



New York City College Of Technology
of the City University of New York

Self-Study

FOR THE

Middle States Commission on Higher Education

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NEW YORK CITY COLLEGE OF TECHNOLOGY

CITY TECH

Self-Study

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by

New York City College of Technology
Of The City University of New York

Dr. Russell K. Hotzler
President

Dr. Stephen J. Pugliese
Middle States Liaison

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I. Executive Summary

New York City College of Technology (City Tech) of the City University of New York (CUNY) presents this 2017 Self-Study in support of decennial reaccreditation by the Middle States Commission on Higher Education. Using the lens of the seven Middle States Standards of Excellence, the Middle States team has engaged in an iterative two-year process in which a cross-section of faculty, administrators, staff, and students has come together to consider how and how well the college fulfills its mission. Under the leadership of President Russell K. Hotzler, the college has made remarkable strides over the past decade in its transformation from a predominantly associate degree-granting institution to a baccalaureate-focused college of technology. City Tech's future is deeply intertwined with that of New York City; it is a microcosm of the city's diversity, breadth of enterprise, creative energy, and innovative spirit. The value of a City Tech degree to graduates in potential for upward economic mobility and professional success has been proven. This potential lends urgency to our goal of increasing retention and accelerating time-to-degree for more students.

STANDARD I: MISSION AND GOALS

City Tech's essential mission has not changed since its founding in 1946 as a new model of higher education—a two-year institution designed to prepare returning WWII veterans for participation in the burgeoning post-war economy. A reformulation of the mission statement, approved by the College Council in 2017, contains contemporary emphases: cutting edge professional and technological education undergirded by a strong general education foundation, a signature focus on experiential learning, an explicit commitment to inclusion, and responsiveness to the needs of the community we serve.

City Tech's distinctive emphasis on applied skills...based upon a vibrant general education foundation...equips students with the problem-solving skills that make its graduates competitive....As a community City Tech nurtures an atmosphere of inclusion, respect, and open-mindedness in which all members can flourish.

The college operates within a matrix of interrelated goals: CUNY system-wide goals address broad measures of institutional effectiveness; strategic planning goals address campus-level priorities; program goals formulated at the department level define outcomes for specific degree programs; and achieving general education student learning outcomes is expected of every degree-seeking student. Goals at each level have a corresponding set of outcome measures. The goals articulated in Standard I are operationalized and assessed as described throughout the Self-Study in Standards II through VI.

As with any institution offering a broad array of programs to diverse constituencies, our burden is not so much mission definition—we know who we are and what we are here to accomplish—as it is to help diverse constituents understand that it is by serving them that City Tech realizes its mission. They are the college's *raison d'être*. City Tech will strive to communicate its mission more effectively to produce greater engagement and a stronger sense of belonging among its diverse constituents, most importantly students. Moreover, in fulfillment of its public mission, City Tech has an obligation to proactively seek new ways to serve our community. Increased internal communication on how mission and goals drive the work of individual units, how decision-making takes into consideration the impact on students, and new ways to solicit and receive feedback to encourage engagement among all constituencies have been identified as areas needing attention.

STANDARD II: ETHICS AND INTEGRITY

City Tech, as a public institution, operates within a framework of federal, New York State, and New York City laws and CUNY regulations that guarantees protection of academic freedom, freedom of expression, and intellectual property rights. Academic integrity is an absolute expectation in all courses, scholarship, and research activity. CUNY's Human Research Protection Program provides oversight and training to ensure that all research conducted by CUNY faculty and students complies with federal and state regulations and meets the highest ethical standards. The protection of human subjects is certified through a centralized CUNY Institutional Review Board process.

Respect for diversity is affirmed in the mission statement and integral to all we do. The Office of Student Life and Development makes diversity education a central goal of all its activities. Learning outcomes assessment for co-curricular activities addresses intercultural competence, the ability to work in teams, and the development of leadership skills. The college strives to maintain a social climate that reflects shared norms of inclusion, community, and equity. Ethical awareness is an explicit general education goal and ethical reasoning is taught across the curriculum.

The Office of Human Resources ensures full compliance with the letter and spirit of the law in all personnel matters. The promotion and tenure process for faculty entails extensive vetting of candidates' qualifications and multiple levels of review. Standards are widely communicated through professional development workshops and multiple information channels. The appeals process is also clearly articulated. The majority of candidates for promotion do ultimately advance through the ranks.

The Standard II Working Group concluded that the college needs to do more to help students know their rights and understand how to communicate grievances effectively for appropriate and timely resolution. Students surveyed about the process for making service complaints and equity-related grievances known revealed widespread lack of understanding of the process. The "customer service" issue speaks to managerial effectiveness in offices that provide direct academic and non-academic services to students and suggests a strong need for staff training. As a public institution, City Tech has appropriate policy and protections in abundance in all realms of institutional life. However, the institution should work to ensure that complaint and grievance processes are made clear and transparent to all constituencies. A targeted communications strategy through which this information is presented consistently, authoritatively, and transparently, and is easily available to all in multiple media formats is needed.

STANDARD III: DESIGN AND DELIVERY OF THE STUDENT LEARNING EXPERIENCE

Standard III and Standard V are the chapters of the Self-Study that most dramatically reveal institutional transformation. Program-level goals reflect industry standards of professional practice and ensure the quality and relevance of professional curricula, while an ambitious redesign of general education that is aligned with CUNY Pathways ensures universal transferability of credits among CUNY institutions. The widespread adoption of high impact pedagogies and interdisciplinary perspectives has been supported by the implementation of a comprehensive program of general education learning outcomes assessment that provides the building blocks for continuous academic improvement. A commitment to hiring full-time faculty has resulted in an expansion of the faculty and greatly strengthened our program offerings.

City Tech enrolls more science, technology, engineering, and math (STEM) majors than any other CUNY college. The National Science Foundation ranks City Tech sixth nationally in the production of Black STEM associate degree recipients, 18th in Asian associate degree recipients, and 20th in male associate degree

recipients. These rankings demonstrate the college's effectiveness in fostering STEM success, particularly among underrepresented minority students. A rich array of scholarly, scientific, and pedagogical resources is available to advance faculty research and scholarship, a focus that has intensified as the college becomes a baccalaureate institution. Technology infrastructure includes specialized laboratories and equipment. Faculty professional development on assessment, sponsored programs, and a wide range of pedagogical subjects is provided through the Faculty Commons.

The college plans to continue the strategic expansion of degree programs in response to business and industry needs. Changing professional contexts will require new curriculum directions such as inter-professional education in health and human services fields. Faculty scholarship, scientific research, and creative work must be supported through CUNY and external funding from public and private sources.

STANDARD IV: SUPPORT OF THE STUDENT EXPERIENCE

As an institution with an open admission policy at the associate level, City Tech faces continuing challenges to retention and graduation. CUNY's new Academic Momentum Campaign focuses on accelerating student progress toward their degrees. Programs that incorporate a "completion agenda," such as Accelerated Study in Associate Programs (ASAP) and Early College High Schools, provide services that typically go beyond financial aid and provide more cohesive advisement, academic support, articulation and transfer guidance, and internship placements. Every effort is also made to streamline mathematics remediation, long a barrier to STEM success, through comprehensive redesign of the mathematics curriculum. The college strives to support students at critical junctures including college entry, entry to upper division programs, and graduation through such initiatives as the First Year Experience, academic advising, and the Professional Development Center. Prompt credit evaluation, transfer assistance, CUNY Pathways, and articulation agreements between community colleges and City Tech's baccalaureate programs enhance the likelihood of success for incoming transfers. The Office of Student Life and Development develops and manages a rich program of student activities that are designed to complement the curriculum and to achieve specific learning outcomes. Students typically deal with the Offices of Admissions and Financial Aid, the Registrar, the New Student Center through the college entry process. These interactions are governed by CUNY policies concerning privacy of student records. A major focus on orientation for all entering students supports the goal of increasing retention, as students are supported in making appropriate choices of programs of study.

STANDARD V: EDUCATIONAL EFFECTIVENESS ASSESSMENT

Assessment of learning is an institutional function that has undergone a major transformation over the past decade, evolving in parallel with academic program improvements. Today, the college implements a comprehensive system of educational effectiveness assessment at institutional, program, and course levels. General education was redesigned around desired student learning outcomes, which are measured on a three-year cycle. A continuous improvement model ensures that assessment outcomes are fed back into academic program design and delivery to improve their effectiveness; courses and programs of study are modified to improve learning. An extensive array of student support programs and interventions also undergoes systematic assessment. Faculty lead assessment of educational effectiveness. Responsibility for its implementation is distributed across schools and departments and centrally managed by the Office of Assessment and Institutional Research (AIR) through the City Tech Assessment Committee. An important goal is to expand committee membership to include greater representation of the Office of Enrollment and Student Affairs and the Office of Finance and Administration. Communication of assessment and institutional research findings occurs regularly through a variety of media to a wide range of constituents, and includes an effective AIR website.

STANDARD VI: PLANNING, RESOURCES, AND INSTITUTIONAL IMPROVEMENT

All institutional planning, fiscal management, and resource allocation is performed to advance the college's academic mission. Over the past decade these functions have served three primary institutional goals: (1) Increase the number, quality, and diversity of faculty; (2) Strengthen physical and technological infrastructure by addressing deferred maintenance and institutional growth; and (3) Ensure that academic resources are adequate to baccalaureate program requirements in new and rapidly evolving fields. Planning, finance, and resource allocation performance is benchmarked annually in the CUNY Performance Management Process (PMP), itself an outcomes-based continuous improvement system that measures institutional effectiveness in three domains: academic quality, student success, and fiscal and managerial effectiveness. As City Tech integrates non-academic units into the college's increasingly comprehensive system of assessment, the congruence of PMP and City Tech assessment models will facilitate the incorporation of planning, fiscal management, and resource allocation under the college's assessment umbrella. Infrastructure investment includes the construction of a new flagship academic building that will house science and health science departments and raise the profile of City Tech within the Brooklyn Tech Triangle. A major focus on addressing deferred maintenance has modernized learning environments, increased handicapped accessibility, and improved laboratory facilities. Human resources and technology infrastructure management have seen significant growth and are adequate to serve the needs of the academic program.

STANDARD VII: GOVERNANCE, LEADERSHIP, AND ADMINISTRATION

The college has an effective administrative leadership and governance structure that enables the college to advance its mission in a rapidly changing environment. City Tech, a constituent institution of The City University of New York, has authority vested in the president and derived from the CUNY Board of Trustees. As a public institution, City Tech observes the letter and spirit of federal, state, and city laws, and CUNY regulations, and policies. The college enjoys autonomy in developing its own governance structure, through which authority is vested in the College Council and its range of subcommittees. The work of the Offices of Academic Affairs, Enrollment Management and Student Affairs, and Finance and Administration is systematically vetted through the College Council. The president and his cabinet deliberate regularly on high-level administrative matters. The college's three schools are represented there through their respective deans who are appointed by the president.

Over the period covered by this Self-Study, City Tech has fully addressed concerns raised in the last review. A broad segment of the faculty designed and implemented a general education plan that integrates the liberal arts into our career-focused programs. A similarly broad-based assessment of student learning supports both general education and the majors and is well integrated into decision-making. Taken together with its location in the Brooklyn Tech Triangle as well as dramatic expansion of the faculty, curriculum, and physical plant, City Tech is situated to take full advantage of its potential as CUNY's college of technology.

Recommendations

1. Implement a comprehensive, cross-institutional plan for student retention and success. (Standard IV and I);
2. Strengthen overall institutional effectiveness by building on practices instituted to assess student learning outcomes. (Standard V and VII);
3. Improve scope, documentation, and transparency in the complaint resolution process (Standard II); and
4. Refine our facilities and technology master plans to take advantage of new opportunities. (Standard VI and III).

II. Institutional Overview

As New York City College of Technology approaches its second decennial review by the Middle States Commission on Higher Education following the arrival of President Russell K. Hotzler in August 2004, the college can report that the critical projects envisioned in the last Self-Study, especially those related to faculty, curriculum, and facilities, have come to pass. Meanwhile, the pace of institutional change is accelerating—City Tech is demonstrably more baccalaureate-focused, research centered, interdisciplinary, and connected to industry. Looking ahead, we are in a much stronger position to fulfill our mission of preparing a diverse urban population, currently underrepresented in STEM fields, for the careers of the future thereby addressing both students' own goals and the city's needs. At the same time, we continue to focus on extending critical efforts supporting completion and student success.

History and Identity

From its founding in 1946 to address the need to educate veterans and others for careers in the postwar economy, City Tech has provided workforce-relevant, career-oriented degrees grounded in a strong liberal arts foundation to a diverse urban student population. City Tech, a Hispanic Serving Institution, occupies a commuter campus in the heart of a global city. All but a tiny fraction of its 17,282 students come from the five boroughs of New York City and most are graduates of New York City Department of Education high schools. However, students' countries of origin include 152 nations and truly represent the world. City Tech students in large measure qualify for full or partial financial aid, with 80% of first year students qualifying for need-based financial aid. City Tech's historic mission has been to open doors of educational opportunity to students regardless of financial means or prior academic achievement.

City Tech is one of 24 constituent units of The City University of New York, the nation's largest urban university system, enrolling well over 250,000 degree-seeking students and another 250,000 in non-degree programs. A board of trustees appointed by the governor and the mayor governs CUNY, and the policies under which the CUNY colleges operate are largely determined centrally. As part of CUNY, City Tech benefits from the advantages of a much larger university—including curriculum and program articulation and shared cultural, research, and collaborative opportunities, as well as business systems. Since 2009 City Tech has participated in the incremental implementation of CUNY's enterprise resource planning system, CUNYfirst. In Fall 2013, to further facilitate articulation and transfer across the university, CUNY mandated participation in Pathways, a coordinated general education structure built around learning outcomes. At the most fundamental level, City Tech's budgetary fortunes—resting mainly on financing by the State of New York and to some extent on the City of New York—are tied to those of the larger entity.

City Tech's more than 50 degree programs at the associate and baccalaureate levels span a wide range of professional and career-focused areas offered by three constituent schools, each led by an academic dean, complemented by programs offered through the Division of Continuing Education. Most programs hold separate accreditations and several, such as those in Professional and Technical Writing, Construction Management Technology, Entertainment Technology, and Applied Computational Physics, are unique within CUNY or even in the region. The full-time faculty, ethnically diverse, represents both advanced academic perspectives and industry experience, enabling the college to deliver an education that effectively combines theory and hands-on practice. More than half of the full-time faculty has been hired in the past ten years and are research-active scholars who contribute to the college's growing research ethos.

The **School of Technology and Design** enrolls 50% of the student body. Bachelor of Technology (BTech) degree offerings include Architectural Technology, Communications Design, Computer Engineering Technology, Computer Systems Technology, Construction Engineering Technology, Electrical Technology, Emerging Media Technology, Entertainment Technology, Facilities Management, Mechanical Engineering Technology, and Telecommunications Technology. Since City Tech was founded as a community college and has been a two-year institution for much of its history, the School of Technology and Design also offers Associate in Applied Science (AAS) degrees in almost all of these fields. A faculty with broad experience beyond the classroom is able to blend theory and practice, anticipate emerging labor market trends, and prepare students for professional certifications and licensures that lead to good jobs in critical sectors of New York's tech economy.

The **School of Professional Studies** enrolls 32% of the student body. Its baccalaureate offerings include Business and Technology of Fashion, Career and Technical Teacher Education, Health Services Administration, Hospitality Management, Human Services, Legal Assistant Studies, Nursing, Radiological Science, and Technology Teacher Education. AAS degrees are offered in most of these fields as well as in Accounting, Dental Hygiene, Dental Lab Technician, and Ophthalmic Dispensing. A "two-plus-two" program structure enables students to begin working in professional fields after earning an associate degree while continuing their studies toward the baccalaureate. Students graduating from health-related programs have high pass rates on licensure exams; they are in demand in the health sector in Brooklyn (Kings County), one of New York State's most acutely medically underserved counties. The technology teacher education program is one of only three in New York State that prepares teachers in the fields of career and technology education.

Programs in the **School of Arts and Sciences** enroll 18% of the student body. However, as the locus of most general education offerings, the school serves virtually every degree-seeking student in the college. A growing number of baccalaureate offerings include Applied Chemistry, Applied Mathematics with a Finance, Information Science, or Science emphasis, Applied Computational Physics, Biomedical Informatics, Mathematics Education, and Professional and Technical Writing. Associate in Arts (AA) and Associate in Science (AS) degrees in Liberal Arts and Sciences provide students with a strong foundation in general education that prepares them for transfer to baccalaureate programs or for the workplace. Instruction in the liberal arts and sciences focuses on oral and written communication, the human experience in global and historical contexts, introduction to scientific observation and measurement, and ethical and aesthetic awareness.

The **Division of Continuing Education** offers a wide range of programs that serve more than 11,000 students each year. More than seventy-five instructors with industry expertise provide didactic and hands-on instruction in such diverse fields as Photovoltaic Design and Installation, Heating, Ventilation and Air Conditioning (HVAC), Medical Billing and Coding Specialist Exam Prep, Dental Assisting, Welding, Microsoft Technology Jobs Academy and more. Continuing Education also offers customized credit programs addressing the assessed needs of companies, community-based organizations, and unions, e.g., Local 3, SEIU 1199, and Local 100. Contract training for New York City Departments (Housing Authority, Department of Buildings, Small Business Services and others) brings a wide spectrum of programming to mayoral agencies. Its client base is diverse and includes those in need of a high school credential and/or career changers, incumbent workers seeking skills upgrades to keep up with emerging technologies, practicing professionals in need of continuing education units (CEUs) for license renewal, and community members interested in skills enhancement. Revenue is generated by tuition, grants, and business contracts.

Significant Recent Developments

I. Institutional Growth

In 2006, as we prepared the last Self-Study, the enrollment was 13,368, which grew to 16,208 by the 2013 Periodic Review Report (PRR). The most recent figure from Fall 2017 of 17,279 represents a 29% increase since 2006. An equal balance between female and male students, which had characterized student enrollment for some time, has shifted. Males now account for 55%, as enrollment in technology programs continues to increase while enrollment in licensed health professions, where there had been a preponderance of women students, has either remained stable or declined slightly.

Baccalaureates now account for more than 50% of degrees awarded and baccalaureate enrollment has nearly doubled. While 3,708 baccalaureate degree-seeking students were enrolled in Fall 2006, 8,396 were enrolled in Fall 2017, which represents 52% of all degree-seeking students in the 2017-2018 academic year. Contributing to this growth, the college has added several baccalaureate degree programs since the last Middle States team visit: Construction Engineering Technology, Mechanical Engineering Technology, Electrical Engineering Technology, Emerging Media Technology, Biomedical Informatics, Applied Chemistry, Mathematics Education, Professional and Technical Writing, Radiologic Science, Business and Technology of Fashion, and Applied Computational Physics. New bachelor's degrees are in development in Biomedical Engineering Technology, Environmental Health and Safety, and Health Management.

The full-time faculty has also grown to support the expansion of the college's degree programs, from 304 full-time faculty in Fall 2006 to 404 in Fall 2017, for a net increase of 33%. Of particular importance, as of the 2014-2015 academic year, the full-time faculty teaching load was reduced to 21 workload hours, thus achieving parity with the other senior colleges of CUNY. A further reduction to 18 hours will be implemented over the next three years. A new collective bargaining agreement was recently ratified after six years without a contract. Although fiscal constraints have slowed hiring since 2015-2016, we have continued to fill the most critical lines, and faculty hiring remains an absolute institutional priority.

A new academic building, the cornerstone of City Tech's physical expansion and a high-profile symbol of institutional growth, will be completed in early 2018. Representing a \$420 million investment in high-tech infrastructure, the building comprises dedicated teaching and research space for lab science and health programs, as well as a 1000 seat theater, a gymnasium, and other public spaces. Adding 365,000 sq. feet to the physical plant, the new building will free up space in the Pearl Building for critically needed classrooms, student activities, faculty offices, and administrative services, thus enabling further growth. During the past five years, investment in new technology infrastructure and instrumentation has exceeded ten million dollars, including over two million dollars in new medical imaging and dental equipment.

II. Academic Transformation

General education has been redesigned and assessment for learning is being implemented. The 2008 team visit resulted in two imperatives: To engage the faculty in determining the set of knowledge, skills, and values or habits of mind expected of all students and, a parallel expectation, to assess these learning outcomes. The 2010 Monitoring Report described in detail the structures and processes devised to achieve these imperative goals, engaging faculty from all departments. The 2013 PRR, for which the college was commended by MSCHE, reported advances in both areas. Approved by college governance

and aligned with CUNY's Pathways Initiative described above, the new City Tech signature general education was inaugurated for Fall 2013 entrants. Moreover, the City Tech Assessment Committee (CTAC) has fully implemented its plan to assess the fundamental general education outcomes, adapted from the Association of American Colleges and Universities (AAC&U) Value Rubrics, and has supported academic departments in assessing learning outcomes for their majors.

The college has taken advantage of interdisciplinary opportunities. City Tech's degree programs are directed largely toward fields where disciplinary boundaries have softened, and interdisciplinary thinking and collaboration are essential—technology, building science, and health among others. City Tech's faculty has been engaged in cross-disciplinary professional development for more than fifteen years, leveraging a series of grants from the United States Department of Education (USED), National Science Foundation (NSF), and National Endowment for the Humanities (NEH). A faculty-driven Interdisciplinary Committee launched in 2009 inspired the inclusion of an interdisciplinary (ID) requirement for all baccalaureate degrees as part of the new general education. Twenty-three team-taught new and retooled ID courses are now offered. Interdisciplinary thinking has led to further collaborations, such as the bachelor's degree in biomedical engineering technology currently under development.

Grants and research have expanded to support key goals. Federal grants have played a major role in the evolution of City Tech into the institution it is today: nationally connected, locally attuned, and a significant contributor to CUNY's and the nation's intellectual capital. Grants have had a positive impact on faculty career trajectories by extending research horizons, building ladders for leadership, and creating new bonds of intellectual community nationally and internationally. For the institution as a whole grants have provided the means for wide-ranging transformation that has had particular impact on general education: ten NEH grants to support faculty development on interdisciplinary humanities themes have centered the institution in its liberal core. STEM education too has been transformed. A total of 33 grants awarded by the NSF over the past decade have enabled City Tech to position the laboratory at the heart of STEM education, support faculty research, provide scholarships for promising students, prepare STEM teachers, and generally raise the quality of curriculum and instruction.

III. Student Success

New cohort models of comprehensive student support linked to program completion goals show dramatic results in stemming attrition and accelerating time-to-degree. A CUNY program called Accelerated Study in Associate Programs (ASAP) assists students in earning an associate degree in three years by providing a matrix of financial, academic, and personal support. City Tech is expanding the number of ASAP students based upon significant improvement in time-to-degree over comparison groups. Two dual-enrollment early college partnerships with career-focused high schools are also redefining norms for time enrolled and time elapsed for degree completion.

High impact practices further the achievement of the mission. Over the past ten years, the staff of both the Office of Academic Affairs and the Office of Student Affairs has each greatly expanded the implementation of demonstrated high impact practices, while also strengthening collaborative efforts¹. Learning communities, writing intensive courses, undergraduate research, service learning, and capstone

¹ Although there are slightly varied versions of high impact practices, the term refers generally to educational practices that have been demonstrated to improve student outcomes, a list that of necessity will grow and modulate. Thinking at City Tech has been guided by the LEAP initiative of the AAC&U, which lists HIPs as First-Year Experiences, Common Intellectual Experiences, Learning Communities, Writing-Intensive Courses, Collaborative Assignments and Projects, Undergraduate Research, Diversity/Global Learning, Service Learning, Community-Based Learning, Internships, Capstone Courses and Experiences.

courses have all continued to grow. Supported by a USED Title V grant (2011), faculty, joined by staff from Academic Affairs and Student Affairs, have created a collaborative First Year Experience.

IV. The Value of a City Tech Education for Our Graduates

City Tech is a dynamic engine of economic mobility for its graduates. According to the 2017 Stanford University Equality of Opportunity Project, City Tech ranked fifth among 369 selective public colleges and ninth among the entire sample of more than 2,300 US colleges in the achievement of overall intergenerational economic mobility. This means that graduates are jumping several income quintiles above their parents' economic status.² This demonstrated potential for professional and economic success by our graduates lends urgency to the mission to retain and graduate more students.

City Tech is ranked by National Science Foundation as a top producer of associate degrees in STEM for underrepresented students. The college is ranked sixth nationally in the number of Black STEM associate degree recipients, 18th nationally in the number of Asian recipients, and 23rd nationally in STEM degrees awarded to males. This finding suggests that City Tech is effectively addressing the NSF's Broadening Participation in STEM challenge and has demonstrated success in preparing underrepresented students for STEM careers, an area of critical national need. These graduates enter the STEM workforce.

Downtown Brooklyn has become the Brooklyn Tech Triangle. As noted in the PRR, as City Tech has advanced and grown in the past ten years, its surroundings in Downtown Brooklyn have been transformed into a major technology hub. Financial services, media, medical technology, robotics, architecture and design, and e-commerce firms have made City Tech's neighborhood a thriving start-up laboratory. Dumbo and the Brooklyn Navy Yard Complex, as well as Industry City in nearby Sunset Park, house tech start-ups, established firms, and advanced manufacturing, fields that are closely aligned with the college's programs. The demand for interns, as well as for graduates with technology skills, has expanded rapidly. To take advantage of these opportunities and to respond to a need identified in student surveys, in 2015 the college launched a **Professional Development Center**, which connects current students and City Tech alumni with local employers who represent the advanced technology marketplace. The center provides career coaching, interview preparation, and graduate school exploration while also sponsoring job fairs and recruiting events.

Recent Results of Planning and Assessment Processes

Following the 2013 PRR, City Tech adopted a strategic plan for 2014-2019 that identified four major goals in light of the challenges and opportunities noted in the report, as well as the college's regular assessment processes [[Strategic Plan 2014-2019](#)]:

I. Pursue Changing Opportunities in City Tech's Areas of Expertise

Updates: In 2015 City Tech obtained a USED Title V Cooperative Arrangement grant to develop digital tools and pedagogical strategies for mathematics, foundational to the technology programs and a major factor in student persistence/ completion. A USED Minority Science and Engineering Improvement Program (MSEIP) grant to further this effort. In addition to new degree programs noted above, departments are pursuing accreditation and exploring degrees beyond the AAS and BTech to enhance credentials and better position students with an interest in continuing their studies. Communication Design, for example,

² Mobility Report Cards: The Role of Colleges in Intergenerational Mobility. Chetty, Friedman, Saez, Turner, and Yagan (2017).

is augmenting the BTech with a Bachelor of Fine Arts (BFA) degree and seeking National Association of Schools of Art and Design accreditation; Architectural Technology is developing a five-year Bachelor of Architecture degree and is now a candidate for National Architectural Accounting Board accreditation.

II. Increase Student Success and Enhance Students' Academic and Co-Curricular Experience

Updates: Improving student retention and success is a priority, both for those who enter bachelor's programs and for associate degree entrants with developmental needs. Bachelor's students benefit from expanded opportunities for international travel and study, as well as coordinated advisement for graduate and professional school. City Tech is increasingly attracting transfer students, as indicated by enrollment data. To facilitate transfer, departments are reviewing and updating existing articulation agreements, identifying areas for new agreements, and initiating procedures for regular update. A new Transfer Center receives transfer students and expedites the review of their credits. A New York State Collegiate Science and Technology Entry Program (CSTEP) grant supports a cohort of students, with a focus on transfer students, and uses what is learned about how to enhance success to support all transfer students. Two early college career and technical high schools, City Poly and P-TECH, both with industry partners, prepare students to enter programs in technology with no remedial needs. In response to growing student interest in STEM programs, which continue to be demanding, City Tech inaugurated an ASAP program in Fall 2015, which is expected to serve over 1300 students by 2018-2019, a large percentage in STEM. This CUNY program has demonstrated impressive gains in three-year graduation rates in associate degree programs.

III. Strengthen Coordination and Collaboration to Advance both Personnel and Programs

Updates: The college rolled out a new website and email platform in Fall 2016. To clarify requirements for tenure and promotion and facilitate the review process, a new format for organizing faculty dossiers was introduced in 2010; the college is now developing a completely electronic process, which will greatly streamline both submission and review. A college committee will be convened to make recommendations for optimal usage of existing space made available by the move of several departments to the new academic building. CTAC has been expanded to include representatives from Enrollment Management and Administration and Finance.

IV. Continue to Evolve a Strong, Shared Institutional Identity to Guide Decision Making Internally and Present a Distinctive, Readily Identifiable Face to the World

Updates: City Tech began to offer continuing education programming at Industry City in 2017. A fund-raising campaign linked to the new building, now in the quiet phase, will have its kick-off this year, supported by an expanded City Tech Foundation Board. An emerging partnership between CUNY/ City Tech and Cold Spring Harbor Laboratory will establish a DNA Learning Laboratory on the City Tech campus. This entity will serve the college, the university, the K-12 schools, and the larger community.

