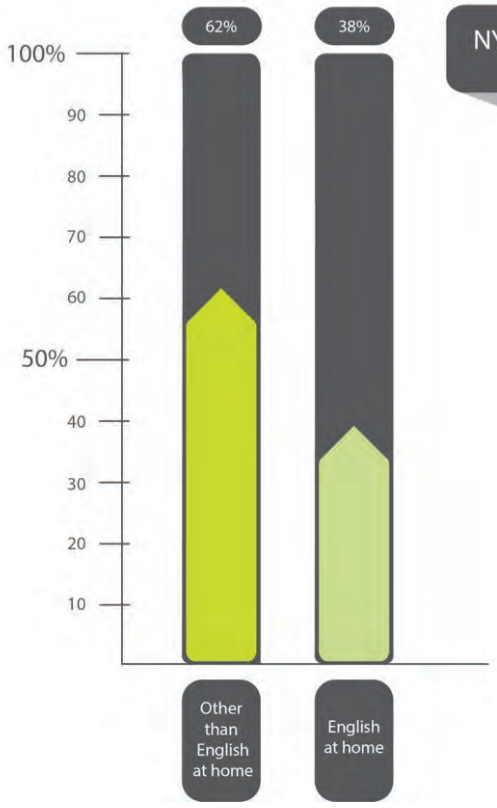


CITY TECH OVERVIEW STATISTICS



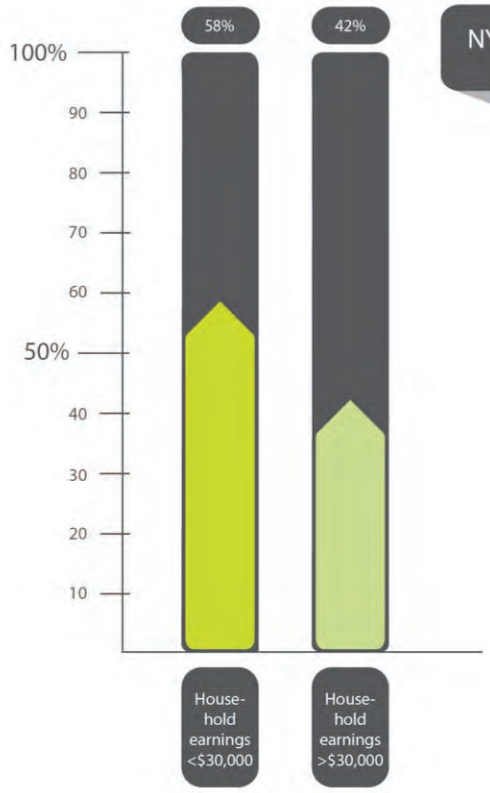
NYCCT Students

43% of enrolled students were born outside of the U.S.



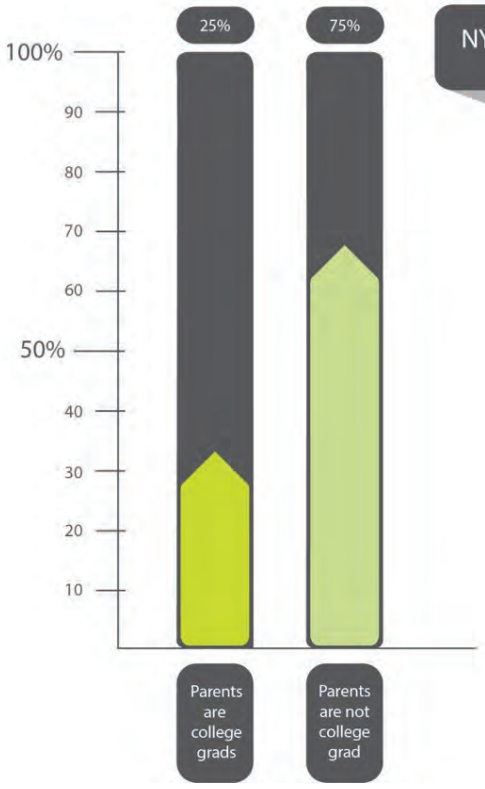
NYCCT Students

62% report language other than English spoken at home.



NYCCT Students

58% of enrolled students came from households earning less than **$30,000** per year.



NYCCT Students

25% work more than 20hrs per week.

DEPARTMENT PROCESS FOR NAAB ACCREDITATION

Proceedures

PRINCIPALS THAT GUIDE NAAB

SHARED RESPONSIBILITY

BEST PRACTICES

PROGRAM ACCOUNTABILITY

PREPARING GRADUATES FOR PRACTICE

CONSTANT CONDITIONS FOR DIVERSE CONTEXTS

CONTINUOUS IMPROVEMENT THROUGH REGULAR REVIEW

PROCEDURE FOR ACHIEVING INITIAL ACCREDITATION

(6 YEARS MAX)

1. Application to Establish Candidacy Status
2. Determination of Eligibility
3. Initial Candidacy Visit
4. Subsequent Evaluations Toward Accreditation
5. Initial Accreditation

Sequence for Candidacy and Initial Accreditation

Application to Establish Candidacy Status

- Application for Initial Candidacy compiled by institution:
  - *Letter from Chief Academic Officer*
  - *Recent decision letter from regional accrediting agency*
  - *Plan for Achieving Initial Accreditation (PAIA)*

Application to be limited to 75 pages including all supplemental info, sent as MS Word or Adobe PDF (3MB).

Determination of Eligibility

- Review of Application for Initial Candidacy by NAAB
- Establishment of 3-person Application Review Panel
- Eligibility visit
- Report from the Application Review Panel to the NAAB Board of Directors
- NAAB Board of Directors determines whether to accept the program as eligible for initial candidacy

Eligibility Visit: Max 2 days by 1 member of the Review Panel

Initial Candidacy Visit

- Preparation of Architecture Program Report for Initial Candidacy (APR-IC)
- NAAB Visiting Team organized
- Date for visit scheduled
- Visit Schedule:
  - *Tours*
  - *Meetings: staff, Program Head, School Administrator, CAO, faculty, and students*
  - *Review of students' work*
  - *Observations of studios' lectures and seminars*
  - *Review student records*
  - *Debriefing session*
  - *Exit interviews*
- Preparation of Candidacy – Visiting Team Report (C-VTR)
- C-VTR review by NAAB staff
- Decision by NAAB Directors whether to grant initial candidacy

APR-IC: 250 pages (excl. PAIA and Eligibility Memorandum), sent as MS Word or Adobe PDF (7MB).

Visit: Sat evening – Tues noon

Subsequent Evaluations

- Submission of annual statistical reports
- Visits at 2-year intervals until initial accreditation is achieved
- Format of panel visit is the same as for initial candidacy

Initial Accreditation

- Initial Accreditation Request:
  - *Letter from Chief Academic Officer*
  - *Recent decision letter from NAAB*
  - *Recent decision letter from regional accrediting agency*
  - *Assessment of PAIA*
- Preparation of Architecture Program Report for Initial Accreditation (APR-IA)
- NAAB Visiting Team organized and scheduled
- Visit: Format of visit same as for Continuing Accreditation
- Preparation of Accreditation - Visiting Team Report (VTR)
- VTR reviewed by NAAB staff
- Decision by NAAB Board of Directors whether to grant initial accreditation
- Public disclosure of accreditation outcomes

Initial Accreditation Request limited to 15 pages, sent as MS Word or Adobe PDF (3MB).

Visits in fall semester or quarter following graduation of first students to complete program.

Visits: Sat evening – Wed noon

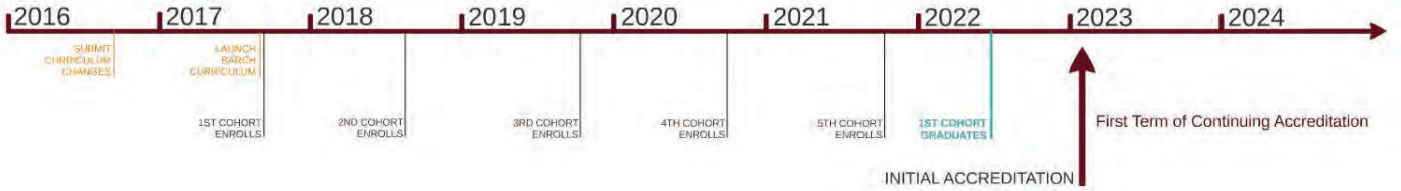
DEPARTMENT TIMELINE FOR ACCREDITATION

PROPOSED TIMELINE:

NAAB PROCESS

PROPOSED TIMELINE:

STUDENT IMPACT



KEY DATES:

AUG 2016	APPLICATION AND PLAN FOR INITIAL ACCREDITATION
SEPT 2016	CURRICULUM MODIFICATION SUBMISSION
NOV 2016	NAAB ELGIBILITY VISIT
NOV/DEC 2016	COLLEGE COUNCIL CURRICULUM APPROVAL
FEB 2017	NAAB DECISION ON ELIGIBLITY
AUG 2017	ENROLL FIRST COHORT INTO 5 YEAR BARCH DEGREE PROGRAM
SPRING 2018	NAAB CANDIDACY VISIT #1
SPRING 2020	NAAB CANDIDACY VISIT #2
MID-2021	APPLY FOR ACCREDITATION
MAY 2022	GRADUATE FIRST BARCH DEGREE COHORT
FALL 2022	NAAB CANDIDACY VISIT #3
JAN-FEB 2023	ACHIEVE INITIAL ACCREDITATION