III. Self-Study

Preparatory Steps

Anticipating the Self-Study and conscious of the new standards, the college sent a team led by Associate Provost Pamela Brown to the Self-Study Institute in November 2015. Director of the Office of Assessment and Institutional Research, Dr. Tammie Cumming, and directors of key areas in Student Affairs participated in the Workshop on Assessment in Student Affairs in April 2016.

Early in the Spring 2016 semester, Provost Bonne August reviewed the Self-Study process at meetings of the College Council, President Russell Hotzler's cabinet, the Council of Academic Affairs (consisting of all academic deans and department chairs and other heads of academic support areas), the General Education Committee, and the Student Government Association (SGA). An MSCHE 2018 email address to facilitate communication was created; the college's MSCHE 2018 website was updated to serve as a central communication site for the process [[MSCHE 2018 website](#)].

Intended Outcomes of the Self-Study

1. Engage college constituencies in an inclusive and transparent Self-Study process that will expand their understanding of the broader context for the institution in which they study or work and thus enable fully informed participation in planning and decision-making;
2. Demonstrate conclusively that the institution meets all the standards and merits reaffirmation of accreditation;
3. Affirm for both external and internal constituencies the transformative process that has taken place at City Tech and will continue from a largely associate degree institution to an innovative college of technology offering an array of baccalaureate programs, well connected to the disciplines, industries, and professions it represents and playing a unique role within CUNY;
4. Ensure that assessment of each area identified in the standards is employed in an integrated process to move the institution forward; and
5. Use the results of the self-analysis to generate wise and useful recommendations to inform the next iterative step in strategic planning.

Organizational Structure

The Self-Study Committee, consisting of a steering committee, an executive committee, and eight working groups, is chaired by Professors L. Jay Deiner (Chemistry) and Shelley E. Smith (Architectural Technology). The membership of the Self-Study Committee was drawn from across the institution ([See VI. Committee Members](#) for a full list). College Council leadership and department chairs nominated faculty. The Vice Presidents for Administration and Finance and for Enrollment and Student Affairs recommended staff from their respective areas.

The Executive Committee plans and facilitates preparation of the documentation roadmap (also known as the evidence inventory) and the Self-Study report. It assists the steering committee in compiling the working groups' standard-specific reports into a single coherent Self-Study report.

The Steering Committee is composed of the members of the executive committee and the co-chairs of the working groups. Steering committee members are responsible for the reports and recommendations forwarded by their working groups. Collectively, the steering committee is the oversight group for the Self-Study, determining priorities, serving as a communication link among the working groups, and providing critical reviews of the Self-Study drafts to the executive committee.

The Working Groups, each assigned to a standard, investigate how the institution meets the standards for accreditation, identify and gather documents providing evidence of how the institution meets each standard, and prepare evidence-based reports about their investigation [[Charge Template for Working Groups](#)].

The committee selection process and organization follow a plan that has proven successful for the previous Self-Study, the PRR, and the strategic planning that followed each of those events. All academic departments are represented, as are the major administrative areas. At the same time, members represent a mixture of experienced individuals with previous service as an evaluator or on a Middle States Self-Study committee/ strategic planning committee or accreditation by a national professional or disciplinary body, and those who can be expected to participate in future accreditation work. A faculty member and an administrator, generally a vice president, a dean, or a director of a major area, co-chair each working group. Student members, including SGA officers and members, are part of most working groups. They also constitute a consulting group to meet regularly with the steering committee and help to engage students in focus groups and reviews of the drafts.

Formally charged by President Hotzler in March 2016, the steering committee and the working groups met throughout the semester and the 2016-2017 academic year to develop the Self-Study design, identify items for the documentation roadmap, gather evidence, prepare their reports, and provide responses to the overall development of the Self-Study. They will continue to respond to drafts and participate in the institutional forums and the team visit in 2017-2018.

IV. Findings

Standard I: Mission and Goals

The institution's mission defines its purpose within the context of higher education, the students it serves, and what it intends to accomplish. The institution's stated goals are clearly linked to its mission and specify how the institution fulfills its mission.

Current Snapshot: Our mission is deeply embedded in the college and, as recently reaffirmed by the new mission statement, has been a steady guiding force for the growth of workforce-oriented degree programs built on a vibrant general education foundation. The new statement emphasizes our sharpened focus on the centrality of the industry partnerships, interdisciplinary thinking, and creative collaboration that will prepare our graduates for productive careers in the 21st century. Our mission and goals are intrinsic to what we teach and how we support our students throughout their education.

MISSION STATEMENT ¹

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. [[Mission Statement Fall 2017 Catalog](#)]

Criterion 1. Clearly defined mission and goals.

a. Mission and goals are developed through collaborative participation by all who facilitate institutional development and improvement;

The Executive Summary of the 2013 Periodic Review Report stated, “the college’s mission has remained consistently focused on providing workforce, career-oriented degrees grounded in a strong liberal arts foundation to a diverse student population” [[Strategic Plan 2014-2019](#)].² While our mission has changed little over the years, the mission statements have been adjusted periodically to reflect evolving contexts and circumstances. At the time of the 2008 decennial evaluation, the college’s mission statement had been in place for more than a decade and one of the Self-Study suggestions was to reevaluate it [[Strategic Plan May 2009](#)]. That did not happen, however, until the development of the 2014-2019 Strategic Plan [[Strategic Plan 2014-2019](#)], which proposed a new statement of the mission, setting it in the current climate and emphasizing interdisciplinary thinking and innovation.

The first draft of the current mission statement was formulated by the 2014-2019 Strategic Planning Committee, made up of representation from college stakeholders and leadership who were involved in various collaborative initiatives across campus and well-positioned collectively to express our shared

1. Requirement of Affiliation 7 – “a statement of mission and goals”

2. Requirement of Affiliation 7 – “defines [the mission statement’s] purpose within the context of higher education”

vision for the future [Strategic Planning Committee 2014-2019]. The draft mission statement was posted to the College Council website with a blog function for comments and discussion [[Mission Statement Public Comment](#)]³, and presented and discussed at regular campus meetings including the provost’s Council of Academic Affairs, the president’s Cabinet, the college Personnel and Budget Committee, Student Government, and the Executive and Personnel Committees of College Council [[Mission Statement History](#)]. Following receipt of comments and based on this feedback, a revised mission statement was presented to College Council, the representative body for shared college governance, and approved at its February 28, 2017 meeting [[College Council Minutes 02-28-17](#)].

A further example of the collaborative process involved in defining the institutional mission is reflected in the individual mission statements developed by some departments and units as a requirement of external accreditations or as a tool to define the goals and outcomes of programs for the benefit of students and constituents [[Mission Statements of Individual Departments Units](#)]. City Tech’s institutional mission guides these department and program mission statements.

City Tech Pursues a Matrix of Goals. Mission and goals are reviewed, established, and assessed at multiple levels. The university sets overall performance goals derived from CUNY’s master plan; the university-level performance goals and master plan are reviewed and updated on a five-year cycle. The individual colleges set annual targets for the CUNY performance goals and the colleges also establish a number of college focus goals annually. These CUNY-wide and selected local goals are reviewed, updated, and assessed on an annual basis through the university’s system-wide Performance Management Process (PMP). College focus goals are aligned with the more detailed and longer-range college strategic goals, which are developed autonomously through individual college strategic planning processes to address campus-level priorities. Program-level goals define the learning outcomes for individual degree programs and are measured at the department level following formats and cycles set by CUNY or, as is the case with many of City Tech’s programs, by external accrediting bodies. City Tech’s education goals are the general education student learning outcomes that address the knowledge, skills, and habits of mind that all students should be able to demonstrate regardless of major.

CUNY performance goals are derived from CUNY’s master plan, and are set and assessed annually through the university’s system wide PMP. The individual colleges annually establish a number of college focus goals, which are included in the annual PMP assessment. College focus goals are aligned with the longer-range college strategic goals, which are determined locally to address campus-level priorities. Program-level goals define the learning outcomes for individual degree programs and are measured at the department level. The college education goals are the general education student learning outcomes that address the knowledge, skills, and habits of mind that all students should be able to demonstrate regardless of major.

CUNY Performance Goals. Since 2003 and under the leadership of former Chancellor Matthew Goldstein, CUNY has used a Performance Management Process (PMP) that measures institutional performance toward attaining three university-wide goals: Raise Academic Quality; Improve Student Success; and Enhance Financial and Management Effectiveness. As described on the CUNY website [[Performance Management – CUNY](#)], an annual cycle links planning and goal-setting by the university and its colleges and professional schools, using well-established processes that are simultaneously bottom-up and top-down. Common metrics are used system-wide, enabling progress toward meeting these goals at the institutional level to be charted both over time and within a comparative framework across colleges.

3. Requirement of Affiliation 7 – “approved by its governing body”

The CUNY Chancellor announces the university's performance goals for the upcoming academic year, guided by the university's master plan. Then CUNY presidents and professional school deans, working with their executive teams and college communities, establish performance targets for their institution for the coming year reflecting plans for existing or new initiatives. The faculty and staff within each department and unit at the college work to develop annual goals. Deans, vice presidents, and the provost meet with their reporting department, school, and unit leaders to develop the annual goals for the larger college divisions in their areas of responsibility. Finally, the president and senior leadership of the college prepare the annual goals and targets for the college overall. In this way the annual process brings together the university's annual goals and a selected number of college focus goals derived from the local process. The CUNY process directs the development of "SMART" goals—specific, measurable, achievable, relevant, and time-bound.

At the end of each academic year, each college's progress on university and college goals is assessed, and strengths and ongoing challenges are identified. The chancellor meets with each college president or dean annually to review institutional performance, recognize successful performance, and identify future priorities. The University Data Books showing trends in performance indicators by college for year-end 2015-2016 and earlier years are available via the link [CUNY Performance Management \[Performance Management – CUNY, 2011-2012 PMP_Report, 2012-2013 PMP_Report, 2013-2014 PMP_Report, 2014-2015 PMP_Report, 2015-2016 PMP_Report, 2016-2017 PMP_Report\]](#).

New CUNY PMP Goals Instituted in June 2017. While this Middle States Self-Study retrospectively covers Academic Years 2008-2017, a new CUNY PMP is going into effect as this report is being written. Under the current leadership of Chancellor James B. Milliken, who assumed the chancellorship on June 1, 2014, the PMP has five goal areas:

- Access and Completion
- College Readiness
- Career Success
- Knowledge Creation
- Funding Model

The above PMP goals and associated metrics are aligned with the university's new goal areas [[CUNY Strategic Framework](#)].⁴ While these goal areas overlap with the old set of goals, there is a definite shift in emphasis from academic inputs to student outcomes, from traditional academic hierarchies and boundaries to vigorous intellectual discovery and technological innovation, and from status quo financial stewardship to more entrepreneurial fiscal management. These new emphases will require CUNY colleges to become more responsive in meeting the urgent demands of the communities they serve, and more actively engaged with the risks and opportunities of the external financial environment. We expect that the new PMP goals will serve to increase accountability, responsibility, and initiative at the institutional level while enabling each CUNY college to operate more flexibly and opportunistically within its distinctive context.

College Strategic Goals. A five-year strategic planning cycle, linked to the MSCHE accreditation cycle and led by the provost, is undertaken by a Strategic Planning Committee, a subcommittee of the College Council, with broad representation from multiple college constituencies. The strategic planning process includes periodic review of the college mission statement and provides a deliberative forum for the long-range alignment of goals and mission. Goals identified in City Tech's 2014-2019 Strategic Plan are:

4. Requirement of Affiliation 10 – "Institutional planning integrates goals for academic and institutional effectiveness and improvement"

1. Pursue changing opportunities in City Tech’s areas of expertise;
2. Increase student success and enhance students’ academic and co-curricular experience;
3. Strengthen coordination and collaboration across the college to advance both personnel and programs; and
4. Develop a strong, shared institutional identity that will guide decision-making internally and present a distinctive, readily identifiable face to the world outside the college.

Program-Level Goals. The proposer of a new degree program must follow an established process that begins in consultation with the department, advisory committee, school dean, associate provost and provost, and includes preparation of a detailed case statement. Once there is consensus that the new program will advance the college’s mission and serve the students, the proposal process continues with a full submission to the College Council Curriculum Committee and then proceeds to a vote by College Council. All new programs undergo additional levels of review at the CUNY Office of Academic Affairs and the CUNY Board of Trustees prior to final approval by the NYS Department of Education [[Curriculum Proposal Process – College Council](#), [CUNY New Academic Program Handbook](#)]. CUNY mandates that each existing academic program follow a strategic planning cycle. Due to the specialized nature of many City Tech programs, many departments fulfill separate Self-Study and review requirements imposed by the nine external professional organizations that accredit twenty-five associate and baccalaureate programs [[Catalog 2017-2018](#), examples: [Hospitality Management Program Review](#), [Vision Care Program Review](#)]. For academic programs not externally accredited, CUNY guidelines outline the required process for a 10-year cycle of program Self-Study, culminating in an evaluation by an external expert in the field or discipline [[CUNY Academic Program Review Policy](#); [City Tech Academic Program Review Policy](#); [Comprehensive Program Review Schedule](#)].⁵ External accreditors and CUNY guidelines require and encourage the fullest possible engagement of faculty and stakeholders in these processes, which include the formulation of five-to ten-year strategic goals (See [Standard III, Criterion 8](#) for details).

Education Goals. [See Criterion 3.](#)

b. The mission and goals address both external as well as internal contexts and constituencies;

The formulation of mission and goals reflects significant involvement of external constituencies that are able to provide real-time information about the economic and technological contexts in which City Tech operates. Knowledge of external demands informs the design of academic programs so that they are maximally responsive to workforce trends and needs. For example, the Carl D. Perkins Local Advisory Committee (LAC) meets annually with college leaders to review investment of Perkins funding in career programs and its outcomes [[Perkins Committee Minutes April 2017](#)]. The charge of the LAC is to promote convergence between Perkins-funding career development interventions for students and evolving professional skills requirements of the workplace. Departmental advisory boards similarly provide a real-time window to the professions [[Catalog 2017-2018, p. 310-313](#)]. As described above, internal constituents participate in myriad ways in the formulation of institutional mission and goals from diverse organizational perspectives, ensuring that broad and divergent interests are represented and balanced. A continuous improvement cycle of assessment activities described in Standard V invites internal and external constituents to address institutional issues of all kinds that relate to the college’s mission and goals. ([See Standard V, Criterion 3c](#) for more details.)

5. Requirement of Affiliation 10 – Institutional planning integrates goals for academic and institutional effectiveness...and the results of academic and institutional assessments.

c. The mission and goals are approved by the governing body;

City Tech’s revised mission statement was presented to College Council, the representative body for shared college governance, and approved at its February 28, 2017 meeting (see [Criterion 1a](#)). College annual goals, which include CUNY goals and a number of college focus goals, are presented annually through the Performance Management Process (PMP) to the CUNY chancellor for review, as described above in Criterion 1a.

d. Mission and goals guide decision-making related to resource allocation, program and curriculum development, and the definition of institutional and educational outcomes;

The college mission provides a foundation for decision-making and the definition of goals and outcomes across the institution, including curriculum development in both baccalaureate and associate programs. Support for broad access and post-graduate success, hiring and support of highly qualified faculty, the centrality of experiential and place-based learning, the re-visioning of general education, and development of interdisciplinary initiatives are foci that derive directly from the college mission. For highlights, see Table I.1. Recent data indicate that 64% of faculty surveyed agreed or strongly agreed that the mission guides planning at the college (25% neutral); 73% of faculty surveyed agreed or strongly agreed (22% neutral) that the college’s degree programs are consistent with its mission [[City Tech Faculty Survey Report 2016](#)].

TABLE I.1 Mission and goals guide decision making

CITY TECH MISSION COMPONENT	SELECTED EXAMPLES OF MISSION- AND GOAL-ALIGNED DECISION-MAKING RELATED TO RESOURCE ALLOCATION AND PROGRAM AND CURRICULUM DEVELOPMENT
Baccalaureate and associate level curriculum development	<ul style="list-style-type: none"> • Revised and streamlined curriculum process • High volume of updated and new courses and career-focused programs, including 11 new bachelor’s and one new associate degree programs • Guidelines for new programs require documentation of workforce need, including “specific job titles with salary ranges” and recruitment ads, and “relationship to ... college and university missions” [CUNY New Academic Program Handbook]
Broad access	<ul style="list-style-type: none"> • Associate degree programs enable admission of students with some developmental needs • Investment in intensive AAS student support program [ASAP – City Tech] • Two major grant-funded initiatives to improve math curriculum and pedagogy • Implementation of Pathways, a system-wide general education structure to facilitate transfer between CUNY colleges

<p>High quality technical and profession education</p>	<ul style="list-style-type: none"> • Hiring of highly qualified faculty—33% increase in # of full-time faculty (2006-2017) • Update and alignment of student learning outcomes for all academic programs—posted to catalog and program web pages [Catalog 2017-2018] • Creation of a robust structure for faculty involvement in educational effectiveness assessment [Assessment and Institutional Research, see also Standard V]
<p>Applied skills, place-based and experiential learning for post-graduate success</p>	<ul style="list-style-type: none"> • Launch of Professional Development Center to develop partnerships for experiential learning, internships, and job placement [PDC Data Snapshot Nov 2016] • Partnerships with the Innovation Lab at Industry City [Innovation Lab], Infor [Infor Education Alliance Program], Tech Jobs Academy [Tech Jobs Academy], and Brooklyn Tech Triangle [Brooklyn Tech Triangle Internship Program] • Five-year Title V grant project, the Living Lab, (2010-2016) supporting development of hands-on, place-based pedagogies; and the ongoing teaching resource exchange [Living Lab Learning Library] • Staff hired to coordinate and maximize participation in CUNY Service Corps @ City Tech • New 365,000 sq. ft. building with laboratory and clinical facilities for hands-on instruction opening Spring 2018 • Annual investments in equipment and software [Student Technology Fee Plan 2016-2017] • See also Experiential Learning Opportunities (ELO) Task Force report [ELO Task Force Response, ELO - Quantitative Results 110315, ELO Survey response DRAFT 110315]
<p>Vibrant general education</p>	<ul style="list-style-type: none"> • Design and implementation of a re-envisioned Gen Ed Core • Active general education committee—themed college-wide activities, course coordination initiative, alignment of Arts and Sciences course student learning outcomes with college education goals
<p>Interdisciplinary initiatives</p>	<ul style="list-style-type: none"> • Active Interdisciplinary Studies Committee—formulation of guidelines and initiatives • Interdisciplinary requirement in Gen Ed Core [City Tech Pathways ID Web Page] • Summer support initiative for faculty development of ID courses, launch of more than 20 new and restructured existing courses that meet the interdisciplinary requirement • Ten National Endowment for the Humanities (NEH) grants for interdisciplinary faculty development on humanities themes have been awarded to City Tech since 2010.

e. Mission and goals support scholarly inquiry at levels and of the type appropriate to the institution;

TABLE I.2 Mission and goals support scholarly inquiry at all levels

CITY TECH MISSION STATEMENT	COLLEGE STRATEGIC GOALS FROM CITY TECH'S 2014-2019 STRATEGIC PLAN	CITY TECH ADDRESSES CUNY GOALS 2015-2016 PMP
<p><i>...high quality technological and professional education... distinctive emphasis on applied skills and place-based learning built upon a vibrant general education foundation... multi-disciplinary approach and creative collaboration...City Tech nurtures an atmosphere of inclusion, respect, and open-mindedness in which all members can flourish</i></p>	<p>Goal 1.A.</p> <ul style="list-style-type: none"> • Improve the awareness of global opportunities, including joint research with overseas institutions • Build infrastructure to support technological innovation and research commensurate with industry practice • Explore incubator opportunities for technology departments and faculty 	<p>University Goal A.2. Increase faculty scholarship</p> <p>University Goal A.9. Increase faculty from under-represented groups</p>
	<p>Goal 1.B.</p> <ul style="list-style-type: none"> • Ensure a supportive, nurturing workplace • Build mentoring, teaching, and research resources for new faculty • Expand the Library's role in support of scholarship, in the disciplines and of teaching and learning • Intensify pursuit and coordinated management of grant funding to further both faculty research and institutional objectives 	<p>University Goal A.10. Increase faculty satisfaction</p>
	<p>Goal 1.D.</p> <ul style="list-style-type: none"> • Pursue a center for collaborative research in architecture, construction and environmental disciplines • Support faculty scholarship on teaching and learning in STEM 	
	<p>Goal III.A.</p> <ul style="list-style-type: none"> • Continue to build a mutually supportive, engaged, and caring environment 	
	<p>Goal III.F.</p> <ul style="list-style-type: none"> • strategic grant-seeking and efficient grants management 	
	<p>Goal III.G.</p> <ul style="list-style-type: none"> • Engage constituents and planning professionals in addressing needs for student and faculty spaces 	

f. Mission and goals are publicized and widely known;

The mission statement of City Tech is clearly presented and publicly available on the [college website \[City Tech Mission Online\]](#), the college catalog [\[Catalog 2017-2018\]](#), and the [Classified Staff Handbook](#). Surveys conducted for this Self-Study reveal that only that 28% of the students were familiar with the mission statement but 49% of those who were familiar with City Tech’s mission did consider it as part of their criteria when choosing to study here [\[Middle States Student Survey Fall 2016 Report\]](#). In interpreting the student responses, it is useful to distinguish between direct knowledge of the mission statement text and an understanding of the college mission. City Tech enrollment has remained strong and the overwhelming majority of entering students enroll directly in one of our many technical or professional programs, evidence that students understand the relevance of our programs and the college’s underlying mission focus on workforce preparation. Of faculty surveyed, 82% percent agreed or strongly agreed with the statement, “I am familiar with the mission statement of the college” [\[City Tech Faculty Survey Report 2016\]](#).

g. Periodic assessment of mission and goals (See Criterion 4)

Criterion 2. Institutional goals are realistic, appropriate to higher education, and consistent with mission;

Key components of the mission statement appear consistently in the annual goals and strategic planning documents of the college and university [\[Strategic Plan 2014-2019, CUNY Master Plan 2016-2020\]](#).⁶ The program review policies of the university, college, and nine external accrediting bodies (as described under Criterion [1a](#), [b](#), and [c](#), above), ensure comprehensive, integrated, cyclical processes for the regular review of alignment between goals and mission in individual academic programs.

TABLE I.3 Goals are appropriate to higher education and consistent with mission

CITY TECH MISSION STATEMENT	CUNY PERFORMANCE GOALS AND COLLEGE FOCUS GOALS 2015-2016 ANNUAL PMP PROCESS	CITY TECH GOALS 2014-2019 STRATEGIC PLAN
<ul style="list-style-type: none"> • baccalaureate and associate degree programs • high quality technological and professional education • multi-disciplinary, creative collaboration 	<p>University Goal A.1. Increase opportunities for students to be taught by full-time faculty</p> <p>University Goal A.2. Increase faculty scholarship</p> <p>University Goal A.7. Increase revenues</p> <p>College Focus Goal 1. Enhanced fundraising</p>	<p>IV. Distinctive, shared institutional identity: providing high quality, career-focused education; fostering innovation, creativity, and problem-solving; engaging external partners for institutional support</p>

6. Requirement of Affiliation 10 – “Institutional planning integrates goals for academic and institutional effectiveness and improvement...”

<ul style="list-style-type: none"> • broad access for a diverse urban population 	<p>University Goal A.3. Ensure that students make timely progress</p> <p>University Goal A.4. Increase graduation rates</p> <p>University Goal A.5. Increase student satisfaction with academic and support services</p> <p>University Goal A.6. Increase student satisfaction with administrative services</p> <p>University Goal A.8. Prioritize spending on student services</p> <p>University Goal B.1. Create more efficient remediation pathways</p> <p>College Focus Goal 2. Enhance retention and graduation—ASAP, advisement, math pedagogy and curriculum initiatives</p>	<p>I.D. Excellence in STEM education for a diverse, urban population</p> <p>II.A.,B.,C.,D., and E. Increase student success, enhance academic and co-curricular experience—FY experience, advisement, academic support, effective delivery of administrative services, expanded activities, adequate student space</p>
<ul style="list-style-type: none"> • technological and professional education • competitive graduates, prepared for the workforce or further education • emphasis on applied skills and place-based learning • vibrant general education foundation • multi-disciplinary, creative collaboration 	<p>University Goal B.3. Prepare students for transfer to baccalaureate programs</p> <p>University Goal B.4. Increase pass rate on licensure exams</p> <p>College Focus Goal 3. Program development—business of fashion, biomedical engineering, Bachelor of Architecture</p> <p>College Focus Goal 4. Establish Professional Development Center to enhance workforce readiness and job placement, develop internships and partnerships</p>	<p>I.A. Expand and continuously update program offerings, promote collaboration and interdisciplinary work</p> <p>I.B. Strengthen the foundations of academic achievement—general education, assessment, faculty, infrastructure</p> <p>I.C. Reconfigure advisory committees and partnerships to keep pace with industry and professions</p>
<ul style="list-style-type: none"> • atmosphere of inclusion, respect, and open-mindedness 	<p>University Goal A.9. Increase faculty from underrepresented groups</p> <p>University Goal A.10. Increase faculty satisfaction</p>	<p>III. Strengthen coordination, collaboration, communication—culture of shared responsibility, supportive business processes and IT services, shared governance, collaborative infrastructure planning</p>

For evidence that institutional goals are realistic, we rely on the institution’s solid track record in achieving targeted goals, as demonstrated in annual performance management process (PMP) reports of the college⁷ and annual goals and targets reports of departments and units as further described below in [Criterion 4](#).

The curriculum process, assessment, and student support are significant areas where institutional structures advance City Tech’s mission and goals:

- Active and continuous curricular improvement can be seen in the record of the College Council [Curriculum Committee](#), and in the sustained record of the college in obtaining external funding and executing transformative pedagogical initiatives. Recent highlights in the latter category are two major projects for improvements in mathematics sequencing and pedagogy [[STEM Education Initiatives](#), [Opening Gateways](#), [2016-2017 Faculty Seminar](#), [MSEIP Activities Repository](#)].
- The robust activities and accomplishments of Office of [Assessment and Institutional Research](#) (AIR) demonstrate the high priority placed on assessment of student learning outcomes. AIR promotes faculty as leaders and includes student organizations and other key constituencies in the assessment process to create and sustain a dynamic system as described in detail in Standard V. A schedule of outcomes and results, including quantified data, can be found in the AIR section of the college website. This is an ongoing college-wide initiative in which all programs participate. The resulting data are examined by administration and faculty and used to initiate institutional and programmatic improvements.
- City Tech also demonstrates a strong commitment to student support in a broad and evolving network of programs, services, and initiatives detailed in Standard IV. A comprehensive listing with links can be found under “[Current Students](#)” at the top of every page on the college website and in the [Student Handbook](#). These resources range from the Ursula C. Schwerin Library, Computer Labs and Technology Enhancement Centers, the College Learning Center, and Counseling Services, to targeted programs such as ASAP, SEEK, Veterans Support, the Center for Student Accessibility, Undergraduate Research, and Honors Scholars, to a wide array of student clubs and activities that reflect and promote the diversity of the college community. Recent accomplishments include significant enhancements to [First Year Programs](#), a comprehensive campus-wide [tutoring schedule](#) that is updated each semester, and launch of the [Professional Development Center](#) to support students’ workforce readiness and job placement.

7. Requirement of Affiliation 10 – “Institutional planning integrates ... the results of academic and institutional assessments”

Criterion 3. Goals that focus on student learning and related outcomes and on institutional improvement; are supported by administrative, educational, and student support programs and services; and are consistent with the institutional mission;

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.*

City Tech's education goals were developed by the general education committee, a standing committee established in 2009 and made up of representatives from every academic department and program. This intensive collaboration over the course of two academic years (2009 -2011), included participation of the general education committee and other faculty to map the learning goals in each program; distillation to a set of common college education goals; and comparison and alignment (where appropriate) with model frameworks, including learning goals from various accrediting bodies. The resulting college education goals were approved by college governance in March 2013 [[Gen Ed proposal 2012](#), [College Council Meeting Agenda 03-05-2013](#), [College Council Meeting Minutes 03-05-2013](#)].⁸

Education Goals Are Supported by Administrative, Fiscal, and Student Support Functions. CUNY's overarching goals of raising academic quality, improving student success, and enhancing financial and management effectiveness have ensured a comprehensive, coordinated approach to the attainment of education goals. The smooth coordination of management functions results in mutually reinforcing systems of unit-level Goals and Targets to support the primacy of the college's educational mission.

Criterion 4. (also 1.g.) Periodic assessment and evaluation of mission and goals to ensure that they are relevant and achievable.

The mission statement is periodically evaluated as part of the five-year strategic planning cycle to assure alignment between mission and strategic goals (see strategic planning process, [Criterion 1a](#). above). The strategic planning cycle, as well as the extensive processes set in place by CUNY and the college for setting and reporting on annual goals and targets provide a framework for continuous evaluation and adjustment to address changing contexts, challenges, and opportunities. Through a well-established annual process, the deans, vice presidents, provost, and president each meet with their reporting department and program leaders to review and develop annual goals. Each spring, college departments and units use a college template to submit goals and targets for the coming academic year, and likewise report on progress toward prior year goals. University and college templates emphasize alignment of department/unit goals with college and university goals [[PMP Target Report - NYCCT 2015-2016](#), [Template Goals and Targets 2010-2011](#), [Department Goals Template 05-15-2016](#), [COMD GT 2016 2017](#)]. Year-end progress reports are part of the record for annual performance evaluations of leaders at each level, from academic department chairs up to and including the college president's annual report to the

8. Requirement of Affiliation 10 – Institutional planning integrates goals for...student achievement of educational goals

university chancellor [[Chair Annual Activity Report 2014-2015- AFR](#), [COMD GT 2014 2015 Status 1, 2013-2014 G&T Outcomes final](#), [PMP Target Report - NYCCT 2015-2016](#), [Year-End Progress Report - NYCCT](#), [Executive Competencies Form](#), [Executive Performance Goals](#), [HEO Performance Evaluation Form](#)].

Conclusion and Future Focus: The mission and goals that have been outlined in Standard I are operationalized and assessed as described in Standards II through VII. City Tech’s mission is both enduring and especially relevant to current workforce needs and opportunities and to the college’s location, relationships, and student population. The college is diligent in its response to a complex matrix of inter-related goals. This past decade of vibrant renewal and growth for the college requires a commensurately extraordinary effort to formulate and communicate a shared sense of mission and identity that reflects the current institutional reality. This goal is addressed in the 2014-2019 Strategic Plan.

Recommendation 1:

Implement a comprehensive, cross-institutional plan for student retention and success. (Standard IV)

City Tech’s goals are at least to double the rate at which associate degree students either complete their degrees in three years or transfer to baccalaureate programs, and to achieve a six-year graduation rate of 50 % for bachelor’s students. Over the next eight years, City Tech will make measurable progress towards this goal by:

- Coordinating extant retention and completion programs under a single cross-institutional student success effort;
- Identifying and implementing financially viable means of scaling particularly successful programs, like CUNY ASAP and orientation that focus on retention of first year and associate degree students;
- Implementing CUNY’s recent policy on developmental math and streamlining the math sequences to remove a major obstacle to student progress and instead make learning math a path to success;
- Securing resources through grants and other means to acquire digital analytical and communication tools and further support student success programs;
- Effectively communicating to all students, faculty, and staff a broad understanding of student support resources and a shared vision of the student success agenda; and
- Promoting deeper student involvement in the realization and communication of the college mission by increasing student participation in college governance, and in institutional planning.
- Expanding support for faculty work in research, scholarship, and creative work, and in teaching, particularly the teaching of STEM disciplines.

Standard II – Ethics and Integrity

Ethics and integrity are central, indispensable, and defining hallmarks of effective higher education institutions. In all activities, whether internal or external, an institution must be faithful to its mission, honor its contracts and commitments, adhere to its policies, and represent itself truthfully.

Current Snapshot: As one of the 24 campuses of The City University of New York (CUNY), City Tech adheres to and supports the policies and procedures put in place by CUNY to promote academic and intellectual freedom, freedom of expression, respect for intellectual property rights, the avoidance of conflict of interest, fair and impartial hiring and continuing employment practices, and compliance with all applicable federal, state, and commission reporting policies, regulations and requirements. CUNY is an independent public system of higher education governed by a board of trustees that is responsible for the governance, maintenance, and development of all member colleges. Labor relations are negotiated centrally through employee sector-based collective bargaining agreements.

City Tech prides itself on its extraordinary cultural diversity and strives to foster a climate of respect among students, faculty, administration, and staff within an organizational culture that values honesty, transparency, and accountability. Every effort is made to use inclusive language in official college communications and a statement of accessibility for individuals with special needs. Professionals across the organization are required to meet ethical standards related to their specific discipline. Research integrity is assured by multiple layers of oversight and review, including CUNY, the CUNY Research Foundation, and federal compliance requirements related to the protection of human subjects. Annual external audits confirm responsible fiscal management. The City Tech Foundation meets legal requirements governing fiduciary stewardship of financial assets by all institutionally-related 501(c)(3) foundations.

To help assure fairness, appropriateness, honesty, and truthfulness in public information, complaint policies not specifically reserved by the Board of Trustees Bylaws, state laws, or collective bargaining agreement are vetted through college governance. All materials are reviewed multiple times by appropriate personnel before posting in the catalog and on the web pages of various offices and departments throughout the college. Grievance policies, such as the grade appeal policy, include a timetable for resolution in order to assure prompt due process. Periodic assessment and evaluation of grievance policies assures a continuous effort to serve our students while embracing a culture of ethics and integrity.

Criterion 1: A commitment to academic freedom, intellectual freedom, freedom of expression, and respect for intellectual property rights;

Academic and Intellectual Freedom and Freedom of Expression. City Tech practices its commitment to academic and intellectual freedom in adherence to CUNY’s policies and related documentation [[CUNY Manual of General Policy - Policy 1.02 Academic Freedom](#), [CUNY Guide to Academic Freedom](#)]. The City Tech website links to appropriate [CUNY policies](#). These documents include a thorough review of policies, including the definitions of terms, a historical perspective, statements on the importance of academic freedom, related language from the CUNY-PSC Collective Bargaining Agreement, and resolutions of support for academic freedom by the governing body of PSC-CUNY. City Tech affirms its commitment to freedom of expression through adherence to CUNY policy on Freedom of Expression [[Proposed CUNY Policy on Freedom of Expression and Expressive Conduct](#), [CUNY Statement in Support of Policy on Freedom of Expression and Expressive Conduct](#), [CUNY Statement on the Freedom of Student Expression](#)]

Intellectual Property Rights. The institution’s commitment to intellectual property rights is reflected by its adherence to CUNY’s Intellectual Property (IP) policy [[CUNY Intellectual Property Policy](#)]. This policy addresses the definition, ownership, and rights of access to copyrightable and other intellectual property assets produced at, or with the assets of, or in the scope of, employment at the university or the CUNY Research Foundation. The policy also describes administration and management of CUNY IP assets. The creators of copyrightable assets retain ownership of such assets; CUNY retains all rights to all other IP assets produced at the university. Exceptions to this general rule, for example, IP generated through sponsored research or commissioned work, are fully described in the IP policy.

Academic and Research Integrity. City Tech demonstrates its commitment to academic integrity through its academic integrity policy, which in turn is founded upon the CUNY policy [[Academic Integrity Policy Manual - City Tech](#); [CUNY Policy Academic Integrity](#)]. Every course syllabus contains the college’s academic integrity statement; workshops are held for faculty on how to promote academic integrity in student work and for students on what academic integrity means. An Academic Integrity Committee of faculty reviews and adjudicates reported violations. The college’s Academic Integrity Officer, a faculty member designated by the president, tracks academic integrity complaints and their outcomes, looking for trends and identifying areas needing improvement [[Academic Integrity Data](#)]. Ethics is also woven throughout the curriculum as a goal of general education, not only to meet the requirements of accrediting agencies but also because the college is committed to preparing ethical citizens.

City Tech is committed to advancing research conducted by faculty. Responsible conduct in research is governed by the CUNY **Human Research Protection Program (HRPP)** [[HRPP Policies and Procedures](#)]. This program provides oversight, administrative support, and training to ensure that CUNY research complies with federal and state regulations and university policy, and meets the highest ethical standards. Research involving human subjects requires Institutional Review Board (IRB) approval. Faculty and students involved in research must be certified through the Collaborative Institutional Training Initiative (CITI), a research ethics education board, before submitting an IRB application. Applications for IRB approval, required by all federal funding agencies, are submitted to City Tech HRPP Officer for review [[HRPP Annual Report 2016](#), [HRPP Letter to CAOs 2017](#)]. Final approval on IRB applications for research conducted outside City Tech is provided through the Office of the Provost. Information on the IRB approval process and responsible conduct in research is included in the yearlong orientation for new faculty. City Tech also complies with CUNY’s Research Misconduct Policy [[CUNY Policy on Research Misconduct 2015](#)].

Criterion 2. A climate that fosters respect among students, faculty, staff, and administration from a range of diverse backgrounds, ideas, and perspectives;

City Tech has been cited in *US News and World Report* as the most ethnically diverse school in the Northeast US in its 2017-2018 Regional Colleges survey, [[Campus Ethnic Diversity 2018](#)]. The college’s strong commitment to fostering a climate of respect is affirmed in the mission statement: “...As a community City Tech nurtures an atmosphere of inclusion, respect, and open-mindedness in which all members can flourish” [[Mission Statement, Fall 2017 Catalog](#)]. It is further affirmed by a central goal of all co-curricular activities sponsored by the Office of Student Life and Development (SLD): Diversity Education. The commitment is reinforced again by general education learning goal #4 found in the mission statement that reads, “...students will...understand and apply values, ethics, and diverse perspectives in personal, professional, civic, and cultural/global domains.” Every City Tech graduate is

expected to meet this goal. The college has in place consistent and regular mechanisms for training the community in matters of respect and tolerance as well as procedures for addressing incidents of reported violations [[CUNY Workplace Violence Prevention Training 2017](#), [Title IX Training](#), [CUNY Policy Equal Opportunity and Non-Discrimination](#); [CUNY Policy Against Drugs and Alcohol 2011](#); [Reaffirmation of Diversity and Equal Opportunity – 2017](#); [CUNY Policy on Sexual Misconduct](#); [CUNY Policy Campus and Workplace Violence Prevention](#); [CUNY Domestic Violence and the Workplace Policy](#); [Wellness Center On-Campus Services](#); [Center for Student Accessibility](#); [Veterans Support Services](#); [COPE Program](#); City Tech Affirmative Action Plan 2016-2017]. Additional evidence of inclusivity includes restroom signs declaring use by gender self-identification. Information about disabilities services provided by the Student Accessibility Office is widely disseminated [[Center for Student Accessibility](#)]. Of students responding to the 2015 Noel-Levitz SSI survey question 62 [[City Tech Noel-Levitz Student Satisfaction Inventory 2015](#)], “There is a strong commitment to racial harmony on this campus,” the satisfaction/SD was 4.92/1.50 with a mean difference from national four-year publics of -0.58. While additional efforts are needed for the college to more effectively communicate this commitment, this does represent an improvement from the 2013 Noel Levitz SSI, where the satisfaction/SD was 4.80/1.54 with a mean difference from national four-year publics of -0.67 [[City Tech Noel-Levitz Student Satisfaction Inventory 2013](#)].

Criterion 3. A grievance policy that is documented and disseminated to address complaints or grievances raised by students, faculty, or staff. The institution’s policies and procedures are fair and impartial, and assure that grievances are addressed promptly, appropriately, and equitably;

Grievance Policies. While the college proactively seeks to avoid all instances of perceived discrimination or other manifestations of unfair practices, when such instances do arise there exists a well-defined set of policies and procedures for addressing grievances. The college documents its grievance policies in multiple sources of literature [[CUNY Policy Equal Opportunity and Non-Discrimination](#); [CUNY Policy on Sexual Misconduct](#); [Enough is Enough](#); [Title IX Web Page](#); [CUNY Bylaws Article XV – Students](#); [CUNY Students Bill of Rights](#); [CUNY Procedures Student Complaints Faculty Conduct](#); [CUNY Policy Campus and Workplace Violence Prevention](#); [CUNY Domestic Violence and the Workplace Policy](#); [CUNY Policy Against Drugs and Alcohol](#); [CUNY Policy on Reporting Alleged Misconduct](#); [CUNY Work/Life Program](#); [City Tech Student Handbook](#) 15.4, 15.5 and following; [Catalog 2017-2018](#); City Tech Grade Appeals Policy (in [Catalog 2017-2018, p 30](#)); [CUNY-PSC Collective Bargaining Agreement 2007-2010](#); [CUNY PSC MOA 2010-2017](#)]. These policies call for timely resolution of grievances after a thorough investigation. A summary of relevant policies and the responsible office follows.

TABLE II.1: Process for resolving student grievances

Nature of Student Grievance	Governing Policy Documents	Office Responsible for Resolution
Academic, grades	Governance approved grade appeal policy. [Catalog 2017-2018, p. 30]	Departmental Grade Appeal Committee

Credit evaluation ⁹ (also see Standard IV)	CUNY general education transfer policy: CUNY Transfer Policy , Pathways Credit Transfers Course equivalencies as recommended by the academic departments. Information on course equivalents within CUNY is available in CUNYfirst under Evaluate My Transfer Credit	Registrar
Discrimination/sexual harassment	Federal Title IX regulations, CUNY Equal Opportunity (EO) and Non-Discrimination Policy. [CUNY Policy Equal Opportunity and Non-Discrimination]	Chief Diversity Officer
Faculty in academic settings	Procedures for Handling Student Complaints about Faculty in Academic Settings ; [Catalog 2017-2018, p. 59-62] .	Department Chairs, School Deans, Provost
FERPA	FERPA complaints [Catalog 2017-2018, p. 57-58]	VP for Enrollment and Student Affairs
Financial aid, financial matters	Complaints about financial matters, students contact the Business Office when they have inquiries about their 1098-T forms, outstanding balances, or holds on their account and the status of their TAP. The Business Office has two email accounts that students utilize for these inquiries. The email accounts are studentaccounts@citytech.cuny.edu and tapinfo@citytech.cuny.edu This information can be found on the City Tech Facebook page . Discretionary Funds Appeal Form : Students who have lost TAP eligibility (NYS financial aid) because of a documentable college advisement and/or administrative error have the option to appeal to the Discretionary Fund Appeals Committee to request funding to cover any balance accrued as a result of the error.	VP for Finance and Administration
Student Affairs	Student Affairs Complaint Procedure: Students may submit written complaints to StudentAffairs@citytech.cuny.edu . This information is found in the college catalog [Catalog 2017-2018, p. 61] .	VP for Enrollment and Student Affairs

Student Satisfaction with Grievance Processes. The Office of Assessment and Institutional Research (AIR) has conducted surveys and focus groups to assess the effectiveness of the grievance process from the students’ perspective. Results are posted on the [AIR Surveys site](#), along with results of the Noel Levitz SSI and the CUNY Student Experience survey. Findings reveal that, of students surveyed, roughly:

- 72% reported awareness of right to complain; only 26% claim to know complaint procedure;
- 50% knew of right to complain about student services, college facilities, or other students;
- 25% reported discomfort with filing complaints about student experience, college facilities, particular members of the faculty, or other students;
- 30% expressed confidence that complaints would be addressed; and
- 25% believed their filing a complaint might adversely affect their college careers.

[\[Middle States Student Survey Report, Fall 2016\]](#)

9. Requirement of Affiliation 9 – “The institution’s student learning programs and opportunities are characterized by...appropriate assessment of student achievement”

TABLE II.2: Grievance processes available to faculty and staff

Nature of Faculty Grievance	Governing Policy Documents	Office Responsible for Resolution
Discrimination	Federal Laws, see: Title IX Web Page	Chief Diversity Officer
Working conditions	Federal Laws, Collective Bargaining Agreements [Instructional Staff Handbook ; OFSR website]	Office of Faculty and Staff Relations (OFSR), Classified Staff Services
Hiring, tenure, and promotion	Federal Laws, Collective Bargaining Agreements, Personnel Appeals Committee, also see [Instructional Staff Handbook , College Council Standing Committees , OFSR website]	Office of Faculty and Staff Relations (OFSR), Classified Staff Services

Criterion 4. The avoidance of conflict of interest or the appearance of such conflict in all activities and among all constituents;

Conflict of Interest Policy. City Tech endeavors to maintain high standards of ethics and integrity as demonstrated by its compliance with the university’s and the state’s policies on conflicts of interest.

As state employees, City Tech employees are subject to §94 of the New York State Executive Law and §73, et al. of New York State Public Officers Law and Civil Service Law §107, which covers business or professional activities, including financial disclosure and ethics. These sections promulgate a common goal—to prevent conflicts of interest. Section 73-a requires certain categories of employees to file an annual financial disclosure statement that includes, among other things, outside activities. In addition to state law, CUNY possesses a Conflicts of Interest Policy that applies to all employees. [[Conflict of Interest Policy](#), [Public Officers Law 73 JCOPE](#), [Public Officers Law 74](#), [Civil Service Law 107](#)]

Two categories of employees must file an Annual Financial Disclosure Statement with New York State Joint Commission on Public Ethics (JCOPE): those earning a threshold salary set by the state and those who hold policy-making positions such as the president, vice presidents, all members of the president’s cabinet, deans, academic department chairs, and directors within the Offices of the Vice Presidents. Filers must also take a comprehensive ethics training course every three years. To aid in the education of all employees and students, the ethics officer distributes biannual ethics newsletters issued by JCOPE [[Ethics Review Newsletter Vol 2 Issue 2](#)]. The ethics officer certifies annually to JCOPE that all required filers have been notified of their responsibility; JCOPE informs the ethics officer when employees are delinquent and may be subject to penalties including fines.

Role of Ethics Officer. Pursuant to the Governor’s Executive Order No. 1--Establishment of Ethical Conduct Guidelines, the president named the college’s Special Counsel as its first ethics officer in 2007. The position is responsible for compliance with this Executive Order in three specific areas: Prohibition Against Receipt of Gifts, Prohibition Against Use of State Property, and Prohibition Against Nepotism in Hiring and Contracting [[Legal and Compliance Training](#)]. Faculty, staff, and students can raise concerns and

report potential conflicts of interests to the ethics officer, who investigates the matter. Employees who would be more comfortable in reporting conflicts, concerns, or misconduct outside of City Tech for fear of retaliation may reach out to CUNY's Chief Compliance Officer, who also accepts anonymous reports.

Criterion 5: Fair and impartial practices in the hiring, evaluation, promotion, discipline, and separation of employees;

Responsibilities of the Office of Faculty and Staff Relations (OFSR). OFSR oversees recruitment and hiring of teaching and non-teaching instructional staff and other ancillary and support employees. OFSR also coordinates and maintains records of performance evaluation and promotion processes, as well as employee and faculty discipline matters. To ensure fairness in hiring faculty, managerial, and administrative staff, diverse search committees are formed. Classified staff vacancies are filled from hiring pools made up of all candidates meeting minimum qualifications for the position. In Fall 2016, 37.9% of full-time faculty were from minority groups. Detailed data on the faculty and staff diversity by department/rank is provided in "Diversity details." [[IPEDS HR 2016 City Tech](#)]

The college's faculty and administrative staff search process is monitored and guided by the chief diversity officer (CDO). Once the personnel vacancy notice is completed and approved, a Recruitment Plan (RP) is developed, noting any underutilization considerations and listing the committee members, to allow the CDO to determine whether the committee is sufficiently diverse. The CDO certifies the applicant and interview pools and may reject a pool lacking diversity. In charging the search committee the CDO informs them of any minority or gender underutilization in the field of study based on national data, and addresses ways to avoid unconscious biases in the selection process. After the position is filled, the CDO maintains applicant and interview data obtained from the search committee chair by completing the "Diversity Data Search Form." Of 29 new faculty members hired during the 2015-2016 academic year, 45% were from underrepresented groups and almost 60% were women. The CDO submits to CUNY an annual Affirmative Action Plan (AAP) pursuant to Executive Order 11246. The AAP provides the college community and the public with voluminous documentation of City Tech's diversity data, history, and goals [City Tech Affirmative Action Plan 2016-2017].

Promotion, discipline, and separation practices are clearly established by written procedure as well as provided for in various labor contract provisions [[CUNY-PSC Collective Bargaining Agreement 2007-2010](#), [CUNY PSC MOA 2010-2017](#), [Instructional Staff Handbook](#), [City Tech Governance Plan](#)]. In all instances, several individuals or review committees make recommendations before final decisions are made [[PSC CUNY Agreement Article 18](#)]. In addition, OFSR ensures that discipline rules are fairly and consistently applied. The office advises managers on discipline matters and provides them with supervisory tools to guide and support the improvement of their employee when a less formal corrective action plan is warranted. Where issues involve employee grievances, the college's Labor Designee is responsible for adhering to the terms of the labor contract. These matters are regularly reviewed: labor contracts are renegotiated roughly every six years; the review of college procedures occurs annually.

Criterion 6. Honesty and truthfulness in public relations announcements, advertisements, recruiting and admissions materials and practices, as well as in internal communications;

In order to promote transparency in internal communications, relevant and accurate institutional data, public safety, etc. are posted on the college website [[Public Safety - Crime Statistics](#), [City Tech AIR Home Page](#), [Performance Management – CUNY](#)]. Only upper level administrators have access to pre-established email groups that include “Everyone,” “Faculty Full-time,” “Faculty Part-time,” etc. Computer Information Services will notify all users of malware and other online attacks received on City Tech email accounts. The college maintains email records, which can be accessed if concerns arise.

In order to assure honesty, accuracy, and truthfulness in public relations announcements, IPEDS or CUNY data is used if available. Press releases are developed by the Communication Office, overseen by the special assistant to the president. Before release, articles are vetted for accuracy by the subject(s) of the article, and the appropriate dean and vice-president [[City Tech News press releases](#)].

Similarly, advertisements and recruitment brochures are prepared by the departments, and reviewed by the dean, New Student Center and Transfer Office directors, and the special assistant to the president before dissemination. Admission to the college is centralized at the CUNY Office of Admissions through the University Application Processing Center [[UAPC](#)] that also disseminates materials to applicants. In order to provide relevant, truthful and easily accessible information to current and prospective students, tabs for each are available on the college home page. Student Right to Know Information is available at [Consumer Information](#) and includes the cost of attendance. The Office of Assessment and Institutional Research (AIR) website provides detailed and longitudinal metrics of student success including enrollment, retention, graduation rates, grade distributions and survey results. Information provided to students is also discussed in detail in [Standard IV, Criteria 1-4](#). In general, acceptance into majors is available to all qualified students; however, competitive health-professional majors (dental hygiene, nursing, and radiological technology) must cap enrollment due to the limited number of clinical sites. Students must apply to these programs after completing prerequisite courses. The admissions requirements and the historical GPAs needed for admission, in the mid 3s, are stated in the departmental descriptions in the catalog [[Catalog 2017-2018](#), page 148, 177, and 184, respectively]. These departments also offer information sessions and provide advisement to potential students.

Criterion 7. As appropriate to its mission, services or programs in place:

- a. to promote affordability and accessibility;
- b. to enable students to understand funding sources and options, value received for cost, and methods to make informed decisions about incurring debt;

A critical aspect of CUNY’s mission is to make a great education accessible and affordable, with nearly 80% of students graduating debt-free [[The CUNY Value](#)]. To inform its students, City Tech’s Office of Financial Aid provides a document entitled “Financial Literacy,” that empowers students with knowledge and skills to make sound decisions related to budgeting, borrowing, and loan repayment strategies. Because approximately 60% of City Tech students have annual family incomes below \$30K [[Financial Literacy](#), [College Fact Sheet](#)], the college’s ability to facilitate students graduating debt-free is highly dependent on the availability of financial aid and the ability of the Office of Financial Aid to optimize financial aid packages for the advantage of the student. The Office of Financial Aid provides financial

aid information on all programs: federal Pell Grant, SEOG, Perkins Loan, Direct Loans, TAP, and APTS programs. Applicants and current students may view and download information from the City Tech website on a variety of financial aid topics, including viewing instructional videos on how to complete the FAFSA, how to create an FSA ID, determining their dependency status, and what happens after completing the FAFSA [[Financial Aid Instructional Videos](#)]. Prospective students and families may also access the CUNY Net Price Calculator to calculate the financial aid award they may receive if they attend City Tech [[Financial Aid Estimator](#)].

Students who demonstrate need and are facing a current unexpected emergency may apply for gap funding provided by the Petrie Foundation. The Counseling Services Center assists students with this application. They also offer financial literacy workshops to explore funding resources and learn money management [[Counseling Workshop Schedule](#)].

Entering freshmen, continuing students, and transfer students can find a variety of scholarship information on the Scholarship and Residency Services website [[Scholarships and Grants](#)]. Many of these scholarships are based on academic merit and/or financial need. For example, the college has been awarded several NSF S-STEM grants for scholarships for students who show promise in STEM [[NSF Research Spending](#)].

Finally, as the cost of textbooks continues to rise, students are increasingly unable to afford essential instructional materials. City Tech's Library has been a leader within CUNY in developing an OER [[Open Educational Resources](#)] initiative, which now involves many departments and offers free instructional materials in high enrollment courses like general biology and mathematics [[OER Course Conversion List](#)].

These services are also discussed in [Standard IV](#).

Criterion 8. Compliance with all applicable federal, state, and Commission reporting policies, regulations, and requirements to include reporting regarding:

- a. full disclosure of information on institution-wide assessments, graduation, retention, certification, licensure or licensing board pass rates;
- b. the institution's compliance with Commission's Requirements of Affiliation; Criterion 6 Standard II
- c. substantive changes affecting institutional mission, goals, programs, operations, sites, and other material issues which must be disclosed in a timely and accurate fashion;
- d. the institution's compliance with the Commission's policies;

The Ethics and Integrity and Verification of Compliance working groups collaborated in evaluating compliance. Institution-wide data on graduation, retention, certification, and licensure pass rates are found on the Office of Assessment and Institutional Research ([City Tech AIR Home Page](#)) and Student Right to Know ([Consumer Information](#)) websites. The institution has documented compliance with the Commission's Requirements of Affiliation and is in compliance with the Commission's policies. There have been no substantive changes affecting the institutional mission, goals, operations, and sites. The new catalog providing new information on programs and other materials is posted and made available prior to registration.

Criterion 9. Periodic assessment of ethics and integrity as evidenced in institutional policies, processes, practices, and the manner in which these are implemented.

Multiple levels of periodic assessment of ethics and integrity are built into the fabric of the college. As part of the annual reporting of goals and targets with outcomes, surveys such as the Noel-Levitz, National Survey of Student Engagement (NSSE), and CUNY Student Experience Survey and institutional data are regularly reviewed, with planning and actions taken as needed. Administrators and heads of departments regularly review and update college documents to assure accuracy and full disclosure. The annual Affirmative Action Plan is used as a vehicle to assure ethics and integrity in hiring. As employees of New York State, members of both the instructional staff and non-instructional staff are subject to limitations on employment outside the university. University and college procedure requires regular assessment of compliance with these limitations. Department chairs and members of the instructional staff file multiple position reports each term as required by New York State for purposes of both reminding members of the faculty of their primary instructional responsibility to the university and discovering and addressing any violations of policy concerning other employment [[Multiple Position Form](#)]. Non-instructional staff must also file reports that indicate compliance with NYS limitations on employment positions in addition to full-time status at the college.

Conclusion and Future Focus:

Shared norms of civility, community, and equity will continue to shape the climate of the college. All employees are expected to exemplify high standards of personal and professional behavior and to model that behavior in interactions with students. When students, faculty, or staff members feel their rights have been violated, the legal protections available to all members of the college community may be invoked. Communications related to the implementation of college policies has been identified as an area in need of improvement. A recurring theme in the investigation and analysis of ethics and integrity was that while the standard was met, information on a particular topic was sometimes described partially in multiple locations and could be difficult to piece together and understand. The college should redouble its effort to publicize college policies and procedures for reporting complaints as widely as possible online and in all academic and student affairs offices. Procedures to address consumer complaints arising from services provided by the registrar, academic advisement, financial aid, and other student services-oriented units should also be publicized clearly and comprehensively.

Recommendation 3:

Improve scope, documentation, and transparency in the complaint resolution process (Standard II)

Ensure clarity for all constituents regarding the processes for addressing stakeholder concerns:

- Enhance efforts to publicize complaint policies and procedures consistently online, and in all academic, student affairs, and business services offices, including those policies that are based on law, statute or regulations, i.e., Title IX, Sexual Harassment, Health and Safety;
- Make clear that CUNY and the college have established policies and procedures that address rights of the members of the community to communicate complaints; and
- Capture and utilize these data effectively for institutional improvement.

Standard III: Design and Delivery of the Student Learning Experience

The institution provides students with learning experiences that are characterized by rigor and coherence at all program, certificate, and degree levels, regardless of instructional modality. All learning experiences, regardless of modality, program pace/schedule, level, and setting are consistent with higher education expectations.¹⁰

Current Snapshot: As CUNY's sole college of technology, City Tech's mission requires student learning experiences to demonstrate the breadth and rigor expected of higher education while simultaneously responding to the rapidly changing workforce demands of technological and professional fields. In service of providing rigorous and workforce-relevant education, City Tech has undergone tremendous growth and transformation over the past ten years. Notable achievements include:

- **The redesign of general education.** No longer a menu of distribution requirements, general education offers a liberal arts and sciences foundation integrated into professional specialization and lifelong learning. Student learning outcomes define the knowledge, skills, and habits of mind expected of an educated person in the 21st century. A continuous cycle of assessment ensures the relevance, rigor, and effectiveness of general education.
- **An intensive institutional focus on STEM.** With over 7,000 STEM students, City Tech has by far the largest enrollment in STEM programs of any CUNY college [[CUNY STEM Enrollment by College 2015](#)]. Since 2008, the National Science Foundation has supported the transformation of STEM at City Tech to support a growing faculty research portfolio, improvement of STEM laboratories and curricula, scholarships for students underrepresented in STEM, and STEM teacher preparation. Other agencies have also contributed to institutional strength in STEM research, including the National Institutes of Health, the National Aeronautics and Space Administration, the US Department of Energy, and the US Department of Defense. These investments have paid off: As of 08/2016, NSF ranks City Tech sixth nationally in the production of Black associate degree recipients in STEM, 18th in the production of Asian associate degree recipients in STEM and 23rd in the production of male associate degree recipients [[NSF Tabulations STEM Associate Degrees Awarded](#), [NSF Tabulations by Gender](#), [NSF Research Spending](#), [CUNY Student Data Book](#)]
- **The development and introduction of new baccalaureate programs.** The college has added eleven baccalaureate degree programs since the last Middle States team visit, with others in progress. Baccalaureate enrollment reached 52% of degree seeking students in the 2017-2018 academic year.
- **Creation of OpenLab.** The OpenLab is a powerful open-source digital platform that enables students and faculty to meet, learn, work together, and share ideas. A critical tool for building engagement and a sense of belonging at a commuter institution, it has enhanced student learning by making the experience more hands-on, collaborative, and open-ended. It is a key factor in our development of OER [[Open Educational Resources](#)]. OpenLab's goals are to support teaching and learning, enable connection and collaboration, and strengthen the intellectual and social life of the college community. Successful beyond imagining, the OpenLab has attracted 22,000 members since its launch in 2010 and is currently supported in part by the National Endowment for the Humanities and the USED.

10. Requirement of Affiliation 9 "The institution's student learning programs and opportunities are characterized by rigor, coherence, and appropriate assessment of student achievement throughout the educational offerings, regardless of certificate or degree level or delivery and instructional modality."

Criterion 1. Programs foster coherent student learning experiences and promote the synthesis of learning;¹¹

As of Fall 2017, City Tech offered 28 baccalaureate and 26 associate degree programs [[College Fact Sheet](#)]. The total number of students enrolled in degree seeking programs was 15,950 with 52% pursuing bachelor's degrees [[Catalog 2017-2018](#), [College Fact Sheet](#)]. An additional 9809 students are enrolled in pre-college and workforce programs offered by the Division of Continuing Education [[Continuing Studies](#)]. The number of associate and bachelor's degrees awarded in 2016-2017 was 1452 and 1263, respectively [[Degrees Awarded](#)]. All degree programs are approved and registered by the NY State Education Department, and program approval requires that program length be in accord with broadly accepted higher education standards [[NYSED Standards for Program Approval and Registration](#)]. Associate degree programs must require no fewer than 60 credit hours, and baccalaureate degree programs no fewer than 120. City Tech follows the credit hour definition based on the Carnegie Unit [[Carnegie Units](#)].

The rigorous degree approval process ensures that degree programs are coherent from their inception. Each program is developed by subject matter experts within the proposing department, in consultation with their advisory committee, other affected departments, the school dean, the associate provost, and the provost. A sub-committee of the College Council Curriculum Committee, the full Curriculum Committee, and the College Council Executive Committee vet full degree program proposals before a council vote. Once College Council approves, programs go to the CUNY Board of Trustees and then to the NYS Department of Education for final approval. While time-consuming, the process allows a large number of people with diverse backgrounds to evaluate program quality, including coherence. [[Curriculum Proposal Process](#) [College Council](#), [CUNY New Academic Program Handbook](#)]

City Tech has three primary mechanisms to ensure that programs embed student learning outcomes across the curriculum in a manner that promotes synthesis of learning. The first mechanism is the requirement that programs create and maintain a **curriculum map**¹² showing the specific courses in which each program-specific learning outcome is introduced and reinforced [Assessment Documentation Folder]. This map is located on a shared college hard drive, as described in [Standard V](#). The second mechanism is the **robust general education curriculum**. This curriculum, described in [Standard III](#), [Criterion 5](#), ensures that all students, irrespective of degree program, emerge from City Tech with competencies that require synthesis of a range of skills, knowledge, and attitudes. Examples of such competencies include quantitative literacy and inquiry and analysis. They are assessed through the college-wide general education assessment initiative, described in [Standard V](#). Third, the **structure of learning outcomes** assessment promotes coherence of learning as course-level learning outcomes are reinforced through program-level learning outcomes, and these, in turn, are reinforced through institution-level general education learning outcomes.

Between Spring 2009 and Fall 2016, the College Council approved 11 new bachelor's degree programs and one new associate degree program. The new programs are:

- 2016–BS in Applied Computational Physics, BS in Business and Technology of Fashion, AS in Business and Technology of Fashion
- 2015–BS in Applied Chemistry
- 2013–BS in Professional and Technical Writing, BTech in Construction Management Technology

11. Requirement of Affiliation 9 – “Student learning programs and opportunities are characterized by rigor, coherence, and appropriate assessment of student achievement”

12. Requirement of Affiliation 15 – “Faculty...assure the continuity and coherence of the institution's educational programs.”

(now called Construction Engineering Technology: 2017)

- 2012–BTech in Electrical Engineering Technology, BS in Biomedical Informatics
- 2011–BS in Radiological Science, BS in Mathematics Education
- 2009–BTech in Emerging Media Technologies (2009), BTech in Industrial Design Technology (2009, now called Mechanical Engineering Technology). [[Current Proposals](#) [College Council](#), [Past Proposals](#) [College Council](#)]

The new bachelor’s degree programs support City Tech’s mission to provide career-focused education. Accordingly, City Tech’s new degree programs map to industry sectors undergoing employment growth in NY State. Areas of workforce growth are shown in Figure III.1 and Table III.2, which documents the correspondence between City Tech’s new bachelor’s degree programs and New York City’s growing workforce needs [[Figure III.1 and Table III.2 Employment and New Degrees](#)].

In addition to associate and bachelor’s degree programs, City Tech offers a range of courses and professional certifications through the Division of Continuing Education [[Continuing Studies](#)]. Many participants attend in cohorts to satisfy workplace training and certification requirements, or as new occupational trends emerge. Continuing Education offers test preparation in content needed for certification by external examinations administered by associations and agencies, e.g., FDNY Certificates of Fitness. The Division also offers training and administers exams from sector-based associations, membership organizations, or city/state agencies. A list of examples of the certificate-related courses offered by the Division of Continuing Education is provided in the Documentation Roadmap [[CSC Courses Certifications](#)].

The college’s emphasis on applied learning ensures that students are given the opportunity to “do” what they have learned in class, whether in laboratories, internship placements, or through other experiential learning opportunities. Applied learning by definition produces coherence between conceptual understanding and hands-on skills, preparing students for the workplace.

Criterion 2. Student learning experiences are guided by well-qualified faculty:

a. Faculty possess requisite expertise in learning, assessment, scholarly inquiry, and service;

Academic Qualifications. Qualifications for appointment to the instructional faculty are outlined by the CUNY Office of Human Resources Management. [[Instructional Staff Titles](#), Section II.1] Requirements for appointment at the lecturer and instructor levels include earned bachelor’s and master’s degrees, respectively. Requirements for appointment to assistant professor and higher rank¹³ include an earned doctoral degree (or equivalent) and evidence of effective engagement in teaching, scholarship, and service. Equivalency of qualifications alternative to the Ph.D. is governed by CUNY Bylaw 11.5 and is also described in the Office of Human Resources Code of Practice [[CUNY Degree Equivalences](#)]. Adjunct faculty are subject to the same hiring standards as full time faculty [[Instructional Staff Titles](#), section II.11.2]. Full-time faculty academic qualifications are listed in the college catalog by professorial rank, degree, and conferring school.

Scholarly Productivity. Faculty research productivity as demonstrated in refereed journals, conference presentations, and publications provides evidence of their scholarly rigor [[Faculty Scholarship Report](#)

13. Requirement of Affiliation 15 – “The institution has a core of faculty (fulltime or part-time)”

[2016](#)]. From 2009 to 2016 the three-year rolling average of number of pieces of scholarship/creative work per year per City Tech faculty member has increased from 0.5/year to 0.8/year [[Faculty Scholarship Report 2016](#), [Faculty Scholarship Report 2015](#), [Faculty Scholarship Report 2014](#), [Faculty Scholarship Report 2013](#), [Faculty Scholarship Report 2012](#), [Faculty Scholarship Report 2011](#)]. This increase aligns with City Tech's transformation from a primarily associate degree granting to a more baccalaureate-focused institution. The enhanced productivity may be due, in part, to a release time program begun in 2006 as part of the collective bargaining agreement, under which new faculty receive twenty-four hours of release time during their first five years. The annual teaching load has also been reduced from twenty-four to twenty-one credit hours, in parity with CUNY senior colleges, and will be reduced to eighteen hours by 2020-2021. The workload will be reduced by one hour in 2018-2019 and another hour in 2019-2020.

Faculty Expertise in Assessment. Assessment skills of faculty are developed and supported by the college-wide assessment effort, led by the Office of Assessment and Institutional Research (AIR) and the City Tech Assessment Committee (CTAC). The CTAC is a faculty run steering committee which organizes assessment of student learning at City Tech. The CTAC works with the assessment committees of the Schools of Arts and Sciences, Technology and Design, and Professional Studies to plan assessment efforts and to provide resources for faculty conducting the assessments. Instructional faculty members build and demonstrate their expertise in assessment by participating in three robust assessment initiatives. These initiatives are: Critical Course Assessment; General Education Assessment; and Program Assessment. The details of these assessment initiatives are presented in [Standard III, Criterion 8](#).

b. Faculty are qualified for the work they do;

By virtue of the rigorous qualifications criteria required for employment as a faculty member at CUNY and the equally rigorous processes of recruitment, performance review, promotion, and tenure of individual faculty members, City Tech faculty members are well qualified to perform the duties of their positions. Because of our many applied programs require industry experience, faculty in these areas often come to City Tech with extensive professional experience in addition to academic credentials.

c. Faculty are sufficient in number;

For 2017-2018, the number of full time faculty at City Tech is 404. The number of adjunct faculty varies by semester but hovers in the range of 1100. As a result, City Tech has a 17:1 student-faculty ratio. This number is calculated as the ratio of the number of full-time equivalent students to the number of full-time equivalent faculty. In Fall 2016, the average class size was 21.7. Figure III.3 provides a frequency distribution of class sizes. Less than 2 % of classes have more than 40 students, indicating that the number of faculty is sufficient to maintain personal student/faculty interaction in nearly every class [[Figure III.3 Class Sizes Fall 2016](#)].

The percentage of classes taught by full time faculty ranges from 26%-67%, depending on the department. Some departments rely particularly heavily on adjuncts. In Fall 2016, adjunct faculty taught 67% of the English Department's course hours [[English 1169 Analysis](#)]. The corresponding value for Hospitality Management, Physics, Nursing and Legal Studies was approximately 50%. Given its heavy reliance on adjunct faculty, City Tech pays particular attention to ensuring that instructional quality and assessment of student learning is consistent across sections of the same course [[Arch Tech 1169 Analysis](#), [Chemistry 1169 Analysis](#), [CST 1169 Analysis](#), [ENT 1169 Analysis](#), [Hospitality 1169 Analysis](#), [Law 1169 Analysis](#), [Nursing 1169 Analysis](#), [Physics 1169 Analysis](#)].¹⁴

14. Requirement of Affiliation 15: "Assure the continuity and coherence of the institution's educational programs."

d. Adequacy of faculty resources to support professional growth;

The Faculty Commons, a college-wide Center for Teaching, Learning, Scholarship and Service, brings under one roof professional development, sponsored programs and assessment activities of faculty. Faculty Commons adopts a programmatic approach to professional development that shapes curriculum, pedagogy, and assessment. In accordance with the college goals and strategic plan and with support from CUNY, the Office of the Provost, the College Council, and the Professional Development Advisory Council, Faculty Commons strives to improve the quality of teaching at City Tech. Programming for faculty includes professional development on the tenure and promotion process, orientation of new academic department chairs, and seminars in various high impact pedagogies of engagement. In 2016-2017, 190 full-time faculty members (non-duplicated) participated and 117 part-time faculty members [[FC 2016-2017 Goals and Targets with Outcomes](#)]. Institutional opportunities, resources and support for professional growth and innovation are summarized in Table III.4.

Table III.4 Opportunities, resources, and support structures for faculty

Resource	Services Provided
Faculty Commons	Coordinates professional development for faculty; co-located with Office of Sponsored Programs and Office of Assessment and Institutional Research [Faculty Commons Report 2016-2017 , Faculty Commons Report 2015-2016 , Faculty Commons Report 2014-2015]
Office of Sponsored Programs (OSP)	Provides grants workshops, grant information, proposal development support, and post-award fiscal management including liaising with CUNY Research Foundation, our fiscal agent, on behalf of faculty PI
Office of Assessment and Institutional Research AIR Surveys	Provides assessment training and support for all program and institutional assessment requirements, provides consultation on educational research design and measurement, conducts Student Evaluation of Teaching (more complete description of AIR is found in Standard V)
Coordinated Undergraduate Education (CUE)	Supports coordination of curriculum development and professional development
Instructional Technology (iTEC)	Coordinates academic computing, Blackboard support and other instructional technology training [Faculty Resources List], web page hosting for faculty
Ursula C. Schwerin Library	Scholarship support; teaching support (OER)
CUNY High Performance Computing Center; City Tech Center for Theoretical Physics Computing Cluster	Provide advanced high-performance computing technology resources and related technical assistance to faculty and students
CUNY Academic Works	CUNY-wide library service that collects and provides access to the research, scholarship and creative work produced at The City University of New York
New Faculty Reassigned Time for Research [New Faculty Research Time]	Provides 24 hours of release time for new faculty to do research at full pay to be used during the first five years of faculty appointment [Reassigned Time]

Fellowship Leave [Fellowship Leave Application]	Tenured members of the instructional staff who have completed six (6) years of continuous paid full-time service with the university may apply for: (1) full year leave at 80% of biweekly salary; (2) one-half year at 80% of bi-weekly salary; or (3) one-half year at full pay
Support for Faculty Travel	The Professional Development Advisory Committee allocates funding for faculty professional travel [PDAC Travel Funds] ; each dean’s office also allocates funds up to \$10,000 per year; the CUNY Academy provides travel grants [CUNY Academy Travel Grants Email] . Per the collective bargaining agreement, the college provides approximately \$40,000 per year which has been supplemented in recent years by approximately \$50,000 from the City Tech Foundation
PSC-CUNY Research Award Program	CUNY funding to support research and creative work. Three funding levels: Traditional A (<=\$3500), Traditional B (\$3600 - \$6,000) and Enhanced (\$6500 - \$12000) provide one year of support [PSC CUNY Award Guidelines]
CUNY Office of Research	The CUNY Office of Research provides a number of research-related internal funding programs for CUNY faculty
Graduate Research and Teaching Initiative	NY State funding to support equipment and supply purchases for student-involved research [GRTI Round 19 - NYCCT Summary Data Sheet]
City Tech OpenLab	OpenLab, City Tech’s unique digital platform for collaboration with over 23,000 members, enables any member of the college community to host sites that can be used for projects, classes, clubs, and portfolios
Open Education Resources (OER)	The Schwerin Library oversees a college-wide fellowship program that teaches participants OER best practices [OER City Tech Fellowship Overview]
Software Site Licenses	Licenses to programs ranging from Microsoft Office to Mathematica
Living Lab Learning Library (L4) (A Living Laboratory)	Online resource exchange for innovative teaching practices in general education

As evidenced by Table III.4, City Tech has abundant resources and mechanisms to support faculty growth. Assessment of the usage patterns and perceived utility of these resources will be part of City Tech’s next steps in expanding assessment to all college functions. This initiative to expand assessment beyond student learning outcomes is one of the recommendations of this Self-Study report.

e. Faculty performance is reviewed regularly and fairly;

As an undergraduate institution, City Tech expects faculty to balance excellence in undergraduate teaching and student learning assessment with productive scholarship and service. Teaching is regarded as a core responsibility of the faculty, full-time or part-time, and information is routinely gathered and evaluated regarding effectiveness of teaching. For full-time faculty the evaluation also considers scholarly productivity and institutional service.

Evaluation of Teaching. Two instruments are the primary tools employed to evaluate teaching: peer observation and student evaluation of teaching. Each semester, full-time faculty are reviewed by their departmental peers through peer observations [\[Peer classroom Observation Report\]](#) and by the students through the Student Evaluation of Teaching (SET) [\[Student Evaluation of Teaching sample\]](#). Peer observation is not required for tenured full professors but may be done. Adjuncts are contractually observed for ten consecutive semesters after which peer observation is upon request by the chairperson

or the individual instructor. Adjuncts eligible for and receiving three-year appointments are observed annually. Each peer observation includes a post-evaluation conference between the faculty member and the observer [[Peer classroom Observation Post Conference Memo](#)]. During the meeting, the faculty member receives ideas for improvement in teaching and classroom management. The college is currently developing instruments and procedures to ensure that equivalent assessment activities are standardized for courses with hybrid or fully-online delivery modalities.

All faculty members are expected to administer SETs in every course and section. AIR aggregates each faculty member's SETs, and provides the faculty member with summary data regarding students' perceptions as well as individual comments. Faculty can compare their data with baseline averages for all courses in their departments and for all sections of their course. At City Tech, there is consistently an over 90% level of participation, probably because the SETs are administered in class, and students consistently rate their instructors positively [[SET Response Rates Spring 2012 - Spring 2017](#)].

Faculty Personnel Policies. The document "Guidelines for Faculty Personnel Process" [[Guide to Faculty Personnel Process](#)] outlines assessment criteria and procedures for reappointment, tenure and promotion, as governed by CUNY and the City Tech Bylaws.¹⁵ A central feature of the tenure and promotion processes is that each tenure track faculty member submits a Professional Activity Report and Self-Evaluation (PARSE) with supporting documentation to the Office of Faculty and Staff Relations (OFSR) at the end of each academic year. [[PARSE website](#)] Based on the PARSE, the department chairperson completes an annual evaluation of the faculty member reflecting teaching effectiveness, service, and scholarly output. CUNY follows a seven-year tenure clock. For untenured faculty on the tenure track, the departmental appointments committee makes a yearly recommendation for reappointment, based on the chair's evaluation and a review of the PARSE and supporting documentation. This is forwarded to the college Personnel and Budget (P&B) Committee, which then makes a recommendation to the president who provides the final approval. For fourth, sixth, and tenure years (as well as in year seven if a Letter of Guidance is issued to the candidate in year six), a sub-committee of the P&B reviews the file. At the end of the third year of employment, the academic dean provides a full review of the faculty member's performance, and the review report is discussed with the faculty member and his/her chairperson. An appointment for an eighth year comes with tenure.

Reappointment of part-time instructors is assigned annually based on recommendation of the chairperson. In the summer of 2016, CUNY faculty negotiated a new contract that created the possibility of three-year appointments for adjunct faculty. To be eligible, "an adjunct must have taught at least six contact hours per semester in the same department for at least the 10 most recent consecutive semesters." The departmental Personnel and Budget Committee must also recommend the three-year appointment [[Guidelines Faculty Personnel Process](#)].

For promotion to a higher academic rank (e.g., from assistant to associate professor) a faculty member submits an application for promotion and the most recent PARSE to OFSR. A department peer committee reviews the PARSE and makes a recommendation. An ad hoc committee then reviews the records of candidates for promotion and makes recommendations to the college P&B Committee. The P&B Committee hears the reports of the ad hoc committee and, after discussion, makes a recommendation to the president who makes the final decision about promotion.

15. Requirement of Affiliation 15 – "a core of faculty (fulltime or part-time)...with sufficient responsibility to the institution"

Faculty impressions of the tenure and promotion processes were gathered by the COACHE Survey conducted in 2015 (62% response rate, total n = 235 faculty, 63% of whom were tenured). Table III.5 describes Likert scale responses (1 = strongly disagree, 5 = strongly agree) to questions in which faculty were asked whether they clearly understood the process and criteria for tenure and promotion, and whether they had a clear sense of how their own tenure and promotion applications would fare.

Table III.5 Faculty responses to COACHE survey questions pertaining to tenure and promotion

Clarity of Process		Clarity of Criteria		Clarity on Whether I Will be Tenured or Promoted	
Promotion	Tenure	Promotion	Tenure	Promotion	Tenure
3.36	3.25	3.2	3.05	2.76	3.26

All values in Table III.5 fall beneath the ideal threshold (four) in which faculty, on average, express clarity about the process of tenure and promotion, and about their own chances of earning tenure and promotion. Interestingly, the data suggest that faculty members have greater clarity about the processes and criteria for promotion than about the fate of their own promotion applications. Each year approximately 90 % of faculty applications for promotion are approved; nevertheless, responding to this concern is part of our overall goal to improve communication.

The following efforts are underway to improve clarity surrounding tenure and promotion:

- The provost and president hold an annual meeting open to all interested faculty members to answer questions regarding to tenure/promotion process and criteria;
- Faculty Commons provides a new faculty orientation;
- Faculty Commons organizes an annual workshop for all departmental appointment committee members; and
- Faculty Commons organizes PARSE workshops and teaching portfolio workshops.

Going forward, the efficacy of these methods will be evaluated as will the summary indicator of faculty responses to tenure and promotion questions on future administrations of the COACHE survey. At the same time, a more detailed survey may be helpful to attempt to determine the origin of faculty members’ lack of clarity regarding tenure and promotion. It may be worthwhile to understand whether the perceived lack of clarity comes from a recent influx of new faculty, from changing expectations as the college transitions from an associate to a baccalaureate institution, differing forms of scholarship across a range of technological fields, or from some other source.

Criterion 3. Program information is presented clearly and completely in official publications in a way that students are able to understand and follow degree and program requirements and expected time to completion;¹⁶

Requirements. The official requirements of all degree programs are provided in the College Catalog [[Catalog 2017-2018](#)], available online through the City Tech website. Each department also maintains a description of its degree program(s) on the website. A number of degree programs maintain hardcopy or electronic brochures [[Rad Tech Clinical Education Handbook](#), [Nursing Student Handbook](#), [Vision Care Brochure](#)]. CUNY provides an online tool, [DegreeWorks](#), that clarifies degree requirements and helps

16. Requirement of Affiliation 9 – “The institution’s student learning programs and opportunities are characterized by...coherence”

students plan semester-by-semester progression through their degree programs. Using DegreeWorks, students may view the requirements of their major, track their progress, assess how changing a major might affect them, and see how transfer credits contribute to their degrees. As described in Standard IV, more robust DegreeWorks functionality and degree mapping options became available in Fall 2017. The [New Student Orientation](#) and Student Advisement [[New Student Center Checklist](#)], further described in [Standard IV](#), are additional mechanisms to help students understand degree requirements and to ensure timely progression toward degree attainment.

Time to degree has become an important indicator in CUNY’s new strategic framework, further incentivized by New York State’s Excelsior Scholarship, which requires that recipients earn 30 credits per year. Many factors influence time toward the degree: personal circumstances, level of readiness at entry, and institutional obstacles, among others. City Tech has begun to address seriously the institutional barriers that may hinder students from completing degrees on time. New cohort models of comprehensive student support linked to program completion goals are showing dramatic results in stemming attrition and accelerating time-to-degree. ASAP and two dual-enrollment early college partnerships with career-focused high schools are redefining norms for time enrolled and time elapsed for degree completion (data demonstrating success of Accelerated Study in Associate Programs (ASAP) is provided in [Standard IV, Table IV.1](#) Selected Support programs). [Project Wayfinding](#), newly implemented this year, is a college-wide effort to answer the question “How can faculty, staff, and students effectively provide/use accurate information for academic career planning from Day 1 through Graduation?”

Criterion 4. Resources are adequate to support programs and students’ academic progress;

Learning opportunities and resources at City Tech include course offerings, physical spaces across the seven buildings of the campus, access to technology and discipline-specific laboratory equipment, availability of information resources, and access to co-curricular activities. These learning opportunities and resources are summarized in Table III.6. Assessment of the adequacy of these resources has begun and will continue as part of City Tech’s focus on expanding assessment beyond student learning outcomes. Over the past ten years, recognition of the need for improved facilities and resources has driven investment of more than \$615,000,000 in capital improvements including equipment.

Table III.6 Summary of student learning opportunities and resources

Resources and Opportunities		Description
Courses	Course offerings	At City Tech, a total of 3204 sections (average 27 seats per classroom) were offered in Spring 2016 including 154 weekend courses (average 29 seats per classroom) and 725 evening courses (from 5 pm, average 26 seats per classroom). That means 29% of courses are offered as evening and weekend courses.

Instructional Spaces	Classrooms	City Tech has 160 general-purpose classrooms; 66% of all classroom and laboratory spaces are considered “smart rooms” with computers and projectors.
	Laboratories	City Tech has 290 rooms that are considered laboratory spaces.
	Clinical Spaces	City Tech has dedicated spaces for students to practice clinical skills. These include dental hygiene labs, a full industrial kitchen, and radiologic technology labs.
Technology Infrastructure	Computer Laboratories	City Tech has three general computer labs, G600, G618, and V217, which are open more than 12 hours per day and has two computer labs, G604 and G606, for students who need to take student workshops and learn OpenLab and ePortfolio (web-based portfolio system). City Tech also has specialized computing resources like the High Performance Computing Cluster maintained by the Physics Department and 86 department-based computer labs.
	Software	Through CUNY, City Tech provides students with site licenses to widely-used programs like Microsoft Office, Mathematica, Cambridge Soft, and SPSS. City Tech also invests in discipline-specific software such as the suite of software in the Radiologic Technology Computer Lab.
	Open Educational Resources (OER)	Since 2015, the City Tech library has led a focused effort to help faculty identify and integrate OER into their teaching. This has provided student learning opportunities like the biology department’s open educational resources in areas like DNA replication and genetics. OER have also increased affordability insofar as these are open access resources that obviate the need to purchase textbooks.
Specialized Science and Technology Equipment	Chemical Analysis	City Tech has a full range of spectroscopy, chromatography, and analytical chemistry equipment, exceeding the recommended allotment for program approval by the American Chemical Society.
	Radiologic Technology	Radiologic Technology maintains four fully energized X-ray rooms for students to obtain hands-on practice.
	Architectural Technology	Architectural Technology maintains fabrication labs and equipment for laser cutting, CNC milling, 3C printing and scanning, and industrial robotics, as well as for physical computing, including environmental sensors, actuators, and microcontrollers for development of interactive environments.
	Mechanical Engineering Technology	Mechanical Engineering has fully equipped labs for machining, CNC fabrication, destructive and non-destructive testing, heat-treating and mold-pouring, micro analysis, and robotics.
	Dental Hygiene	The Dental Hygiene department has an active patient care clinic equipped to provide services from cleaning to radiographs to periodontal disease screening.

Specialized Academic Centers	BWRC	Brooklyn Waterfront Research Center: Multi-disciplinary center whose mission is to investigate the history and present opportunities related to Brooklyn's industrial waterfront [Brooklyn Waterfront Research Center].
	Center for Theoretical Physics	Center for Theoretical Physics: A research and teaching center focused on fundamental physics [Center for Theoretical Physics].
	Mechatronics Technology Center	Provides students a framework of fundamental design knowledge with hands-on cross-disciplinary activities that allow them to develop an interdisciplinary understanding and integrated approach to product design [Mechatronics Technology Center].
Co-curricular Learning Opportunities	Undergraduate Research	Students have many options for participation in undergraduate research. Some, like the Emerging Scholars and Bridges to the baccalaureate programs, provide stipends. The Office of Undergraduate Research coordinates these programs and helps connect students and mentors. [Emerging Scholars Program]
	Black Male Initiative	This CUNY-wide initiative supports the success of black and African American male students; City Tech focuses its program on success in STEM; participation is open to all.
	Emerging Scholars Program	The Emerging Scholars program pairs students with faculty mentors and provides them with a \$500 stipend to perform 50 hours of research and present their research in a college-wide poster session.
	CUNY Service Corps	CUNY Service Corps @ City Tech provides "CUNY students with paid work experiences in community-based organizations and government agencies since the program's launch in 2013" [Service Corps Community Partners].
	Study Abroad	City Tech students may participate in one of the 166 programs (covering 51 countries) managed by CUNY.
	Internships	In addition to the Professional Development Center (discussed in detail in Standard IV, Criterion 1d), most City Tech degree programs offer or require credit-bearing internships, field placements, or clinical experiences.
Information Services	Library	The Ursula Schwerin Library offers "offers physical and online access to academic resources, information technology, and study space." [Ursula C. Schwerin Library Home] It also offers courses in information literacy and dedicated subject matter experts for research support
	Journal Subscriptions	The library subscribes to a broad selection of academic research journals in fields ranging from art and architecture to social science: 1,589 print journals, and 103,731 electronic journals. Students and faculty members have access through CUNY to many more.

Role of Grants in Transformation of Academic Programs. Grants have provided an important means for wide-ranging transformation and have had particular impact on general education: ten National Endowment for the Humanities (NEH) grants to support faculty development on interdisciplinary humanities themes have centered the institution in its liberal arts core. STEM education has also been transformed through the cumulative impact of 33 grants from the National Science Foundation over the past decade. An NSF I³ project, *The City Tech I³ Incubator: Interdisciplinary Partnerships for Laboratory Integration*, rededicated the institution to the primacy of the laboratory experience at a college of

technology, resulting in a more open spirit of inquiry and the skillful application of research tools across the curriculum. Three NSF Advanced Technological Education (ATE) grants: *Learning Products Design through Hands-on Mechatronic Projects and Fuse Lab: Collaborative Education for Tomorrow's Technology in Architecture, Engineering and Construction*, and *Advanced Design and Fabrication of Prosthetic and Medical Devices* have brought related technologies together to support the integration of research and education. An NSF REU Site project, *Ground-based and Satellite Remote Sensing at NOAA-CREST*, NSF Louis Stokes Alliance for Minority Participation (LSAMP), two NSF Transforming Undergraduate Education in STEM (TUES) grants, and an NSF Course, Curriculum, and Laboratory Improvement (CCLI) grant for *The Brooklyn Waterfront 2050*, in partnership with the Urban Design Lab at the Earth Institute of Columbia University, and two Improving Undergraduate STEM Education (IUSE) grants have provided a rich array student research experiences. Three NSF S-STEM grants have provided scholarships for qualified STEM students. The college has also received Broadening Participation in the Geosciences grants. In Fall 2014 the National Institutes of Health awarded City Tech a \$1.4M Bridges to the Baccalaureate grant in partnership with Brooklyn College to support articulation to upper division programs in the biomedical sciences. An NSF Noyce Scholarship grant awarded to City Tech in partnership with Borough of Manhattan Community College prepares future STEM teachers to serve in high need school districts.

Other awards include a USED MSEIP grant that supports reform of gateway courses in mathematics and a Title V Cooperative Arrangement grant to support the use of Open Educational Resources (OER) and other reforms in mathematics courses undertaken in partnership with Borough of Manhattan Community College. In 2017 City Tech was awarded a \$1.1M NIH grant to support the *City Tech-Weill Cornell Medicine Big Data Training Program in Biomedical Informatics*.

Criterion 5. General Education

Beyond the specific requirements of their degree programs, City Tech students participate in a signature general education program. Grounded in the liberal arts and sciences, general education inspires students to make connections across disciplinary lines and enriches their understanding of the moral, civic, and creative dimensions of life. The college's general education requirements are aligned with CUNY Pathways, the university's general education program. The courses included in the common core are listed on the college website [[Pathways Required Common Core](#); [Pathways Flexible Common Core](#)]. The required core consists of foundation courses in English, math, and science. The flexible common core requires students to have diverse intellectual experiences, but permits choice of the courses leading to that end. Flexible common core courses thus expand cultural and global awareness and cultural sensitivity, and build scientific and quantitative reasoning. Taken together these courses provide students with a basis on which to make well-reasoned ethical judgments. All courses included in these areas must satisfy specific learning outcomes as outlined by CUNY guidelines [[CUNY Flexible Core Learning Outcomes](#)]. Finally, at City Tech, the college option requires an oral communication course and an interdisciplinary course, both important elements in our degree programs and educational vision. It also permits student choice of two additional liberal arts courses, which is especially valuable for students in BTech programs which are highly structured and require only 42 liberal arts credits. The alignment of City Tech's general education program with expectations stated in Standard 3, Criterion 5 is provided in Table III.7. The assessment of general education learning outcomes related to these Middle States expectations is described in detail in [Standard 5, Criterion 2b](#).

Table III.7 Alignment between City Tech’s general education program and the MSCHE expectations for general education programs

City Tech General Education Program		Middle States Expectation
Required Common Core Courses	English Composition I and II	Written Communication, Information Literacy
	One mathematics course	Quantitative Reasoning
	One life or physical science course	Scientific Reasoning
Flexible Common Core Courses	One course in World Cultures and Global Issues	Cultural and Global Awareness
	One course in US Experience in its Diversity	Cultural Sensitivity
	One course in Individual and Society	Critical Analysis and Reasoning, Reasoned Judgements
	One course in Creative Expression	Values, ethics, and diverse perspectives
	One course in Scientific World	Scientific Reasoning, Technical Competency
	One additional course from any of the above categories	
College Option	Speech	Oral Communication
	One interdisciplinary course	Critical Analysis and Reasoning

City Tech’s redesigned general education curriculum was inspired by the last Middle States Self-Study that identified general education as a necessary focus area. In 2010, a \$3.M Title V project entitled *A Living Lab: Revitalizing General Education at a 21st Century College of Technology* enabled the college to undertake a comprehensive renewal initiative that positioned general education as the fulcrum of all programs. A large and vibrant faculty community is dedicated to the development and implementation of general education across the college. The general education committee comprised of representatives from every academic department stands at the center. The committee developed the present general education requirements for all City Tech students, and submitted them to College Council as Curriculum Action 12-7 in November 2012.¹⁷

After successfully redefining the general education curriculum, the committee has assigned its members to a variety of different working groups, each responsible for a different project. The full General education committee meets multiple times per semester to share working group progress and exchange information. Outcomes include:

- Development of branding for City Tech general education: City Tech “GenEdge” [[GenEdge](#)];
- Creation of annual shared themes to engage in cross disciplinary activities [[GenEdge Brochure 2017-2018](#)];
- A Course Coordination initiative to support consistent achievement of general education learning outcomes [[Course Coordination Group Documents](#)];
- Gen ed Web page design [[College Gen Ed website Prototype Page](#)]; and
- General education curriculum maps for every academic program [[SoAS Repository/Program Curricular Map folder](#), [SoPS Repository/Program Curricular Map folder](#), [SoTD Repository/Program Curricular Map folder](#)].

17. Requirement of Affiliation 15 – “The institution has a core of faculty (fulltime or part-time...to assure the continuity and coherence of the institution’s educational programs.”

Other synergistic activities that strengthen general education include:

- General Education Assessment Committee [[City Tech General Education Assessment Planning Meeting Sept 23 2016 AGENDA](#)];
- Living Laboratory Learning Library (L4) [[A Living Laboratory](#)];
- Undergraduate Research Committee [[Undergraduate Research](#)];
- [Reading Across the Discipline \(READ\)](#) [[READ flyer](#)];
- [Writing Across the Curriculum](#) [WAC];
- [Writing Intensive Requirements](#);
- [Quantitative Literacy](#) [QL];
- [Open Educational Resources](#);
- OpenLab;
- [Place-Based Learning](#);
- Interdisciplinary course requirements [[Interdisciplinary Studies Committee](#), [Interdisciplinary Courses](#)]; and
- NEH faculty development grants on interdisciplinary humanities themes.

Other Investments. Since 2009, City Tech has made other major investments in resources and learning opportunities. These investments, described in detail in Standard 6, have enabled City Tech to keep pace with evolving career opportunities in technological fields, to support our transformation to a bachelor’s degree granting institution, and to support growing student enrollment. Most importantly, City Tech’s new, 8-story, 365,000 square foot science and clinical health building will provide state of the art classroom and laboratory space for instruction and research, critical to robust support of our current programs and to enabling future growth.

Criterion 6. Graduate and professional education;

Not applicable: City Tech does not offer graduate or professional education.

Criterion 7. Third party student learning opportunities;

Not applicable: City Tech does not have student learning opportunities that are designed, delivered or assessed by third party providers.

Criterion 8. Periodic assessment of the effectiveness of programs providing student learning opportunities.

Beginning in 2009, the City Tech Office of Assessment and Institutional Research (AIR), the City Tech Assessment Committee (CTAC) and the assessment committees of the Schools of Arts and Sciences, Technology and Design, and Professional Studies have constructed a robust structure for systematic assessment of student learning opportunities. The structure includes course level assessment through the Critical Course Assessment initiative, collegewide assessment of general education learning outcomes, and degree program assessment. Below, we describe each of these three efforts.

Critical Course Assessment Initiative

Process: The Critical Course Assessment initiative charges every department with identifying and focusing on the data driven improvement of one or more “critical” courses. A critical course is defined

as a course which is particularly important to a department's degree program(s). Typically, critical courses are foundational courses which determine whether students can continue in the major, courses with high enrollment, or courses with low pass rates. Once the critical course is identified, the faculty embark on its assessment following a three-year assessment cycle [[Assessment Cycle](#)]. In the first year, faculty identify one or more learning outcomes to assess across all sections of the course, and develop the assignment and rubric. In the second year, faculty administer the assessment. This provides the data upon which they determine a course of action for course improvement. In the third year, faculty implement the course of improvement. They are then ready to re-assess. After reassessment, faculty may decide to implement a second round of data-driven improvement strategies or they may decide that students have attained the desired level of mastery. If students have attained the desired level of mastery, then a new student learning outcome can be evaluated within the critical course or a new critical course can be designated.

A narrative summary of various departments' critical course assessment activities and resulting course changes is provided in the documentation road map [[SoAS Repository/Critical Course Assessment Reports](#), [SoPS Repository/Critical Course Assessment Reports](#), [SoTD Repository/Critical Course Assessment Reports](#)]. Dental Hygiene provides a typical example of the Critical Course Assessment process and the types of curricular changes resulting. The Department of Dental Hygiene chose DEN 1100, Principles of Dental Hygiene Care I as their critical course [[DEN 1100 folder](#)]. The department chose two learning outcomes, one in the area of Patient Care Assessment and the other in the area of Patient Care Implementation. In the first round of data collection (2009), 71 % of students met the benchmark in learning outcome 1 and 58 % met the benchmark in learning outcome 2. Based on these results, improvement plans were drafted and included adoption of new textbooks, adoption of a typodont, redesign of every seminar; including all new presentation slides, use of Elmo-overhead digital projector for use in instrument demonstration, change in lead faculty, and creation of a clinical tutoring program. To evaluate the effects of these changes, two subsequent years of data were collected: 2010 and 2011. For these years, it was found that more than 80 % of students were now meeting the benchmarks for learning outcomes 1 and 2. This represents significant improvement. The course will continue to be evaluated in coming years due to its importance to the degree program.

General Education Assessment Initiative

Process: City Tech performs collegewide assessment of fourteen general education learning outcomes. These outcomes were selected based on a mapping of the learning goals of City Tech's signature general education curriculum to the learning outcomes described in the AAC&U LEAP VALUE rubrics [[AAC&U Value Sample Rubrics](#)]. General education learning outcomes are measures using a series of staggered three year assessment cycles [[Gen Ed Assessment Timeline](#)]. When a given learning outcome is due for collegewide assessment, the provost selects a range of departments in which to perform the assessment. The department chairs and departmental assessment committees then determine the courses in which to conduct the assessment. A list of the course and departments currently evaluating general education learning outcomes is made publicly available on the website of the Office of Assessment and Institutional Research (AIR) [[Gen Ed Course List Fall 2017](#)]. If it is the first time an outcome will be assessed in a given course, faculty construct an assessment assignment, and the assignment is validated through a content validity exercise [[Content Validity Worksheets](#)]. Once a validated assignment is prepared, faculty administer the assignment (collect data), grade student work against the relevant VALUE rubric, evaluate the data, then determine and communicate an improvement plan. This plan is then implemented over the next two years, and the student learning outcome is then reassessed.

One of the most powerful examples of assessment transforming general education practice at City Tech is the data driven improvement of support for teaching the general education competency of reading. This work was highlighted in the recently published book, “Enhancing Assessment in Higher Education: Putting Psychometrics to Work.” In the Spring 2012, City Tech began assessment of the general education competency of reading. Eight courses (143 students total) were selected for pilot scale data collection. The data from the pilot scale assessment of reading showed that many students were falling below threshold levels in areas of reading such as comprehension, context, analysis, and interpretation. These results motivated fullscale data collection and also engendered an immediate conversation about what could be done to support the teaching of reading. Based on this conversation, the provost, associate provost, director of AIR, and faculty from English, biology, business, and computer engineering technology wrote a proposal to the university to create a program called Reading Effectively Across the Disciplines (READ). This program, funded in 2013, included course redesign for high-enrollment, low-pass-rate courses in biology, business, and Computer Engineering Technology. Faculty in these courses received professional development support from City Tech reading specialists, and peer-assisted learning was incorporated for students in the courses. In Spring 2014, after the READ program had been in place for two semesters, data was again collected. Based on this re-assessment, the faculty leading the READ initiative and the City Tech administration believed that the READ program was successful enough to institutionalize beyond the period of university grant support.

As assessment of general education continues at City Tech, results from data collection and improvement strategies implemented will be shared on the AIR website in the form of “General Education Assessment Briefs.” An example of a general education assessment brief is the recently published brief on assessment of the Oral Communication learning outcome [[Gen Ed Assessment Briefs Website](#)]. Assessment results in this brief show that more than 70 % of students met or exceeded faculty criteria on all oral communication competencies except for the use of supporting evidence (69 % of students met or exceeded criteria on this competency). To improve performance on this competency, it is expected that faculty will share strategies on the OpenLab’s L4: Living Lab Learning Library, a compendium of best pedagogical practices.

Degree Program Assessment

Process: Per CUNY mandate, City Tech performs systematic assessment of the effectiveness of all degree programs. The schedule for program review and whether the review process is governed by requirements of a discipline-specific external accreditor depends on the particular degree program [[Comprehensive Program Review Schedule](#)]. In addition to the college’s institutional accreditation by Middle States, twenty-six programs in thirteen departments currently hold separate accreditation, with four additional departments currently seeking such accreditation. These accrediting bodies provide periodic review and reaccreditation of academic programs at the baccalaureate and associate degree levels. [[Comprehensive Program Review Schedule](#)]. In addition, nine accredited programs in the School of Professional Studies lead to professional licensure or certification. Specialized accreditation review ensures that content, available resources, and pedagogical approaches in education for specific professions reflect high standards of educational practice. [[Catalog 2016-2017](#), examples: [Hospitality Management Program Review](#), [Vision Care Program Review](#)].

For academic programs not externally accredited, CUNY guidelines outline the required process for a 10-year cycle of program self-study, culminating in an evaluation by an external expert in the field or discipline [[CUNY Academic Program Review Policy](#); [City Tech Academic Program Review Policy](#);

[Comprehensive Program Review Schedule](#)].¹⁸ External accreditors and CUNY guidelines require and encourage the fullest possible engagement of faculty and stakeholders in these processes, which include the formulation of five- to ten-year strategic goals.

Other Program Review Initiatives and Assessment

Results: Support from the Office of Assessment and Institutional Research (AIR), especially in the form of program-level assessment, has enabled the college to conduct more rigorous and meaningful program review, and to track the results of program changes implemented as a result of review. One example of data-driven program review and improvement is found in the 2013 review of the AAS degree program in Computer Information Systems (CST). During the program self-study, AIR provided data indicating that the AAS degree had an average first-year retention rate of 67.8 % (n = 162). The relatively low retention rate suggested the need for support of the first-year students. With funds from a Perkins grant, the CST department implemented a program in which senior students served as tutors and mentors for first year students. The retention rate for students participating in the tutoring and mentoring program in Fall 2015 (n = 268) and Spring 2016 (n = 313) was 15-18 % higher than the retention rate in 2013, prior to program implementation. Other examples are cited in [Standard V, Criterion 3c](#).

Conclusion and Future Focus: City Tech's degree programs have grown and improved dramatically, and the institution has made significant progress in obtaining faculty and student resources necessary to support these programs. The rapid pace of change requires that we redouble our commitment to program and resource assessment to ensure that our growth is not only increasing numbers, but also increasing quality:

- In the coming years, City Tech will continue with strategic expansion of degree programs in response to business and industry needs. The college will pursue important new directions necessitated by changing professional practices, including interprofessional education in health and human services fields and linking technology innovation and entrepreneurship education to complement the needs of the tech start-up environment of the Brooklyn Tech Triangle and beyond.
- Making strategic use of CUNY's program review process, as well as an expanding number of external accreditors, we will continue to pursue systematic, data-informed improvement of academic programs, both in curriculum and delivery of instruction. To ensure consistency of instruction across faculty and learning modalities, we will expand existing efforts in course coordination, development and implementation of OER, and online learning.

18. Requirements of Affiliation 8 – A comprehensive list of accreditation and other self studies that indicate systematic evaluation:

Acknowledging the centrality of the faculty to the vitality of our academic programs, we will enhance support of faculty in their professional activities over the course of the professional lifespan. City Tech will continue to strengthen the college’s research capacity and laboratory resources in a manner consistent with a bachelor’s degree-granting institution.

Recommendation 4:

***Refine our facilities and technology master plans to take advantage of new opportunities.
(Standard VI and III)***

Optimize opportunities created by the new academic building, including space made available by the relocation of programs from the Pearl Building. To this end, the college will:

- Engage stakeholders in a cross-institutional review of facilities and technology plans in order to empower the college to fulfill its mission into the future: to attract external partners; to remain nimble and responsive to workforce needs; to support course availability and new modalities of instruction; to leverage technology for intellectual exchange and collaboration in an increasingly commuter context; and to cultivate a positive and cohesive institutional identity.
- To respond to the increasingly interdisciplinary context for our programs, make shared resources and collaboration a primary consideration.

Standard IV: Support of the Student Experience

Across all educational experiences, settings, levels, and instructional modalities, the institution recruits and admits students whose interests, abilities, experiences, and goals are congruent with its mission and educational offerings. The institution commits to student retention, persistence, completion, and success through a coherent and effective support system sustained by qualified professionals, which enhances the quality of the learning environment, contributes to the educational experience, and fosters student success.

Current Snapshot. Students come to City Tech because they are attracted by its workforce preparation mission and the excellence of its professional and technical programs. As an institution with an open admission policy at the associate level, we face challenges to retention and student success, and we are committed to moving students more quickly and effectively to genuine college readiness. Strategies to support retention and graduation have expanded significantly. Since 2008, following two strategic plans, City Tech has:

- Identified obstacles and worked to reduce them by clarifying requirements, sharing information effectively, and streamlining systems, often through collaboration between Offices of Academic Affairs and Student Affairs;
- Implemented CUNY's Accelerated Study in Associate Programs (ASAP) program and improved access to services such as advisement, articulation and transfer, academic support, counseling, internships and job placement; and
- Focused explicitly on students needing developmental education, increasing student success in developmental reading and writing. CUNY is embarking on a major change in math remediation, long a serious obstacle, and a comprehensive revision to mathematics requirements and instruction will be fully implemented by Fall 2019.

Since 2006, enrollment at City Tech has increased from 13,368 to 17,282 [[Fall 2016 Enrollment Report](#)] students, a significant increase of 29%. Founded as a career and STEM-focused associate degree institution in 1946, the college began adding bachelor's programs in 1980. In Fall 2017, for the first time, baccalaureate enrollment of matriculated students exceeded that of associate degree students and the number of baccalaureate degrees awarded has generally exceeded the number of associate degrees awarded since 2013-2014 [[Degrees Awarded](#)]. Throughout, the student population has remained extremely diverse in its ethnic makeup. As of Fall 2016, 33% of students were Hispanic/Latino, 30% were Black or African American, 20% were Asian, 11% White, 4% were Nonresident Alien, and 2% were other. [[Fall 2016 IPEDS Ethnicity](#)]. While these percentages have fluctuated somewhat over the past ten-year period, the actual number of Hispanic and Asian students has increased significantly given the overall growth in student population [[Enrollment by Ethnicity](#), [Transfer Students by Ethnicity](#)]. Slightly over half (55%) of students are male, an increase from 2006 when male/ female enrollment was nearly equal. The median age is 21. City Tech is a commuter school, serving New York City residents almost exclusively; the greatest number reside in Brooklyn, but 56% come from outside the borough. At the same time, the college is internationally inflected, with 35% of students born outside the United States. Students report 152 countries of origin, and they are extremely diverse linguistically, with 73% reporting languages other than English spoken at home [[College Fact Sheet](#)].

Many City Tech students struggle economically. With 58% reporting a household income of less than \$30,000, it is unsurprising that 80% of incoming freshmen and 67% overall receive need-based aid.

One quarter of all students report working more than 20 hours per week, typical of CUNY. Employment affects the rate at which students progress in their academic programs, and 37% of students attend part-time. Only one third of students list their parents as college graduates, with an undetermined percentage of parents having had some college. It is safe to say that the majority of City Tech students are among the first generation in their families to attend college.

As a “comprehensive” senior college granting both associate and bachelor’s degrees, City Tech is committed to providing a high-quality education to all students. In the past ten years, the percentage of matriculated students in baccalaureate degree programs has increased from 30% to just over 50%, including both external transfers and those from our own associate programs. The increase in bachelor’s programs and students brings with it profound changes in the college’s culture and priorities; however, associate degree programs remain important. Although many students arrive at City Tech with a record of academic success, students with developmental needs—approximately 60% of Fall 2015 entering first-year students—or those who lack the requirements for their desired program, may not qualify for a bachelor’s program initially. Therefore, many students enroll in an associate degree program while they work on CUNY proficiency requirements for baccalaureate programs or complete prerequisites for their degrees. City Tech’s many 2+2 degree programs thus provide a seamless pathway into four-year degree programs.

For the Fall 2009 entering class, the graduation rate of associate full-time first-time freshmen was 7.9% after three years, 14% after four years, and 21.6% after six years. It is important to note that the graduation rate methodology required by IPEDS reflects the completion of the associate or baccalaureate degree (highest degree earned is reported). The graduation rate of baccalaureate full-time first-time students entering in Fall 2011 was 5.9% after four years, whereas the six-year graduation rate for the same pool of students was 29.5% [[2015-2016 PMP Report](#)]. Aggressively pursuing a completion agenda, as the discussion below documents, is vital. City Tech’s implementation of CUNY’s successful ASAP in Fall 2015 marked a significant step toward this goal.

In 2014, 74.8% of all students graduating from associate degree programs continued in baccalaureate programs, while 76.2% of graduates from career and technical education programs in 2015 were employed within six months [[Research Brief Graduation Trends 2009 to 2014](#)]. Moreover, two recent studies dramatically validate the importance of what is done at City Tech. A distinguished group of researchers who studied social mobility ranked City Tech ninth among more than 2,000 colleges and universities nationwide, and fifth among public colleges, in graduates who advanced two income quintiles or more above their starting economic position. A second study, conducted by PayScale, a company that studies compensation, ranked City Tech third in the nation in the earning potential of its associate degree graduates (and ranked us first last year) [[City Tech College Mobility Ranking](#)]. These numbers attest to City Tech’s effectiveness in providing students with programs leading to employment and continued education. The challenge is to increase completion, thereby making these benefits available to a greater number of students.

Criterion 1. Clearly stated ethical policies and processes to admit, retain, and facilitate the success of students whose interests, abilities, experiences, and goals provide a reasonable expectation for success and are compatible with institutional mission.

a. accurate and comprehensive information regarding expenses, financial aid, scholarships, grants, loans, repayment, and refunds;

City Tech complies assiduously with its policy to admit and provide services for students without regard to “race, color, creed, national origin, ethnicity, ancestry, religion, age, sex, sexual orientation, gender identity, marital status, legally registered domestic partnership status, disability, predisposing genetic characteristics, alienage, citizenship, unemployment status, military or veteran status or status as a victim of domestic violence in its student admissions, employment, access to programs, and administration of educational policies.” [\[Catalog 2017-2018\]](#). Because so many students are first generation students (62%) whose families lack experience in higher education and are unfamiliar with college processes, we employ repeated and varied strategies to increase awareness of benefits and expectations of college attendance, offer guidance in navigating the processes, and improve compliance with dates and procedures [\[College Fact Sheet\]](#).

The college catalog conveys information on tuition and fees, the refund policy, financial aid, grants, loans and scholarships [\[Catalog 2017-2018\]](#). Prior to each semester, information on the cost of textbooks and other course materials is posted on the CUNYfirst schedule of classes. [\[Instructor Guide to Textbook Information\]](#). A robust effort to develop online educational resources [\[Open Educational Resources \(OER\)\]](#), led by the library and financed by New York State through CUNY, reduces costs while also providing readily available academic support and enrichment.

City Tech participates in all federal and state financial aid programs offering grants, loans, and work-study. The Office of Enrollment and Student Affairs assumes major responsibility for administering financial aid and keeping students apprised of their status. The staff implements a comprehensive management plan, including a detailed schedule for communications to students. [\[Enrollment and Student Affairs Strategic Project Management Plan 2016-2017\]](#). The Office of Scholarships and Residency Services offers information and assistance for students to locate and secure other sources to fund their education [\[Financial Aid - Information Guides\]](#).

Participants in one of several large city/ state-funded programs, (ASAP, Early College, and SEEK, all discussed in more detail below), receive both intensive guidance and financial support. ASAP, focused on students in associate degree programs, makes up the gap between financial aid and tuition and fees, and provides some assistance for books and supplies and a free Metrocard. Students in City Tech’s two partner Early College High Schools, City Poly and P-TECH, can earn an associate degree at no cost in designated degree programs. SEEK, first implemented in CUNY senior colleges in 1965, offers a comprehensive academic preparation, support, and advisement program as well as supplemental financial assistance for educational expenses such as transportation, books, supplies, and college fees to students who are economically eligible.

b. a process by which students who are not adequately prepared for study at the level for which they have been admitted are identified, placed, and supported in attaining appropriate educational goals;¹⁹

For admission to baccalaureate programs, CUNY policy requires that students meet proficiency standards in reading, writing, and mathematics, but associate degrees are “open admission,” accepting all students with a high school diploma or equivalency. Incoming first-year students can demonstrate college readiness based on SAT, ACT, or New York State Regents test scores. Those lacking the requisite indicators take CUNY Assessment Tests in reading, writing and mathematics. Accuplacer, authored by The College Board, is used for reading and mathematics; a university-wide writing test is scored centrally. All students test for placement in the math curriculum. To help students perform at their best, CUNY offers [test prep resources](#) and permits students close to passing to re-test. Free workshops are available to those retesting.

Of 3,405 first-time freshmen in Fall 2015, 60% (2,018) had developmental needs. CUNY requires that students meet proficiency within the first year. According to the University Performance Management Process (PMP) 2015-2016 Year-End Report, 52.9% of students who entered City Tech in Fall 2014 initially needing some remediation were fully proficient by the end of the first year [[2015-2016 PMP Report](#)]. Students who do not meet college readiness requirements at entry have several options:

- Enroll in a free CUNY summer immersion course managed by the First Year Summer Program (FYSP);
- Enroll in City Tech’s developmental/remedial courses in reading, writing, ESOL, or mathematics while they begin to take a limited roster of credit courses; or
- Defer enrollment while they participate in a free or very low-cost program such as CUNY Start or Math Start, the CUNY Language Immersion Program (CLIP), or the Brooklyn Educational Opportunity Center (BEOC).

Fifty percent of Fall 2016 entering students with remedial needs (n=1833) selected the first option, registering for a free First Year Summer Program (FYSP) developmental course [[CUE Report 2015-2016](#)]. Perhaps because participation is voluntary, pass rates for these classes generally meet or exceed their regular semester counterparts, with pass rates in the summer of 2016 at 49% overall for developmental mathematics (37% for MAT 063, covering arithmetic and elementary algebra, and 55% for MAT 065, elementary algebra), 60% for developmental reading, and 65% for developmental writing.

During the academic year, the English Department oversees developmental reading and writing courses. The departmental Self-Study reported that enrollment in developmental reading dropped from 333 in Fall 2010 to 208 in Fall 2015; developmental writing enrollment dropped from 840 in Fall 2010 to 354 in Fall 2016. More NYC high school students are enrolling having met the proficiency criteria [[Grade Distribution Reports](#)]. At the same time, developmental pass rates have improved. Developmental Reading has introduced the use of reading software to support student learning and self-assessment, as well as providing test preparation workshops. The Data Dashboard Grade Distribution Report for Fall 2016 shows a pass rate of 55.8% for upper level Developmental Reading; Developmental Writing revised its curriculum, offered expanded professional development for faculty, and began to experiment with blending remedial instruction with the credit-bearing English Composition. Pass rates in writing have averaged over 50% for several years. Comparisons between the First Year Summer Programs (FYSP) and the developmental reading and writing offered to enrolled students during the fall and spring are difficult to draw because while the former serves first-time students attending voluntarily, the enrollment in the latter is mandatory and consists of students who registered too late for the summer program, declined

19. Requirement of Affiliation 8 – “The institution systematically evaluates its...other programs.”

the opportunity, attended but were unsuccessful in the summer, or are repeating from a previous semester. Furthermore, the completion rate for the summer is higher, averaging 97-98% in Reading and Writing and 88% in Math, compared to 56.4% for MAT 063 and 63.7% for MAT 065 in the fall. Across CUNY, the number of degree-seeking students enrolled in English for Speakers of other Languages (ESOL) has declined for some time; nevertheless, enrollment in CUNY's Language Immersion Program (CLIP) remains strong. CLIP offers intensive instruction for 25 hours a week at very low cost. Students admitted to the college who lack proficiency in English can defer enrollment in the college for a semester or a year while they study English, thus improving their chances of success while saving financial aid until they begin their degree programs. Total CLIP enrollment at City Tech for FY17 was 624. Both the 2016 valedictorian and the 2017 salutatorian, who spoke no English on their arrival in the US, began their college careers in CLIP. City Tech also offers non-credit ESOL classes through the English Department for students who elect to begin their degree programs while learning English. About half of ESOL students use academic support funded through FYP. The program has a referral and follow-up system enabling instructors to set up targeted interventions on an individual basis. ESOL provides advisement for students each semester with follow up via phone and email to ensure proper placement for the next semester.

In summary, the number of students needing remediation in English has declined, while at the same time, the pass rates in developmental reading and writing have improved. Math, however, remains critical.

It is particularly essential to improve success in developmental mathematics classes, where pass rates have been persistently low. Depending on their placement level, remedial students currently take one of two versions of developmental mathematics classes. Math 0630 (0 cr., 7 hrs.) provides basic mathematics review along with elementary algebra, whereas Math 0650 (0 cr., 5 hrs.) focuses on elementary algebra. In Fall 2016, for example, of 367 students who completed Math 0630 only 31.6% passed. This is even more concerning given that the completion rate for the course was only 56.4%. In the same semester, Math 0650 had a completion rate of 63.7%. Out of the 633 students completing this course, 37.8% passed it [[Fall 2016 Math Grade Distribution Report](#)]. In 2016, AIR conducted an item analysis of the CUNY Elementary Algebra Final Exam, which is required to successfully exit from remediation. This evaluation was utilized by the Mathematics Department to review the developmental math courses and improve student outcomes [[CEAFE Research Brief](#)].

The college has piloted many strategies to improve performance in math, including pre-testing and pre-course workshops, classroom-based support, learning communities, self-regulated learning, electronic tools, and Peer-Led Team Learning. The College Learning Center offers tutoring, as does an effective and popular Mathematics Department tutoring program supported with ASAP and Perkins funding (a schedule of all tutoring is posted on the website [[Tutoring Schedule](#)]); however, we struggle to meet the demand. Clearly, a comprehensive effort is needed, one that incorporates the best current thinking about the teaching of math, achieves consistency across the multiple sections of these courses, and provides academic support for most students within the course structure. Fortunately, several factors now make it more possible to do that.

To address a university-wide need to strengthen preparation in mathematics and facilitate degree completion, as part of its newly announced Academic Momentum Campaign, this year CUNY revised its developmental math policy [[New Placement Policies for Developmental Education at CUNY](#)].²⁰ Colleges now must offer multiple math pathways related to students' degree programs, streamline existing pathways, and revise the remedial exit criteria to include multiple measures rather than a single test.

20. Requirement of Affiliation 10 – "Institutional planning integrates goals for academic and institutional effectiveness and improvement, student achievement of educational goals, student learning, and the results of academic and institutional assessments"

During the 2017-2018 academic year, the Mathematics Department will pilot revised sequences both in quantitative reasoning for non-STEM students and in a STEM-focused sequence leading to calculus. This effort, to be brought to scale by Fall 2019, incorporates online tools and extensive professional development activities that faculty members are designing and piloting with support from a Title V grant, Opening Gateways. Developmental students who participate in one of the support programs such as SEEK or ASAP have additional resources. Remedial SEEK students (10- 15% of SEEK) receive an extra hour of support when enrolled in specially designated SEEK sections of remediation. All incoming SEEK students attend a weekly seminar during their first semester and receive at least 12 hours of mandated academic support. ASAP students attend a special orientation and regular workshops and advisement. Tutoring is mandatory for students who are falling behind.

While working toward proficiency, developmental students may choose from a subset of credit-bearing courses to maintain the academic progress requirements for financial aid. However, students who must repeat developmental courses risk using up so much of their limited financial aid that once they pass the developmental coursework they no longer have the financial resources to complete the degree requirements. Thus, students with substantial remedial or ESOL needs may be well advised to defer enrollment at the college and take advantage of City Tech's CLIP program, the college prep program at the BEOC, or CUNY's successful CUNY Start or Math Start [[CUNY Start](#)]. City Tech piloted Summer Math Start 2017 and is developing a year-round program to start in Spring 2018. Students who succeed in one of these programs are eligible to begin at City Tech in the following semester with their financial aid eligibility intact.

c. orientation, advisement, and counseling programs to enhance retention and guide students throughout their educational experience;

The one-year retention rate for full-time first-time freshmen for the Fall 2015 cohort was 77.3% for baccalaureate programs and 56.8% for associate programs. The one-year retention rate of baccalaureate full-time transfers for Fall 2014 was 70.7% [[2015-2016 PMP Report](#)]. After the first year, however, retention declines. Close attention is needed to ensure that obstacles are removed and better supports provided. According to the Noel-Levitz Student Satisfaction Inventory in 2015, student satisfaction was 4.9 out of a possible 7 for academic advising effectiveness, 4.8 for campus support services, 4.3 for admissions and financial aid effectiveness, 4.5 for registration effectiveness and 4.6 for service excellence [[2015-2016 PMP Report](#)]. Partially in response, efforts to increase student retention as well as improve the student experience are evident through the orientation, advisement, and counseling programs at the college.

Orientation is central to the new student's experience. In response to assessment data from post-event surveys, over the past four years under faculty, academic affairs, and student life collaboration, the process of new student orientations has undergone redesign. Events are scheduled by school/major with participation from all departments. All new students, both first-time freshmen and transfers, are invited to a daylong event incorporating general student information and a structured introduction to students' academic departments. The new process takes into account student adjustment needs, focusing on clarification of expectations. Currently, about half of incoming students participate; online orientation is being introduced to expand participation [[Fall 2016 Student Orientation Survey Report](#)]. Collaboration with the First Year Peer-Mentor program provides added support during the first semester. The goal of extending first year experiences beyond a one-day event into a full-year program informs future plans. The New Student Center advises all first-time students. After the first semester, advisement is handled at the departmental level by faculty, with support from the advisement office and via the online

degree audit system, DegreeWorks, available through the CUNY Portal. Results from the past two administrations of the Noel Levitz Student Satisfaction Inventory indicated that advising satisfaction ratings remained relatively constant until 2015 (=4.5 on a 7-point scale). A change in leadership occurred in 2015, which reflected a positive impact on student satisfaction. In 2016, the CUNY Student Experience Survey indicated only 22% of the students were dissatisfied with academic advising, in general [[CUNY 2016 Student Experience Survey NYCCT Advising Results](#)].

The recent student survey conducted by City Tech's Office of Assessment and Institutional Research shows that 45% (931) of the students surveyed (N=2081) agreed that their "program of study is clearly and accurately described in the college catalog and on the college website" and 44% (856; N=1957) agreed to being "familiar with the range of programs that City Tech offers" [[Middle States Student Survey Fall 2016 Report](#)]. Yet in open-ended questions, students reported not having sufficient information to succeed in achieving their education goals at City Tech because of inadequate or confusing/conflicting information. Therefore, with funding support from CUNY, clear, uniform advisement materials including redesigned degree maps are under development for use in Spring 2018 advisement, along with expanded training for faculty advisors [[Academic Momentum Proposal](#), [Degree Map Samples](#)]. CUNY introduced an updated version of DegreeWorks in summer 2017.

The Counseling Center focuses on the academic and personal support of the entire student body offering workshops, crisis intervention, academic probation/dismissal support, career/life planning, and personal counseling and referral services. Services are well utilized, with approximately 5000 student contacts per year. Efforts to increase utilization of services are conducted through tabling, classroom visits, and department meetings. Evaluation of services and student satisfaction is conducted on an ongoing basis with adjustments made as appropriate. The college has been monitoring the satisfaction of the counseling services, and overall, the satisfaction ratings have remained relatively constant as indicated by the Noel-Levitz Student Satisfaction Inventory since 2013 (=4.2 on a 7-point scale) [[2015-2016 PMP Report](#)].

d. processes designed to enhance the successful achievement of students' educational goals including certificate and degree completion, transfer to other institutions, and post-completion placement;

The university goal to ensure that students make timely progress toward degree completion makes credit accumulation an essential focus. Associate full-time first-time freshmen earned an average of 19.7 credits, close to the university average of 20.7 for associate degree students. On the other hand, baccalaureate full-time first-time freshmen earned an average of 22.8 credits in the 2014-2015 academic year, significantly lower than the university average of 26.1 credits for bachelor's degree students. In fact, only 9% out of 2,595 full-time first-year students in associate degree programs and 23% out of 537 in baccalaureate degree programs earned at least 30 credits that year, significantly lower than the university averages of 16.2% for associate and 32.1% for baccalaureate students ([2015-2016 PMP Report](#)). The combination of low family income and skills gained from career-focused programs, especially at the bachelor's level, make employment imperative or at least an enticing option [[College Fact Sheet](#)]. There is an academic rationale for advising "at-risk" students to take a lower credit load. To accelerate progress without overloading students, the college is focusing on increasing summer and winter enrollment and encouraging those who are able to take 15 or more credits each semester. At the same time, we are examining scheduling patterns to ensure course availability. To assure the transfer of credits to other institutions the college proactively establishes articulation agreements as a sending institution [[Articulation Agreements](#)]. Transfer of common core general education

courses is assured within CUNY [[Pathways Credit Transfers](#)]. Evaluation of courses at all CUNY institutions for transfer equivalency courses is a university priority, to be reported annually in the PMP.

The college employs varied academic support structures to foster student success. Specific program offerings differ, but typically include structured academic support services, including tutoring and advising. These programs perform laudable work as evident from retention rates that exceed that of the general population of the college. We consider them pilot projects to be studied and evaluated; effective components will be examined to ensure scalability so they can be institutionalized to benefit all students.

TABLE IV.1 Selected support programs

Program	Funding	# served	Focus	Services	Assessment/ results
Comprehensive programs					
ASAP - City Tech	CUNY (New York State and City)	Implemented at City Tech Fall 2015. Currently 1152; 1300 by 2019	Associate degree, esp. STEM. Raise 2 and 3-year graduation rates	Tuition waiver, book support, advisement, academic support, MetroCard, block scheduling	CUNY monitors retention, graduation, credit accumulation, and participation in advisement. Results Cohort 9 (Fall 2015). N=234. Graduates 34- Spring 2017; 15- Summer 2017; 52 Fall 2017 Total 2.5 years—74 (43%) Cohort 9S N=171. Graduates 71 Fall 2017. Total 2-year graduation rate for both cohorts (41.5%)
Early College (City Poly High School, P-TECH)	CUNY (New York City); New York State Education Dept. --Smart Scholars, New York City Dept. of Education	Approximately 500/ yr. per school	Pre-college through associate degree	Free 6 yr. program leading to an associate degree; college readiness; workforce readiness	P-TECH’s first cohort completed in 2016-2017. Of 97 students, 47 (51%) received an AAS degree. City Poly initiated 6-yr model in 2015, and will complete cycle in 2021.

SEEK [Seek Assessment of Academic Services Utilization, SEEK- Fall 2015 Status Report v1, SEEK In Focus 09 20 2016 v3, SEEK Comp Learning Outcomes Survey Kickoff Version v3, SEEK Fall 2016 Measurement Timeline]	CUNY (New York State)	1,043 in 2016-2017	Incoming students who meet financial criteria		The program prescribes “benchmarks” for students, as determined by their academic status (e.g., Freshmen, Probation, Continuing). Data gathered through the “SEEK Management System” is used to improve programmatic initiatives.
Pre-college or support programs					
BMI (Black Male Initiative)	CUNY	528 (2016-2017)	Black and Hispanic men, focused on STEM, but open to all	Tutoring, peer-mentoring; workshops; community service	# of participants, graduates, awards, honors
Center for Student Accessibility	College budget (Full-time staff); Perkins	516 (2016-2017)	Self-identification/ presenting disability documentation that speaks to the students’ needs and history of academic adjustments and reasonable accommodations	Academic adjustments and reasonable accommodations are specific and individualized to each student. Other services include a computer lab, assistive technology, English and Math tutoring, academic workshops, extended testing time in a separate location, and employment support through the CUNYLEADS program	As the bulk of the CSA work is directed by outside documentation, there is no formal assessment of individual students. CSA staff meet students to review academic adjustments and progress and suggest assistive technology or other supports. A formal assessment of program goals is in design
CLIP (CUNY Language Immersion Program) [CLIP One Page Site Reports, CLIP Matriculation scores by site, CLIP Student Demographic Profile, CLIP College Graduation, CLIP Fall Matriculation Memo]	CUNY	624 (2016-2017)	English Language Learners who defer enrollment	Intensive day or evening instruction	66.5% of 1,221 City Tech CLIP students who entered CLIP between Fall 2008 and Summer 2012 matriculated at CUNY within two years

College Now [College Now FY16 Final Report]	CUNY	375/yr.	Pre-College	College courses; college readiness	CUNY mandates a 90% completion with 75 % receiving a C or higher. In response to assessment, college readiness activities have been added.
CSTEP [CSTEP 2016-2017 Assessment and 2017-2018 Goals and Targets]	New York State Dept. of Education	262	Transfer/STEM/degrees leading to licensure	Advisement, workshops, undergraduate research	Persistence, graduates, GPA, credit accumulation
CUNY EDGE In FY17 CUNY EDGE (formerly COPE) [CUNY EDGE flyer, COPE Final Report FY 2013-2014]	New York City Human Resources Administration	Spring 2017- Fall 2017 = 500	Matriculated CUNY students with active cash assistance cases with the NYC Human Resources Administration (Limited number of students, eligibility determined by HRA Limited Intersession tuition assistance)	Advisement – academic, personal, professional; Career Development Services; Personal and Professional Development Seminars; HRA Administrative Compliance Duties – enrollment verification classroom attendance, attendance verifications; Paid Work-Study opportunities	Contractual Outcomes: Graduation Rate 35% percent will graduate on-time (3 years for Associate; 6 years for Bachelors) Yq1 Retention Rate At least 75% of students retained after Y1; at least 65% after Y2; 60% after Y3. Employment At least 200 participants employed each fiscal year Internships At least 210 students will participate in an internship each fiscal year
First Year Programs (CUE) [FYP Data 2016-17 APPENDIX]	CUNY CUE, Perkins	N=2717 (2016-17) 1237 in free developmental courses, 2016-2017; 405 in fall 2016 learning communities; 930 in math courses with PTLT; 145 in math prep workshops.	First, second year	Summer Immersion, First year Learning Communities, Writing across the Curriculum Faculty Professional Development	SI- enrollment, % eligible enrolled, pass rates; FYLC – enrollment – persistence, pass rates; WAC – assessment of learning outcomes; # of participants; FPD - # of participants

<p>Veterans Support Services [Veterans Support Services Additional Information]</p>	<p>Fall 2016 N=211</p>	<p>Counseling for VA/DOD benefits and financial aid, academic assistance, advising, mentorship programs, career advising, mental health counseling and social events</p>	<p>The director of the center monitors progress of the veterans and is working with the AIR to develop a formal assessment plan in addition to maintaining retention, GPA, credit hours accumulation, and graduation statistics.</p>
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Although City Tech’s graduation rates for both bachelor’s and associate degrees need improvement, the number of degrees conferred continues to rise. In 2016-2017, 1,263 students received bachelor’s degrees and 1,452 received associate degrees [[Degrees Awarded](#)]. The 2016 Student Exit Survey reported 87.6% of graduating respondents (N=145) planned to continue their education [[2016 Exit Survey Further Study Plans](#)]. In the same survey, 66.5% of the graduating respondents (N=166) sought full-time work [[2016 Exit Survey Employment Related](#)]. City Tech is well positioned to support students seeking further study and employment opportunities with its Professional Development Center (PDC), launched in Fall 2015. Nearly 53% of graduating students who indicated they were seeking employment reported utilizing the PDC. The PDC provides individualized assistance in person, via telephone and/or email as well as group-based workshops to both students and alumni. It promotes career and graduate school-related events on and off campus. A career service management system, CityTechConnect, links students and alumni with employers for internship and jobs. In addition to the PDC, graduates took advantage of faculty members in their department (~40%) and other college faculty and staff (~38%) to identify employment opportunities. As befits the growing bachelor’s population, guidance for graduate and professional school application has expanded, with an annual graduate school fair with over 170 student attendees in 2016 and assistance in preparing for the GRE and other standardized tests required for admission.

Criterion 2. Policies and procedures regarding evaluation and acceptance of transfer credits, and credits awarded through experiential learning, prior non-academic learning, competency-based assessment, and other alternative learning approaches;

City Tech’s career-focused programs make it a logical and attractive transfer destination. With the addition of new baccalaureate programs, the flow of transfers into the college has increased, both intra-CUNY and from outside [72% during the past ten years, see: [Transfer In Trends](#)]. City Tech employs several strategies to reduce obstacles, smooth the process, and ensure that transfer students receive the maximum number of credits contributory to their degrees: implementing CUNY Pathways, strengthening articulation with sending institutions, and establishing a Transfer Office with processes well integrated with the academic programs [[Articulation Agreements](#)].

The Pathways initiative implemented throughout CUNY in Fall 2013 established a framework for a 30-credit general education common core based on shared learning outcomes. Bachelor’s students take another 6-12 credits of general education through the College Option (the number of credits depends upon whether students transfer with the associate degree). Pathways has smoothed the transfer process of the general education requirements within CUNY because all colleges honor general education requirements satisfied at one of the other CUNY institutions. [[CUNY Pathways](#), [Pathways Credit Transfers](#)]

Formal articulation agreements facilitate movement into bachelor's degree programs. CUNY requires that all new bachelor's programs have at least one executed articulation agreement with an associate degree program; however, City Tech has gone well beyond that, developing multiple robust agreements. The provost's office maintains the roster of articulations and encourages programs to update existing agreements and develop new ones. Articulation agreements between its colleges are listed in the CUNY Chancellor's University Report (CUR) [[CUNY Chancellors University Report Guidelines](#)] and all articulation agreements are posted on college websites [[Articulation Agreements](#)]. Through participation in large collaborative grants with Borough of Manhattan and LaGuardia Community Colleges, we have begun to expand on the agreements to develop deeper relationships with sending programs and connect with potential transfer students earlier. The college is seeking a grant opportunity to develop as a transfer hub and increase collaborative activities with sending institutions. Meanwhile, however, several essential components of such a program, including degree maps, advisement protocols, and articulation templates, are under development. CUNY's implementation of an upgraded [DegreeWorks](#), its degree audit system, in Summer 2017 provides a valuable tool, as well.

To handle the influx of transfer students, the college has added staff in its Transfer Office, further supported through a CSTEP grant from the NYS Education Department. Closer collaboration between the Transfer Office and the academic programs has shortened the time needed for the evaluation of transfer credits [[CSTEP Outcomes and Goals 2016-2018](#)]. The Transfer Office conducts general education transfer credit evaluations, while academic programs evaluate major courses. Overall, decisions about the evaluation of transfer credits consider course equivalencies, including expected learning outcomes. Incoming transfer students can obtain information on their awarded transfer credit prior to registering in classes. As publicized on the college website, students who want their transfer credit evaluated prior to making a decision about coming to City Tech can email transfercreditappeals@citytech.cuny.edu.

Because of the nature of our professional programs and the requirements of their accrediting bodies, the awarding of credits for prior learning must be thoroughly vetted. Students seeking credit or advanced standing for prior learning come primarily from three sources: CTE high schools, labor unions, or the military. Several departments have formal articulations with both CTE schools and unions to award advanced standing to students who have completed specified learning outcomes. The Office of Veterans Affairs collaborates with departments to determine the best application of military credits to students' degree programs [[Veterans Support Services Additional Information](#)].

Criterion 3. Policies and procedures for the safe and secure maintenance and appropriate release of student information and records;

As a branch of CUNY, the college adheres to all university-wide written procedures regarding the protection of student privacy. This includes [CUNY Security Policies and Procedures](#) and [City Tech FERPA Policies](#), see specifically [CUNY IT Security Procedures](#). To protect the privacy of students, faculty and staff, protocols cover: limiting access to information only to individuals with a strict need to know; review of this list at least once each semester; acknowledgement of university policy by those individuals; severance of access upon termination; authentication, individual user IDs and passwords; disclosure policies; safeguarding of portable devices and records; maintenance of data; vulnerability assessments; and security incident reporting. The college safeguards student information and records conscientiously and endeavors to clarify for students and parents the Family Educational Rights and Privacy Act (FERPA), directory information, directory information waivers, and when/why to submit these forms.

Several administrative offices are devoted to maintaining student information and records, in particular the Registrar's office, under the aegis of Enrollment and Student Affairs, and the Office of the Special Counsel, which addresses legal and compliance issues. In addition to policies, guidelines, and official forms that govern the business processes necessary to maintain student records, two software programs are critical to maintaining the flow of operations that ensure compliance. CUNYfirst is the macro level record repository and purveyor of business processes (the student record, registration, financial aid, tuition). The calendar of CUNYfirst business processes is managed by the Office of Enrollment and Student Affairs, which also is the conduit for information from CUNY Central to relevant business offices at City Tech. Degree Works, a CUNY-wide software program managed locally by the Registrar, is a degree audit system that maintains the official record of a student's degree progress.

Criterion 4. If offered, athletic, student life, and other extracurricular activities that are regulated by the same academic, fiscal, and administrative principles and procedures that govern all other programs;

Student Affairs professionals play essential roles with students of all majors and disciplines at all stages of their undergraduate experience. It is well documented that student learning occurs both within and outside of the classroom environment. City Tech's Office of Student Life and Development (SLD) has worked with the Office of Assessment and Institutional Research to gain an understanding of institutional outcomes and student progress to attain these outcomes [[SLD General Brochure](#)]. As a result, SLD develops, coordinates, and manages a comprehensive program of activities and events, each designed to achieve specific learning outcomes, support student persistence and success, and ensure compliance with CUNY's fiscal management and effectiveness principles.

As mentioned above, in 2015 under a newly appointed director, SLD undertook a comprehensive assessment of its co-curricular program model to better align SLD's learning outcomes with the college's general education and program level learning outcomes. In keeping with City Tech's career-focused academic programs, significant changes were made to SLD's programming to support students' acquisition of workforce readiness skills.

The extra- and co-curricular programs offered by SLD are consistent with City Tech's mission, goals and objectives. Leadership development activities, a major pillar of SLD programming, build skills such as communication, time management, and teamwork that employers value. SLD works with student leaders and campus activity participants to increase students' ability to recognize, reflect upon, and communicate the value of their extra and co-curricular experiences by articulating the specific skills learned from their involvement. Programs developed by SLD utilize specific strategies such as peer-advising, skill-focused work-study employment, and collaboration with Academic Affairs leadership and departments. Three of the four pillars of the SLD programming model directly align with City Tech's general education Competencies: Intercultural Knowledge (or Diversity Education), Teamwork, and Civic Engagement. The Director provided an update of the status of the learning outcomes supported by SLD at the college's newly expanded Fall 2017 Assessment Forum, which for the first time included participation from student support units.

The college acknowledges that classroom approaches alone cannot achieve many important learning and student development outcomes. SLD seeks to expand interdisciplinary collaborations between Academic and Student Affairs and will make continued assessment of student learning in the co-curriculum a

priority. [[Student Life Mission](#), [Student Life Brochure](#), [Student Life Document](#), [Club Information Brochure](#), [Student Organization Manual](#), [Peer Involvement Advisor Guide](#), [Fiscal Accountability Handbook](#), [Student Government Election Guidelines](#), [Student Government Special Election Handbook](#)]

Criterion 5. If applicable, adequate and appropriate institutional review and approval of student services designed, delivered, or assessed by third-party providers;

Not Applicable

Criterion 6. Periodic assessment of the effectiveness of programs supporting the student experience;²¹

Following the 2008 reaccreditation visit, City Tech implemented a massive and successful effort to create a culture of assessment in its academic programs. As detailed throughout this Self-Study, the college has now expanded the focus of assessment institution-wide. CUNY's systematic collection and analysis of data through the Performance Management Process have been of enormous value in this effort, instituting an annual evaluation cycle and providing tools to assess virtually all policies, practices, and outcomes related to faculty, staff, operations, and students [[2011-2012 PMP Report](#), [2012-2013 PMP Report](#), [2013-2014 PMP Report](#), [2014-2015 PMP Report](#), [2015-2016 PMP Report](#), [2016-2017 PMP Report](#)].

Both the overarching issues of retention and completion and the various programs and mechanisms in place to address them are regularly assessed. A prime example of a program whose existence came about due to the assessment of low graduation rates in associate degree programs, ASAP provides students with financial resources, structured pathways to support academic progression, and academic support services. The goal of the program is to graduate at least 50% of students within three years. Since ASAP was initiated at City Tech in Fall 2015, students from its first two cohorts have just graduated. ([See Table IV.1](#)) Early data based on the academic progression of the first cohorts of ASAP students indicates that the 2-year, 2.5 year and 3-year graduation rates of associate degree students in the ASAP program will be substantially higher than that of the general student population at our college. In particular, 56% of the first cohort of 234 students who entered the program in Fall 2015 graduated or were retained into the Spring 2017 semester. The two-year graduation rate for this cohort is 22%; the projected 2.5-year rate is 43%, the projected three-year rate is 55%. Across the two cohorts, the two-year graduation rate overall is 29.5%.

In addition to ASAP, with the goal of improving retention and graduation rates, the college has successfully implemented other CUNY programs focused on improving access and success: CLIP (CUNY Language Immersion), CUE (Coordinated Undergraduate Education), College Now, Early College, SEEK, CUNY EDGE (supporting public assistance recipients). Aware of the well-demonstrated effectiveness of CUNY Start/Math Start in addressing developmental math needs, we are in the pilot/ planning stages of introducing that program to City Tech as well. Institutional grant applications have been guided by assessment. For example, analysis of data related to the role of math in college completion led to a successful Title V proposal, Opening Gateways.

Sound assessment practices now inform both macro-level institutional policies and a large and growing number of academic and student support programs. For example, the Learning Center surveys students at the end of their tutoring sessions [[Implementation Schedule for Accutrack](#)]. Learning Center personnel

21. Requirement of Affiliation 8 – “The institution systematically evaluates its educational and other programs and makes public how well and in what ways it is accomplishing its purposes.”

also evaluate staff, periodically observe tutoring sessions, and collect student pass rates. The assessment of tutors has led to upgraded tutor eligibility requirements. SLD administers student satisfaction surveys after student orientations and workshops [[Student Orientation Survey](#)]. The First Year Program academic support tracks student retention rates as well as student improvement in basic skills proficiency [[CUE Report 2015-2016](#)]. Counseling Services administers student surveys after their workshops and counseling sessions [[Evaluation of Individual Counseling Services](#), [Workshop Evaluation Fall 2015](#), [All Evaluations Fall 2015](#)], which helps guide their further development each semester. Outcomes assessment of CUE programs, such as the successful outcomes of a mathematics preparatory workshop, is leading to curricular developments.

Analysis of the demonstrably successful efforts to improve the student experience and increase success, as well as of more critical data such as that from the Noel-Levitz, National Survey of Student Engagement (NSSE), and CUNY Student Experience Survey [[AIR Surveys](#)] has led us to several conclusions that will direct our future focus. These include:

- Adopt a broad, comprehensive perspective, beginning with college access and pre-college information and preparation and extending through articulation and transfer to post-graduate education and career;
- Continue efforts to integrate goals, programs, and productive relationships between Student Affairs and Academic Affairs to increase impact;
- Without sacrificing efficiency and compliance, cultivate student-focused practices in all offices and operations, including academic departments, as well as academic affairs, student affairs, and business offices;
- Because most processes that cause students the greatest difficulty cross organizational boundaries, continue to analyze each process to remove obstacles and to improve hand-offs and information sharing;
- Engage faculty and encourage them to take a leading role, as they have in planning the new orientation, development of OER, and degree mapping; and
- Incorporate technology such as the OpenLab, City Tech's innovative online learning platform, to increase reach, improve communication, and increase effectiveness in ways that cannot be achieved through face-to-face processes alone.

Conclusion and Future Focus

City Tech will focus even more sharply on retention and graduation outcomes, bringing current efforts to scale: 1. using assessment data to identify those interventions demonstrated to be most successful and scalable, we will incorporate them into a comprehensive, collaborative, coherent system to support student success; 2. using technology to improve reach and effectiveness, we will ensure timely access to a full range of academic and student support services from pre-enrollment through articulation and transfer to post-graduation education and career opportunities. As funding permits, we will seek to acquire software that will support these processes.

Increasing student engagement and enhancing the student experience is another important point of focus. Continued growth of structured activities in SLD, the expansion of the new Orientation and First Year Experience and of Project Wayfinding will help to make the City Tech environment feel more engaging and more student-focused.

Recommendation 1:

***Implement a comprehensive, cross-institutional plan for student retention and success.
(Standard IV and I)***

City Tech's goals are at least to double the rate at which associate degree students either complete their degrees in three years or transfer to baccalaureate programs, and to achieve a six-year graduation rate of 50 % for bachelor's students. Over the next eight years, City Tech will make measurable progress towards this goal by:

- Coordinating extant retention and completion programs under a single cross-institutional student success effort;
- Identifying and implementing financially viable means of scaling particularly successful programs, like CUNY ASAP and orientation that focus on retention of first year and associate degree students;
- Implementing CUNY's recent policy on developmental math and streamlining the math sequences to remove a major obstacle to student progress and instead make learning math a path to success;
- Securing resources through grants and other means to acquire digital analytical and communication tools and further support student success programs;
- Effectively communicating to all students, faculty, and staff a broad understanding of student support resources and a shared vision of the student success agenda; and
- Promoting deeper student involvement in the realization and communication of the college mission by increasing student participation in college governance, and in institutional planning.
- Expanding support for faculty work in research, scholarship, and creative work, and in teaching, particularly the teaching of STEM disciplines.

Standard V: Educational Effectiveness Assessment

*Assessment of student learning and achievement demonstrates that the institution's students have accomplished educational goals consistent with their program of study, degree level, the institution's mission, and appropriate expectations for institutions of higher education.*²²

Current Snapshot. City Tech has undertaken a major transformation in how educational effectiveness is measured since the last Self-Study:

- Under the direction of the Office of Assessment and Institutional Research (AIR) and using a continuous improvement framework, the college has institutionalized a comprehensive system of educational effectiveness assessment at the institutional, program, and course levels. Institution-level assessment measures student attainment of general education outcomes across all schools and programs; program assessment measures attainment of student learning outcomes. Faculty also assess courses identified as critical courses within their degree programs in a systematic manner. This approach is implemented through a cyclical process in which faculty, chairs, and deans work collaboratively to ensure alignment of assessment with course, program, and institutional goals and objectives.
- Faculty leadership of assessment activities has been effectively expanded so that assessment liaisons are in place in every department, critical courses have been identified, assessment liaisons have been appointed in each school, discussion of assessment results occurs in every department, and assessment workshops are designed to involve the broadest possible segment of the various constituencies.
- Frequency of assessment reporting has been increased and has yielded results used to strengthen the institution, providing evidence of commitment to the appropriate assessment of student achievement throughout educational offerings, regardless of certificate or degree level. The college uses assessment data to make investments in resources that promise to improve teaching and learning.
- Moreover, City Tech has emerged as a leader in academic assessment within the CUNY system, winning recognition as best-in-CUNY at the Association for Institutional Research national forum on best practices in five of the past six years (2012-2017).

Criterion 1. Clearly stated educational goals at the institution and degree/program levels, which are interrelated with one another, with relevant educational experiences, and with the institution's mission;

Institutional Educational Goals. Educational effectiveness at the institutional level is correlated with relevant educational experiences and aligned with the college's mission. The education goals, presented in Standard I Criterion 3, reflect outcomes of students' learning experiences in general education curricula and address the knowledge, skills, and habits of mind that all students should acquire as they complete their courses of study. These outcomes lay the foundation for lifelong learning.

In 2013, CUNY implemented the system-wide Pathways initiative to ensure that regardless of a CUNY student's college of origin, he or she must fulfill a common set of general education requirements called Pathways. In turn, Pathways credits are universally transferrable across CUNY colleges; they must be accepted by the receiving institution. Very much like the college's independently derived

22. Requirement of Affiliation 9 – "The institution's student learning programs and opportunities are characterized by...appropriate assessment of student achievement throughout the educational offerings.."

general education goals, Pathways seeks to produce well-rounded graduates who have a critical appreciation of diverse cultural and intellectual traditions, a sense of history, and the ability to contribute to the improvement of society. Pathways also emphasizes skills through which such knowledge is gained: reading, writing, and quantitative reasoning. Pathways facilitates transfer from associate to baccalaureate degree programs and ensures coherence and rigorous intellectual standards across the university. City Tech’s general education curriculum is aligned with the system-required CUNY Pathways [[General Education Learning Goals](#)]. Faculty effort over the course of the 2015-2016 academic year validated the alignment between university Pathways course requirements and the general education offerings of the college [[Alignment of Gen Ed Outcomes to Pathways](#)]. Further, faculty have aligned City Tech’s general education outcomes with institutional career and professional goals.

Program Level Outcomes. All programs have clearly articulated student learning outcomes that are published in the college catalog [[Catalog 2017-2018](#)]. Additionally, all departments have documented course alignment with program outcomes, providing evidence of validity for the course requirements within their degree programs [Assessment Documentation Folder]. All degree programs will provide evidence of the alignment between the program-level student outcomes and the college’s revised mission statement. This mapping provides an opportunity to streamline the assessment process, yielding a more manageable, sustainable, faculty-driven assessment process.

Course Level Outcomes. All courses have clearly articulated student learning outcomes that are listed on the course outline. Each department has identified critical courses, which are assessed on a cyclical basis by the relevant faculty. Emphasis is placed on continuous improvement of course outcomes. A summary of improvements is discussed at the department level [Assessment Documentation Folder].

Criterion 2. Organized and systematic assessments, conducted by faculty and/or appropriate professionals, evaluating the extent of student achievement of institutional and degree/program goals. Institutions should:²³

a. define meaningful curricular goals with defensible standards for evaluating whether students are achieving those goals;

Meaningful curricular goals and defensible standards for evaluation, as defined by the responsible academic department, are in place. All assessment tools undergo rigorous validation efforts and analysis before being used to assess student learning outcomes, providing evidence of the institution’s commitment to ensuring that student learning opportunities provide rigor, coherence, and assessment to monitor student progress and make improvements as warranted. The student outcomes for each degree program are documented in the college catalog and on the college website, on the “Degree” page for each degree program under “Overview” [Sample: [Accounting AAS Overview](#); [Catalog 2017-2018](#)].

The institution systematically evaluates its educational programs on a cyclical basis. Since spring 2016, department chairs and their assessment liaisons inform the school dean and upload documentation on the status of their assessment activities on an annual basis, rather than the previous three-year assessment cycle, in order to ensure compliance with assessment plans submitted to the college. These documents are maintained on the college S-drive, a shared location. [Assessment Documentation Folder]. The following documents are maintained for each program/department on this secure server:

23. Requirement of Affiliation 8 – “The institution systematically evaluates its educational and other programs”

- Documentation of program-level assessment plans/cycle: a chart of the assessment activities of the program;
- Curriculum Maps aligning courses to program outcomes;
- Program-level assessment reports for all degree programs;
- Assessment cycle and plans for critical courses;
- Rationale for critical courses: narrative explaining why the course was selected;
- Reports for critical courses: documentation regarding the status of the critical course;
- Minutes of department meetings to discuss assessment; and
- The Department Assessment Committee membership roster, if applicable.

b. articulate how they prepare students in a manner consistent with their mission for successful careers, meaningful lives, and, where appropriate, further education. They should collect and provide data on the extent to which they are meeting these goals;

The outcomes defined for each degree program are designed to support the mission of the college by enabling students either to enter the workforce directly or be prepared to continue their education. This alignment has been documented for each degree program. In 2009, under the leadership of the provost, a new general education committee began to rethink general education in significant ways, so that instead of being considered primarily as a set of distribution requirements, general education is now understood to be a constellation of knowledge, skills, and habits of mind that provide the critical underpinning of all specialized technological and professional training. The resulting redesign of curricula serves rapidly changing professional programs and provides grounding to help students pursue meaningful, well-rounded lives. [[General Education Learning Goals](#)]. Members adopted 14 of AAC&U general education competencies as a tool to assess general education [[Gen Ed Assessment Workbook](#)]. We ensure the validity of the LEAP VALUE framework through rigorous validation and inter-reader reliability processes.

The CUNY system delegates the measurement of general education outcomes to its constituent colleges. Thus general education student outcomes are assessed college-wide and coordinated through the Office of the Provost and the AIR Office. In 2015, a committee of faculty drafted an academic assessment strategic plan, which was approved by the assessment committee liaisons from the college [[City Tech Assessment Strategic Plan 2015-2018](#)]. The college reports the general education results as the percentage of students that meets or exceeds each performance indicator. The results are shared with the president, provost, deans, department chairs, the Student Government Association, Student Affairs offices, and the wider college community. In addition, the results on student success are shared via college social media (Twitter, Facebook, Instagram). Based on the timeline developed by the Assessment Committee, City Tech is currently on schedule with all planned assessment activities [[Gen Ed Assessment Timeline 2016-2022](#)].

As of Fall 2017, the college will complete the full-scale assessment of outcomes in all of the fourteen pillars related to general education outcomes. As the work is completed, general education briefs are prepared and disseminated, in easy to understand, non-specialist prose, to present outcomes in each area to the campus community [Gen Ed Assessment Briefs Folder, [Gen Ed Assessment Briefs Website](#)]. In areas where careful examination has been completed, enhancements have been introduced, with promising results.

For example, Information Literacy is crucial in any institution, but most especially in a college of technology. During 2013, the college's full-scale assessment results of Information Literacy indicated

that only 60% of the students met or exceeded the faculty target. The Library faculty, supported by the college’s Living Lab Fellows program, were responsible for leading the institution’s effort to address this shortcoming (see Table V.1). When the re-assessment of Information Literacy occurred in 2016, the college increased the student attainment of faculty standards by six percent, with 66% of the students meeting or exceeding the faculty criteria.

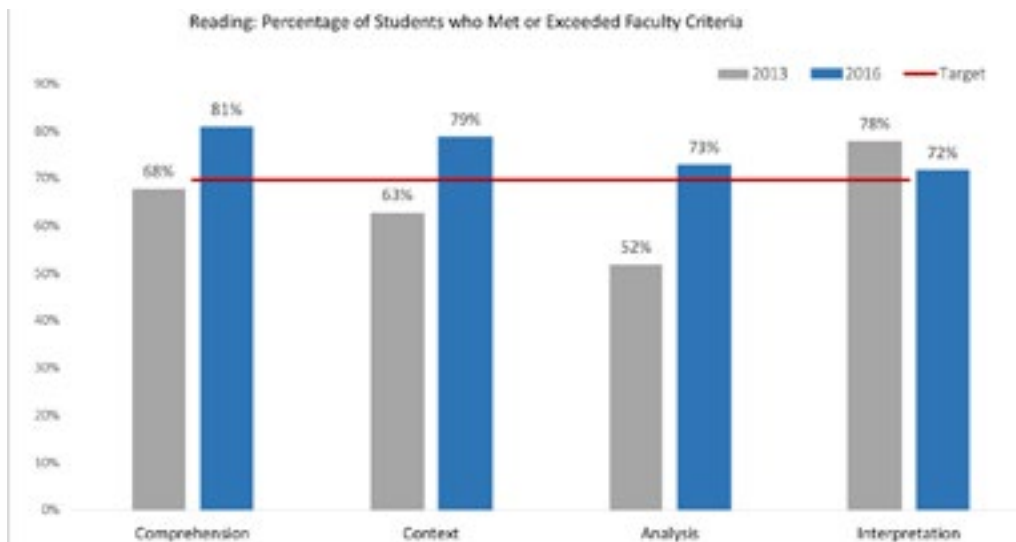
Table V.1 Faculty and student participation in information literacy intervention efforts

Semesters	Faculty Participation (N)	Student Participation (N)
Spring 2013 to Spring 2015	990	18,700
Fall 2015 to Spring 2017	763	14,380

Source. City Tech Library, August 2017.

Similarly, in one of the most diverse colleges in the nation, where more than half of the student population report a first household language other than English, reading comprehension is an issue of paramount importance. The results of the 2013 assessment of Reading indicated that only 65% of the students met or exceeded the criteria (see Figure V.2). As a result of this assessment, Reading Effectively Across the Disciplines (READ) was developed and institutionalized. The results of the 2016 Reading assessment indicated that 76% of the students met or exceeded the criteria of proficiency, demonstrating that the interventions derived from outcomes assessment made an important difference.

Figure V.2 Reading: Percentage of Students who Met or Exceeded Faculty Criteria



After the second full-scale assessment cycle for Writing was complete, a similar improvement was noted. In 2013, only 68% of the student met or exceeded the faculty criteria for Writing per the City Tech AAC&U modified rubric. Improvement strategies were implemented to address the shortcomings through the Writing Across the Curriculum and Living Lab Title V grant fellows. In 2016, the full-scale Writing assessment results indicated that 73% of the student met or exceeded the faculty target.

The general education competencies are not program-specific; they underpin all of our degree programs. Broad-based participation in the assessment of general education competencies is essential, and it has been successfully pursued. The table below (Table V.3) demonstrates this broad participation. As illustrated, the results of the general education/institutional outcomes assessment are utilized for institutional planning and ensure the integration of institutional and program goals, student achievement of these goals, and the identification and implementation of improvement strategies to improve outcomes.

Lastly, the university, the AIR office and several academic departments conduct alumni and exit surveys to determine the extent to which graduates report themselves as prepared for their careers, enriched personal lives, and further education. The college monitors reports of preparedness for the workforce. In the most recent census, approximately 95% of City Tech alumni reported they were prepared for the workforce (2016). A minimum of 90% of alumni indicated that City Tech had prepared them to write effectively, communicate effectively, engage in quantitative reasoning, think critically, and work effectively in teams [[2016 Alumni Survey Report](#), [Exit Survey Report Spring 2017](#)].

Table V.3 Number of students assessed for general education at City Tech from 2013 to 2016

Gen Ed Competency (students assessed)	2013	2014	2015	2016	Grand Total
Civic Engagement				85	85
Creative Thinking				75	75
Critical Thinking	69		69	425	563
Ethical Reasoning				166	166
Foundations and Skills for Life Long Learning		78		139	217
Information Literacy	105	95	356		556
Inquiry and Analysis				220	220
Integrative Learning				99	99
Intercultural Knowledge				211	211
Oral Communication	158		749		907
Quantitative Literacy	34			166	200
Reading	149	177		201	527
Teamwork				143	143
Writing	660		356	317	1333
Grand Total	1175	350	1530	2247	5302

Note. Assessment data are collected on a 3-year cycle. Some departments collect more frequently for their program level assessment purposes. [[Gen Ed Participation Summary 2013 to 2016](#)]

After discussions with the university institutional research staff, a standard was adopted of a sample of 100 in each of these full-scale data collection assessments. Where samples are larger because program-level assessment purposes were also being met, samples were weighted to prevent over-representation from these areas.

c. support and sustain assessment of student achievement and communicate the results of this assessment to stakeholders;

AIR's website [[City Tech AIR Home Page](#)] hosts support materials for assessment, past assessment data and results, and the roster of assessment co-chairs and liaisons for each of the schools [[Assessment Liaison Roster 2009 to present](#)]. Appointed by the provost, the assessment co-chairs are responsible for assisting each department's assessment liaison with department/program assessment activities, and for communicating the results of assessment to the college community. To sustain systematic assessment of student achievement, City Tech convened a faculty task force to evaluate software available to assist with regular assessment responsibilities, leading to the adoption of TK20®. The college-wide Assessment Steering Committee meets annually in August to discuss objectives for the coming year. There is a three-year cycle for program and general education assessment. School assessment committees meet twice per semester and once per semester for a college-wide meeting [[Assessment Dates 2016 to 2018](#)]. Department-level discussions occur on a regular basis, led by either the chair or the assessment liaison. Finally, assessment activities and results are also reported to the student body through the Student Government Association (SGA) in a joint presentation by AIR and the Office of Student Life and Development [[Survey Highlights SGA April 2017](#), [SLD General Brochure](#)]. Results are also shared via social media.

Assessment activity results are communicated to internal stakeholders in multiple ways. First, they are conveyed through department-level discussions, often shared with professional advisory boards. These boards are convened to gain valuable feedback for program improvement as well to invite employer perspectives on desired alumni competencies. Data received from external constituencies is highly valued and its solicitation is encouraged by the professional accreditation organizations. Second, this information is reported to the provost and the deans of each school on a yearly basis. Third, general education assessment activities conducted at the college level are communicated to senior administrators, faculty, and staff during college-wide general education committee meetings [[Gen Ed Assessment Activities](#)]. The committee members are responsible for reporting information back to their departments.

Criterion 3. Consideration and use of assessment results for the improvement of educational effectiveness. Consistent with the institution's mission, such uses include some combination of the following:

a. assisting students in improving their learning;

Assessment strengthens student learning across the curriculum from developmental education through the majors. For example, developmental courses have benefited from a consistent use of assessment results to identify strengths and weaknesses. Currently, 53% of City Tech students enter the college with one or more areas of developmental need (Reading, Writing, and/or Mathematics). For reading, assessment results were used to identify a software package, purchased using Carl D. Perkins funds, that improved student skills substantially. In addition, the READ program was launched as a result of general education Reading assessment results. Initially funded by CUNY Office of Academic Affairs and

subsequently by Perkins allocations, this successful initiative has been institutionalized. [[Cumming and Miller, 2017](#), [But et al, 2017](#)].

During the 2015-2016 academic year, the AIR office conducted an item analysis on the CUNY Elementary Algebra Final Exam and examined performance and exit from remediation trends. The results of this Research Brief (April 2016) were used to inform City Tech’s effort to revise its remedial mathematics program, which was discussed in more detail in Standard IV [[CUNY Elementary Algebra Research Brief](#)].

Assessment’s contribution to student learning in the majors through its essential role in program review is discussed in [Standard III](#).

b. improving pedagogy and curriculum;

Assessment in Grant-Funded Projects to Support Student Learning. Reviewing the results of assessment of general education outcomes has required the college to place a strong emphasis on the improvement of writing, reading, and quantitative reasoning. Several major grants have enabled City Tech to address these areas more effectively. Among them, US Department of Education (USED) Title V grant (2010-2015) of \$3.1M enabled the college to re-envision general education as a “Living Lab” and to develop a correlative culture of assessment for learning. A USED Minority Science and Engineering Improvement (MSEIP) grant (2015-2018) “supports development of digital tools and pedagogy strategies for teaching math.” These grants have enabled the college to build capacity in the use of high impact educational practices through faculty development activities coupled with classroom implementation. As each grant requires an assessment of outcomes and an evaluation of project impact, the college has a substantial portfolio of project evaluation reports that document both student outcomes and institutional impact [[NSF Research Spending](#), [Title V Living Lab Reports](#), [MESEIP 2016 Interim Report](#), [MSEIP Annual Report Jan 31 2017](#)].

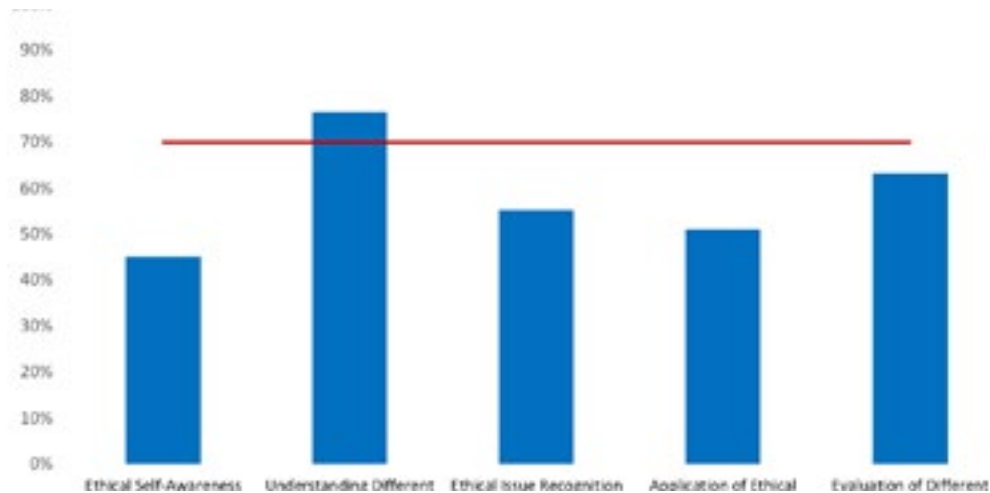
Living Lab Learning Library (L4). As a result of a five-year Title V grant awarded in 2011, the college institutionalized one of the major support programs developed, the Living Lab Learning Library (L4). Based upon general education learning outcomes assessment, L4 is a faculty-generated curriculum and pedagogy resource established in Spring 2016 to assist faculty in improving weaknesses identified through general education assessment activities. These resources help faculty to explore best practices in addressing areas of observed weakness. The results of the Fall 2016 general education assessment results, presented in Table V.4, indicated support was needed with respect to Ethical Reasoning. Thus, L4 has placed an emphasis on the areas where students need support, including: a) ethical self-awareness, b) ethical issue recognition, c) application of ethical perspectives/concepts, and d) evaluation of different ethical perspectives/concepts (see Figure V.5).

Table V.4 2016 Full-scale general education assessment results

General Education Competency	Percentage of Students Who Met or Exceeded Faculty Criteria	Number of Students Assessed
Civic Engagement	77%	85
Critical Thinking	70%	200

Ethical Reasoning	58%	166
Oral Communication	80%	749
Teamwork	78%	186

Figure V.5 Ethical Reasoning: percentage of students who met or exceeded faculty criteria [Gen Ed Assessment Briefs Folder]



Perkins Funding. The Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) provides federal postsecondary funding via the New York State Education Department (NYSED). City Tech receives approximately \$1M annually to support career and technical education (CTE) for associate degree students.

CUNY Strategic Investment Initiative Funds. Initially funded through CUNY Compact funds [now the [City Tech Foundation](#)], the Emerging Scholars (ES) program was used as a model to pilot test new research-centered sections of several courses in which hands-on research experiences were featured as a high impact practice. The results from the pilot were encouraging and revealed a similar effect to the ES program itself, based upon the student learning outcomes assessed [[Brown, Cumming & Pasley, 2017](#)]. In the most recent year, 251 students participated, and scale-up to reach more students is anticipated.

c. reviewing and revising academic programs and support services;

All degree programs are required to complete a Self-Study, including an external review, within a cycle of no longer than seven years. In some cases, the renewal of professional accreditation by specialized bodies serves as this review. This Self-Study schedule is maintained by the associate provost to ensure compliance by all degree programs and departments and is reported to the university (for a description of the process, see [Standard III](#)). At the program level, a comprehensive listing of strategies for improvement is derived from assessment results [[Program Improvement Summary](#)]. It is important to note the ways in which the assessment of learning outcomes has led to changes in the structure, content, and pedagogy of City Tech’s programs. Below are three abbreviated examples chosen from from the Program Improvement Summary.

- **Structure:** Assessment data of baccalaureate student outcomes in Communication Design showed a general weakness in problem-solving, reflected in the requirement to “Create a portfolio representing

conceptual and visual problem-solving abilities.” In response, the department put forward a curriculum proposal to change the format of the course COMD 4801, so that students will spend significant one-on-one time with the instructor.

- **Content:** In conducting program-level assessment activities, chemistry faculty determined that students struggled with one of the program outcomes, a sound understanding of the fundamental principles of chemistry, and identified that students struggled with understanding stoichiometric relationships. Faculty determined that the improvement strategy should be implemented in CHEM 1110 where the course coordinator will meet with all faculty to stress uniform coverage of the topic by teaching all sections using two different methods.
- **Pedagogy:** In the Fall 2015 semester, students fell below the target for showing hands-on skills in mechanical engineering technology systems, a basic skill necessary to successful program completion. Smaller size hands-on group projects were introduced in all feeder classes involving labs and CAD courses. The faculty also proposed to purchase more equipment and to allocate more space for the lab classes.

These examples also highlight the integration of academic assessment processes into institutional planning and improvement. The feedback loop ensures that assessment results are used at a granular level to improve the quality of education at City Tech and to keep academic programs in tune with emerging employment trends.

d. planning, conducting, and supporting a range of professional development activities;

Faculty Commons. The Faculty Commons: A Center for Teaching, Learning, Scholarship and Service was established following a recommendation of the 2008 decennial review as a comprehensive professional resource for faculty and staff. One of the center’s most important functions is to elevate the visibility of good teaching and promote the implementation of high-impact pedagogical practices across the institution. Extensive professional development is offered to address faculty needs. The AIR office and the Office of Sponsored Programs are co-located in the Faculty Commons to make their services easier for faculty to access [[Faculty Commons Pedagogy and Practice](#)]. Since 2009, 413 full-time and part-time faculty (unduplicated count) have participated in the AIR assessment-related workshops, leading to an increased understanding of the centrality of assessment to improving educational effectiveness. [[2013 Faculty Survey Results](#), [2016 Faculty Survey Results](#)]

e. planning and budgeting for the provision of academic programs and services;

Tech Fee. Many academic programs’ technology needs are supported through the Tech Fee, and resource allocation decisions are informed by assessment results. Given the technological focus of City Tech programs, constant enhancement of equipment and software is necessary. The college’s Tech Fee (a substantial source of technology funding: \$3.4M in the most recent year; \$4.1M projected for AY 2017-2018) is used for technology to enhance student learning [[Student Technology Fee Plan 2016-2017](#), [Student Technology Fee Plan 2017-2018](#), [CUNY Tech Fee Policy](#)]. Deans receive assessment reports from department chairs. Informed by these assessment reports, the deans have substantial responsibility for deciding what will be submitted for Tech Fee funding to improve courses and program outcomes.

CUNY Performance Management Process. This annual PMP report, discussed in detail in [Standard I](#), tracks important indicators of success using various assessment measures. Results indicated that City

Tech's incoming transfer student population was underperforming during their first year in comparison to transfer cohorts at other CUNY institutions. This finding led the college to invest substantially in hiring new transfer advisors. Accurate advisement, fair evaluation of transfer credit, and a clear degree plan are essential underpinnings for student success in technical and professional programs that have limited allowance for elective coursework. [[2011-2012 PMP Report](#), [2012-2013 PMP Report](#), [2013-2014 PMP Report](#), [2014-2015 PMP Report](#), [2015-2016 PMP Report](#), [2016-2017 PMP Report](#)].

f. informing appropriate constituents about the institution and its programs;

The AIR office provides different types of assessment results in a format that can be accessed by multiple City Tech constituencies. The AIR website contains information about the City Tech Assessment Plan, general education assessment tools, designated assessment liaisons per school and departments, surveys, student performance data, and the CUNY Performance Management Process. The online dashboard is a comprehensive and customizable tool that allows users to obtain graphical reports about key indicators such as Enrollment Trends, Six-Year Graduation Rates, One-Year Retention Rates, and Graduation Trends. By these means the AIR office disseminates assessment results and related literature. [[City Tech AIR Home Page](#)]

g. improving key indicators of student success, such as retention, graduation, transfer, and placement rates;

While program outcomes are correlated with improved retention and graduation rates, it is difficult to show a discrete impact of any one program on overall graduation and retention rates. However, the development of significant programs in core areas of academic difficulty that were identified by the assessment of student learning outcomes contributes to the slow but steady increase in associate degree graduation rates [[Six-year Graduation Rates Trends](#)]. Positive results have been achieved. This comprehensive and integrated approach has proven successful.

The First Year Program. Retention and graduation have long been key concerns for City Tech and the college makes a concerted effort to address the issue. Several special programs including City Tech's large First Year Program are offered as part of the Coordinated Undergraduate Education (CUE) Initiative, a widely emulated model [[CUE Report 2015-2016](#)]. These programs support a smooth transition from pre-freshman admission to successful entry into college programs and success during the first year at the college.

The READ Program. Faculty participate in workshops on strategies to improve student reading comprehension in gateway courses across the three schools. Architectural technology, biology, chemistry, computer engineering technology, dental hygiene, English, mathematics, and the business department have participated. These programs have overall shown marked improvement [[Cumming and Miller, 2017](#), [But et al, 2017](#)]. The rationale for developing READ, and its general education assessment results are discussed in [Standard V, Criterion 2](#).

Accelerated Study in Associate Programs (ASAP). Based upon extensive research, CUNY designed ASAP to help motivated students earn an associate degree as quickly as possible, with a goal of graduating at least 50% of students within three years or less. Initiated at City Tech in Fall 2015, ASAP began by serving students in STEM disciplines and, given the strength of the model, has been expanded to selected non-STEM areas [[ASAP – City Tech](#)]. It is discussed in detail in Standard IV. Efforts in this direction are promising. The ASAP program has the following retention rates:

- The Fall 2015 starting cohort had 234 students: 93.1% were retained into Spring 2016 and 83.3%

into Fall 2016 (1 year retention), vs. 63% for associate and 75% for baccalaureate students in the general population, clearly a statistically significant difference;

- For the Spring 2016 starting cohort, 171 students were enrolled. The program retained 95.3% into Fall 2016 (1 semester retention). This was the highest retention rate across all CUNY ASAP campuses for the cohort;
- The Fall 2016 cohort enrolled 330 students, a 41.6% increase over the previous Fall cohort; and
- **Graduation rates for the first cohort were: 22% in two years and 43% in 2.5 years, with a projected 3-year rate of 55%.**

h. implementing other processes and procedures designed to improve educational programs and services

Mathematics. The college has begun to focus intensively on increasing the success rate of students in foundational mathematics courses. A locally developed exam, a direct method of evaluating student learning, was the basis for Peer-led Team Learning (PLTL) initiatives in the Department of Mathematics, the Department of Construction Management and Civil Engineering Technology (CMCE), and the Department of Chemistry. Item analysis was conducted to identify areas of weakness, and programming was planned for improvements.

It was hypothesized that improving areas of weakness would translate to higher course-level pass rates. In the Department of Mathematics, the pass and withdrawal rates of the mathematics sections with Peer-Led mentoring (MAT 1175, MAT 1275, MAT 1375, MAT 1475, and MAT 1575) have been compared with the institutional rates at the end of each academic year. The overall results of Peer-Led sections range from five to 20 percent higher pass rates and a one to ten percent lower withdrawal rate. These results have led the Department of Mathematics to add more course sections with an additional one-hour Peer-Led component [[PLTL Documentation](#)].

Peer-Led pedagogies have also made important contributions to student success in other areas. The Department of Construction Management and Civil Engineering Technology (CMCE) requires all freshmen to complete the Statics course (CMCE 1115) as a prerequisite to their design courses. Approximately 90 to 120 students enroll in Statics each semester. A student's performance in Statics is predictive of success in the curriculum; without satisfactorily passing the course, it is unlikely the student will be retained in the major. Peer-Led workshops were implemented in Statics in Spring 2012 in an effort to increase student performance and decrease withdrawal rates. Prior to the implementation of Peer-Led workshops, the rate of students passing with a grade of C or better was about 50%. This percentage has increased steadily from 52% in Spring 2012 to 79.5% in Fall 2014 and the withdrawal rate has decreased from 33% in Spring 2012 to 16.5% in Fall 2014 [[CT Grade Distribution Report Spring 2012](#), [CT Grade Distribution Report Fall 2014](#)]. In other sections utilizing the PLTL method, similar improvements have been observed.

Criterion 4. If applicable, adequate and appropriate institutional review and approval of assessment services designed, delivered, or assessed by third-party providers;

Not applicable.

Criterion 5. Periodic assessment of the effectiveness of assessment processes utilized by the institution for the improvement of educational effectiveness.

Since City Tech's last Self-Study, assessment efforts have been vastly expanded, with an extensive investment of time and energy by faculty and staff. As reported in the last two faculty survey administrations, 2013 and 2016 [[2013 Faculty Survey Results](#), [2016 Faculty Survey Results](#)], faculty understand the importance of using assessment to help them build a better learning experience. City Tech has activities and measures in place for assessing the effectiveness of the assessment processes [[City Tech AIR Assessment](#), [Assessing Assessment 01](#), [Assessing Assessment 02](#), [Assessing Assessment 03](#), [City Tech Internal Evaluation of Assessment 2015_16](#), [NILOA Feedback](#)], including instruments for assessing the assessment of students, faculty, staff, administration, and alumni. They also include assessing our communication strategies with these diverse constituencies.

A recent faculty survey indicated that the majority of full-time and part-time faculty understood the importance of the assessment process. Specifically, faculty indicated that their departments have a systematic approach to assessing student learning, and use the results to make improvements (median=4 on 5-point scale) [[2016 Faculty Survey Results](#)].²⁴ Faculty indicated that they have respect for the assessment process, partially due to the psychometric properties that are considered in developing and administering the direct assessment instruments. For example, faculty are required to provide validity evidence for their assessment instruments, as well as applicable reliability evidence. When assessment practices are conducted in accordance with current best practices, there is a higher level of faculty buy-in for the process, particularly when faculty can see the results of their efforts via improvements in student learning [[Cumming and Miller, 2017](#)].

We also assess this process by examining several aspects of the assessment activities. Faculty began assessing the assessment process during Spring 2014, through a critical course evaluation activity across the three schools to consider how critical course assessment impacted the program level outcomes. [[Critical Course Assessment Workshop Agenda-May 2014](#)]. During the 2015-2016 academic year, the college undertook an external review of the assessment system coordinated by the *National Institute of Learning Outcomes Assessment*. The internal evaluation was submitted to NILOA and feedback was received in the Fall 2016 semester and was shared with the CTAC (steering committee), president, provost, school deans, and assessment committee members [[Internal Evaluation of Assessment](#), [NILOA Feedback](#)]. As a result, City Tech has made improvements to its assessment system to ensure:

- Accessible institution-level learning outcomes (general education) are communicated to students, as well as to external stakeholders;
- Full and transparent alignment between program outcomes and institutional outcomes (general education to program level outcomes);
- Assessment results are shared with the appropriate constituencies;
- The assessment protocol and results are available on either the TK20 dashboard or the shared drive;
- Communications via the AIR website as well as social media outlets are coordinated with the director of communications, to disseminate results to all constituents;
- Chairs in each school are required to report to their respective deans on assessment; and
- Assessment results are used in institutional planning and budgeting decisions.

24. Requirement of Affiliation 9 – “The institution’s student learning programs and opportunities are characterized by...appropriate assessment of student achievement throughout the educational offerings”

The overall findings of the external evaluation indicated that the assessment activities resulted in course and program-level improvements. However, the external reviewers recommended that greater transparency be achieved among different college units and that connections between them be strengthened to ensure that students benefit from an integrated assessment system. As a result, the AIR Office has recommended expansion of City Tech Assessment Committee membership to include representation from Offices of the Registrar, Enrollment Management, Student Affairs, Academic Advising, and Financial Aid.

During the past two years, City Tech has seen the benefit of integration of non-classroom staff into the assessment process. Student Life and Development Offices are actively participating in assessment activities, and AIR is actively involved in Student Life and Development activities.

These activities include:

- Reviewing assessment data from the AIR website to ensure that learning outcomes for the co-curricular program support the acquisition of pre-professional (career) skills, and all institutional efforts to support student achievement;
- Facilitating methods of disseminating assessment results to the student body;
- Administering a student survey to evaluate the new student orientation programs;
- Facilitating communication among student groups, faculty and administration; and
- Planning student life activities to reinforce general education outcomes.

Much has changed in the college's approach to assessment since the last Self-Study. A robust structure for faculty involvement has been created. Faculty liaisons are in place in every department. Assessment faculty co-chairs have been appointed in each school. Discussions of assessment results are held in every department. Workshops and conferences are held, to involve the broadest possible segment of the college's constituents. The college has emerged as a leader within the CUNY system with respect to academic assessment and a strong culture of utilizing assessment data to improve teaching and learning has emerged. However, the assessment efforts outside of Academic Affairs are still in a nascent stage with plans to institutionalize the academic assessment model and expand to other service areas. In sum, the college fully meets each of the criteria in Standard V. Assessment data has influenced the pursuit of initiatives and grant funding to improve educational effectiveness, and the results have produced positive results, reflected in enhanced student performance in key areas. There is much still to do in improving retention and graduation rates, with much on the horizon that is promising. The assessment data and processes are in place to support the setting of college priorities in pursuing the most promising programs and interventions.

During the past ten years, we have seen an increase in the graduation rates of bachelor's degree programs grow from 9% and peak at 30%—and we are still striving to increase this number as we transition from an institution that granted primarily two-year degrees to an institution that has generally granted more bachelor's degrees than associate degrees since 2013-2014 [[Six-year Graduation Rates Trends, Graduation Trends at NYCCT](#)]. With increased completion rates at both the associate and bachelor's degree levels, our students have gained the education and skills to obtain gainful employment that has made a significant economic impact on their lives. The most recent studies by PayScale, a research company that studies compensation, showed City Tech in a positive light. Their 2015 study of 597 colleges ranked City Tech associate degree graduates with the highest mid-career salaries in the group, while their 2016 study placed us third among their cohort in overall compensation [[PayScale](#)].

[Press Release](#)]. Recently, a well-publicized study by a group of Stanford University economists led by Raj Chetty, showed City Tech fifth among almost four hundred public colleges and universities in the social mobility of its students, measured by the number who are able to advance at least two income quintiles above their starting point [[America's Great Working-Class Colleges NYT](#)].

Conclusion and Recommendation: City Tech is committed to improving critical measures of student success in one-year retention rates and six-year graduation rates. Assessment is integral to improving these indicators. Sufficient data and processes are in place to support institutional prioritization of the most promising interventions and programs. Newer programs such as Early College partnerships with City Poly and P-Tech high schools and ASAP, both designed to support students' timely degree completion, provide models that can be scaled to move the dial on retention and graduation. Further, the impact of assessment is currently being broadened, as part-time faculty and non-instructional staff engage in assessment activities. Looking ahead, bringing assessment within Academic Affairs, Enrollment Management, and Student Affairs into closer coordination has the potential to provide the institution with a more holistic understanding of students' educational experiences and the complex array of factors that contributes to student success.

Recommendation 2:

Strengthen overall institutional effectiveness by building on practices instituted to assess student learning outcomes. (Standard V and VII)

Engage all units across the college in a continuous assessment process in which data are gathered and analyzed to guide institutional directions and improvement:

- Expand the City Tech Assessment Committee to include student and faculty support, business services, and administration including non-instructional activities of academic affairs;
- Expand assessment of learning outcomes to include student learning beyond the classroom; and
- Assess the effectiveness of college communications, both intra-institutional and external, in order to ensure that they support the communication-related goals defined in Recommendations 1, 3, and 4.

Standard VI: Planning, Resources, and Institutional Improvement

The institution's planning processes, resources, and structures are aligned with each other and are sufficient to fulfill our mission and goals, to continuously assess and improve our programs and services, and to respond effectively to opportunities and challenges.

Current Snapshot: City Tech's overarching institutional priorities over the past decade have been:

- To increase the number, quality, and diversity of full time tenure track faculty;
- To strengthen the physical and technological infrastructure by addressing deferred maintenance and institutional growth; and
- To ensure that technological and curricular resources are adequate to the academic needs of baccalaureate programs in new and rapidly developing fields.

The college has aligned and synchronized its planning processes with resource allocation processes at institutional and unit levels so that despite vicissitudes of public funding the college has been able to focus clearly on these priorities. These planning and resource allocation processes are transparent and inclusive; they have engaged broad participation among key sectors of the college community. The number of full-time faculty has grown from 304 in 2006 to 404 in 2017, a 33% increase over a decade. Major indicators of infrastructure investment include the creation of a major new academic building planned to open in 2018 and a major refurbishment of both the façade and interior of the Voorhees Building, which houses the majority of the departments in the School of Technology and Design. Finally, the transition of the college to a baccalaureate institution has entailed the creation of eleven new baccalaureate programs to date with requisite academic resources; five additional new programs are also in development. The priorities align directly with CUNY's Performance Management Process (PMP) goals, selected college focus goals, and institutional strategic planning goals as detailed in [Standard I](#).²⁵

Criterion 1. Institutional objectives, both institution-wide and for individual units, that are clearly stated, assessed appropriately, linked to mission and goal achievement, reflect conclusions drawn from assessment results, and are used for planning and resource allocation;

As explained in Standard I, City Tech's mission is deeply embedded in CUNY's academic mission. The attainment of the college's goals and objectives is assessed annually in the PMP, which itself derives from the CUNY Master Plan. The PMP measures institutional effectiveness in three performance domains: academic quality, student success, and fiscal and managerial effectiveness. These correspond to the administrative structure of City Tech in which responsibility and accountability are vested in a vice president for each of these domains. The PMP reflects the annual goals and objectives set by senior level administrators in collaboration with academic deans, department chairs, faculty, and various unit directors for the areas they oversee. These key stakeholders are evaluated annually to review progress and prioritize new goals and objectives for the coming year. City Tech reports to the university the results for each PMP objective [[PMP Target Report - NYCCT 2015-2016](#)], and progress towards each performance target is assessed and benchmarked against peer CUNY colleges. The college also provides a narrative Overview of University and Sector Goals [[Year-End Progress Report - NYCCT, 2014-2015 College Focus Goals Report](#)]. The president meets with the chancellor to review annual progress and identify areas to be emphasized in the coming year. The University Data Books show

25. Requirement of Affiliation 10 – Institutional planning integrates goals for academic and institutional effectiveness and improvement.

trends in performance indicators by college. Results for 2016-2017 and earlier are available via the link [Performance Management](#) and on [City Tech's AIR Performance Management page](#). [[2011-2012 PMP Report](#), [2012-2013 PMP Report](#), [2013-2014 PMP Report](#), [2014-2015 PMP Report](#), [2015-2016 PMP Report](#), [2016-2017 PMP Report](#)].²⁶ College focus goals were added to the PMP in 2014 as a means of enabling individual college presidents to determine specific foci in collaboration with their respective college communities within their particular institutional context.

City Tech's Strategic Plan reflects the goals and objectives of the process by which it was created. The plan aligns resource allocation with strategic goals and is guided by the college mission statement, PMP Goals and Targets, and College Council deliberations.²⁷

Criterion 2. Planning processes are documented, communicated, provide for constituent participation, and guided by assessment;

Academic planning is discussed at length in Standards III, [Criteria 1](#) and [5](#). Enrollment management planning involves continuous monitoring of data and communications with academic departments to adjust courses and sections offered, and to maximize space usage [[2018-2019 Enrollment Projection](#), [FY2018 2020 Financial Projection](#)]. Planning for fiscal and managerial operations likewise follows processes that are bottom up and top down. The CUNY PMP and annual college planning processes described in [Criterion 1](#) above, and in [Standard I](#), ensure that academic departments and administrative units participate in developing strategic priorities for the allocation of resources. The processes involve gathering input from faculty, students, administration, and staff to identify priorities for operational expenditures and capital projects.

The college also gathers data and input from constituents with regular local, university, and national survey instruments, including CUNY Student Experience Surveys and the Collaborative on Academic Careers in Higher Education (COACHE) faculty satisfaction survey. Longitudinal data evaluating faculty assessment of all aspects the nature of their work is tracked and used for improvement. The COACHE Provost's Report is posted on the Faculty Commons AIR website [[COACHE Provosts Report 2015](#)].

Some examples of constituent participation include:

- The allocation of the student technology fee (described in Criterion 3 below) by a representative committee that includes student members;
- Consultation over the last two years with academic departments moving to the new building to ensure the learning environments are appropriate; and
- Consultation with department faculty and staff during the planning processes for recent major facilities projects, for example, for the Departments of Architectural Technology, Communication Design, Construction Management and Civil Engineering Technology, and Physics.

See [Standard III, Criterion 4](#) for details and further examples of new or modified instructional spaces, technology infrastructure, and specialized labs that have resulted from consultations with academic program faculty and staff.

26. Requirement of Affiliation 8 – The institution systematically evaluates its educational and other programs and makes public how well and in what ways it is accomplishing its purposes.

27. Requirement of Affiliation 10 – Institutional planning integrates goals for academic and institutional effectiveness and improvement, student achievement of educational goals, student learning, and the results of academic and institutional assessments.

Criterion 3. Financial planning is aligned with mission, goals, and objectives;²⁸

City Tech receives an operating budget from CUNY Central, which receives funding from New York State and New York City and collects tuition revenues from all colleges. The CUNY Central budget allocation takes into account student enrollment, personnel obligations, maintenance and service contracts, and operational needs [[CUNY-Operating-Budget-Overview](#); [CUNY-2017-2018-Budget-Request](#); [Budget & Finance – CUNY](#)]. Based on the budget allocations, financial plans are developed [[Financial Report Summary 2012-2015](#), [Financial Report Summary 2015-2016](#)]. The academic departments via the school deans and unit directors participate in the financial planning process by submitting budget requests and additional requests with a rationale. Additionally, the college requests capital funding through a CUNY process, and receives capital funds from the state, city council and the Brooklyn Borough President’s Office [[5-Year+Reso-A Capital Requests CityTech 2017](#), [Analysis of Available City Funding 5.20.16](#), [CUNY-Capital-Budget-FY-2017-2018 through 2021-2022](#), [CUNY Capital Budget fy 2016-2017](#)].²⁹ External grants provide additional funding for institutional initiatives and individual faculty research [[Grant Year-End Summary 2016](#), [OSP Annual Statistics](#)].

A provision of Governor Cuomo’s 2015 Opportunity Agenda allocated \$12 million of the state’s total appropriation to CUNY’s senior colleges for the submission of institutional performance improvement plans designed to advance state and university priorities regarding student academic success, expanding access, progression and degree completion, online education, use of digital technology for instruction and academic support, research, and workforce preparation and employer engagement. In October 2015, CUNY’s Board of Trustees approved a performance-funding program, the CUNY Strategic Investment Initiative, to allocate the state’s \$12 million to CUNY colleges for projects initiated or expanded during the 2015–2016 academic year. The Strategic Investment Initiative and CUNY’s longstanding PMP process (described in [Criterion 1](#) above) are aligned to incentivize colleges to advance state and university priorities [[CUNY Master Plan 2016-2020](#), page 115].

All students at CUNY campuses pay a technology fee (Tech Fee) to fund technology equipment, software licenses, and related expenditures to ensure access to necessary up-to-date technology in support of academic objectives. Except for an assessment to support university-wide initiatives, revenues from Tech Fee are retained by the colleges. The Board of Trustees mandates that the Tech Fees be used in a timely manner to benefit current students college-wide. The Tech Fee Committee, with members from across the college evaluates requests from departments and schools [[Student Technology Fee Plan 2016-2017](#), [Student Technology Fee Plan 2017-2018](#), [CUNY Tech Fee Policy](#)].

CUNY directs the budgeting process. City Tech’s operating funds available from the state have not increased at a proportional pace with mandated costs, such as salaries and benefits, which have increased consistently. It is a persistent challenge to continually engage policy makers and funders, to exhaust the possibilities of a dwindling budget, and identify new financial resources and grant opportunities to meet the needs of City Tech students. Nonetheless, through careful planning, City Tech has continued to operate efficiently with conservative annual and long-range budget planning, to maintain a financial plan focused on student success, and utilize tax-levy funds in a cautious manner [[Financial Report Summary 2012-2015](#), [Financial Report Summary 2015-2016](#), [FY2018 4-year FINANCIAL PLAN](#)]. As noted in the president’s 2015-2016 self-assessment, “the college maintained an academically-

28. Requirement of Affiliation 11 – The institution has documented financial resources, funding base, and plans for financial development... adequate to support its educational purposes and programs and to ensure financial stability.

29. Requirement of Affiliation 11 – The institution has documented financial resources, funding base, and plans for financial development, including those from any related entities.

focused financial plan, improved productivity, and continued to limit the amount of tax-levy funds expended on administration” [\[2015-2016 Self-Assessment - NYCCT\]](#).

Criterion 4. Fiscal, human, physical and technical resources are adequate to support operations;

Adequacy of Fiscal Resources. [See Criterion 3](#), above.

Adequacy of Human Resources. In spite of financial constraints and challenges the administration has balanced significant enrollment increases and aligned the hiring of new faculty while developing new bachelor’s programs to fulfill the college mission and meet growing workforce demands. Among the CUNY colleges, City Tech has maintained the distinction of allocating the highest percentage of operating budget directly to students, and operates with the lowest administrative costs as measured by the ratio of students to HEOs (Higher Education Officers) in the university [\[2015-2016 Self-Assessment - NYCCT\]](#). Hiring at the college is highly competitive and all administrators are hired according to well-established procedures [\[Search Process Flowchart, Roles and Responsibilities in the Search Process, Changes to Hiring Process\]](#). Accordingly, administrators have the credentials and experience required to achieve the college’s mission. City Tech has consistently prioritized the hiring of a diverse and highly qualified full-time faculty, successfully filling 32 positions in 2014-2015 and 29 in 2015-2016. An agreement between the university and the union to bring the teaching load at City Tech into alignment with the other senior colleges in the system was implemented in the 2014-2015 academic year, reducing the full-time faculty teaching workload from 24 to 21 hours. In 2016 CUNY and the Professional Staff Congress (PSC, CUNY’s largest union) agreed on a new contract providing ten percent retroactive salary increases, increased benefits and a signing bonus for faculty and professional staff. In continuation of prior contracts, new full-time tenure-track faculty are supported with 24 workload hours of reassigned time for research at full pay during their first five years of re-appointment.

Challenges and Opportunities Related to Human Resources:

With limited resources City Tech is challenged to improve the ratio of full- time faculty delivering instruction which currently sits at 40.8% [\[2015-2016 PMP Report, p 2\]](#). In recent years the university’s annual PMP has included targets for incremental increases, but City Tech’s significant faculty hiring has not outpaced steady growth in enrollment and programs, contractual workload reductions, and reassignment of faculty both for departmental administration and grant-supported projects. Fortunately, the college’s major metropolitan location grants access to a large and highly qualified pool of part-time faculty, many of whom work in the related fields and add significant talent and experience to the programs for the benefit of our students.

Adequacy of Facilities. Overview of campus facilities, space allocation, and campus maps can be found in [\[CUNY Campus Statistics 2016, City Tech Map, 5-Year+Reso-A Capital Requests CityTech 2017\]](#). Focused efforts at procuring capital projects have successfully supported the implementation of more than \$615 million over the past 10 years for catching up on deferred maintenance, renovations, and new construction at the college. A recent overview of major projects is provided in [Status of Major Projects NYCCT January 2016](#). Looking ahead, the college community anticipates the opening of the new academic building in 2018, with over 355,000 square feet of classrooms, laboratories, faculty offices, and public spaces that include a theater and a gymnasium. The construction of the new academic building will maximize physical space and support further program development. City Tech has completed numerous physical and technical infrastructure projects in accord with City Tech’s annual goals and

targets, and communicates the status of ongoing projects to the college community through the Office of Computing Information Services and Administration and Finance newsletters [[Administration and Finance Newsletters 2012-2017](#)].³⁰

Challenges and Opportunities Related to Facilities Management:

- Efforts are underway to secure capital funds needed for the design and renovation of the Pearl Building, which to date includes a \$7.5 million allocation from the New York City Council [[5-Year+Reso-A Capital Requests CityTech 2016](#), [5-Year+Reso-A Capital Requests CityTech 2017](#)].³¹ This project provides the opportunity to repurpose and restructure existing space with input from stakeholders. The facility will be vacated in 2017-2018 by programs being relocated to the new academic building;
- The challenges of lean state budgets and the space constraints of our physical location will likely persist. To continue to fulfill City Tech's mission of "broad access to high quality technological and professional education," we must explore options for expanded modalities, including partnerships to provide hybrid, online, and off-site instruction and experiential learning opportunities.

Adequacy of Technology Resources. Technological resources are essential to achieving the mission and goals of the institution, and the college has made tremendous strides toward an efficient IT structure.

Upgrades to instructional technology and IT resources are continuous and ongoing:

- All campus classrooms have been equipped with instructor workstations with presentation technology (approximately 205 classrooms);
- Three years ago the college added a second Technology Enhancement Center; each of the two centers provides more than 75 computers for general student use [[G600 and G608 Student Survey Spring 2017](#), [V217 Student Survey Spring 2017](#)];
- There are approximately 91 instructional computer labs throughout the college, with an average of three to five labs created annually;
- Recent enhancements to IT resources include: bulk software licensing by CUNY for products utilized by all campuses; implementation of mobile apps for student access to CUNYfirst; and upgrades and module implementations for enterprise-wide systems for course management; and
- Implementation of a newly redesigned, intuitive, and mobile-friendly college website is providing a more effective means of communication for the college community and external constituents.³² Migration to a new network was implemented in November 2016 [[OCIS Newsletter Spring 2017](#), [Strategic Technology Initiatives Spreadsheet](#)].

Challenges and Opportunities Related to Technology Resources:

- Available capital funding provides opportunities to pursue needed IT and infrastructure initiatives;
- Collaboration with CUNY's Office of Computing and Information Services to pursue IT projects and software licensing will continue to provide economy-of-scale cost-savings; and
- Implementation of Resource 25 scheduling software will facilitate space assignments in order to maximize efficient use of classroom and general-purpose spaces campus-wide.

30. Requirement of Affiliation 10 – The institution systematically evaluates its...other programs and makes public how well and in what ways it is accomplishing its purposes.

31. Requirement of Affiliation 11 – The institution has documented financial resources, funding base, and plans for financial development, including those from any related entities.

32. Requirement of Affiliation 8 – The institution systematically evaluates its educational and other programs and makes public how well and in what ways it is accomplishing its purposes.

Criterion 5. Well-defined decision-making processes and clear assignment of responsibility and accountability;

City Tech is one of 11 senior colleges, seven community colleges and four graduate or professional schools in the City University of New York. As outlined in Section 6204 of the New York Education Law, CUNY has a governing board of 17 trustees, with 10 members appointed by the Governor and five appointed by the Mayor of New York City with the advice and consent of the New York State Senate. The CUNY Board of Trustees (BOT) has oversight over all branches of CUNY and is responsible for governing and administering all constituent colleges. [[Bylaws CUNY Board of Trustees](#), [CUNY Board of Trustees Handbook](#), [Minutes of Board of Trustees Meetings](#)].

The BOT Bylaws outline the authority and duties of the chancellor, president, and deans, department chairs, and faculty at the individual colleges. The Chancellor is appointed by the BOT and serves as the chief executive, educational and administrative officer. The president of each college is appointed by the BOT upon recommendation of the Chancellor and has full authority over all matters of the college. The president of the college is an “advisor and executive agent of the chancellor ... with full discretionary power to carry into effect the bylaws, resolutions, and policies of the board, the lawful resolutions of any board committees, and policies, programs, and lawful resolutions of the several faculties and students where appropriate.” City Tech’s president identifies and implements institutional plans, staffs the organization, allocates resources, and directs the institution toward attaining the goals and objectives set forth in its mission, including the expansion and modernization of the physical structure of the college, the creation of partnerships that benefit the organization, the expansion of faculty lines, and increased emphasis on scholarly work. [[Bylaws CUNY Board of Trustees](#), Section 11.4; [BOT Manual of General Policy 5.05](#)].

City Tech’s three vice presidents (Provost and VP for Academic Affairs, VP for Enrollment Management and Student Affairs, and VP for Administration and Finance), the special counsel, and the executive director of the Office of Faculty and Staff Relations, report directly to the president. The reporting structures under the three vice presidents are represented in the organizational charts [[Organizational Chart NYCCT](#), [Organizational Chart Office of the President](#), [Organizational Chart Academic Affairs](#), [Organizational Chart Enrollment Management and Student Affairs](#), [Organizational Chart Administration and Finance](#)]. There is no college board of trustees .

The Personnel and Budget Committee (P&B) is chaired by the president and meets at least monthly during the academic year. The president provides fiscal updates at most meetings. In accordance with the BOT Bylaws, the college Personnel and Budget (P&B) Committee makes recommendations to the president regarding the appointment, tenure, and promotion of academic personnel following recommendations made at the department level. The P&B consists of 30 voting members—the chairs of the 28 departments (which includes the library and Students Affairs plus 26 academic departments), the provost and the dean of Continuing Education. The executive director of the Office of Faculty and Staff Relations (OFSR) and Labor Designee serves as secretary to the committee. Minutes of P&B meetings are available in the OFSR.

Section 8.11 in Article VIII of the BOT Bylaws addresses the power of individual colleges to establish their own governance plans. College Council establishes college policy on all matters except for those specifically reserved by the BOT Bylaws, state laws or collective bargaining agreements. City Tech’s governance plan outlines the constitution of College Council, departmental elections, and administrative accountability [[City Tech Governance Plan](#)]. College Council membership includes ex officio members

with voting rights (e.g., president, provost, all vice presidents, deans), chairs from each instructional department, and voting unit (including college laboratory technicians and higher education officer series), and elected delegates-at-large and student delegates. The governance plan outlines the power and duties of College Council's officers and areas of responsibility of its seven advisory committees: Budget, Building and Grounds, Curriculum, Legislative, Personnel, Students, and Technology. These Standing Committees meet once a month for deliberation and report at the monthly general meetings of the College Council.

The College Council Curriculum Committee evaluates curriculum, including the review of proposals to develop and/or modify curricula, and to formulate curriculum policy, after development and approval at the departmental level and sign-off by the dean. All new programs undergo another level of review at CUNY Office of Academic Affairs before receiving approval from New York State. CUNY and state guidelines require proposals to demonstrate that new programs meet workforce needs and are fiscally viable [[College Council Curriculum Committee](#)]. The Buildings and Grounds Committee is collaborating with the Technology Committee to produce new models of classroom design that incorporate general education principles. The Budget Committee is "responsible for recommendation, review and evaluation of policy relating to the financial planning, budget allocations, the use of allocated funds and long-term planning of the college" [[City Tech Governance Plan](#), Article V. D. 10].³³ The vice president for administration and finance is in attendance at the Budget Committee regularly. The committee is required to produce a report to College Council every academic year. The president also attends the monthly College Council general meetings and reports on matters of budget and administration, with opportunity for questions and responses from those in attendance.

Vice presidents, deans, other Executive Compensation Plan (ECP) administrators who oversee units, academic department chairs, Higher Education Officers (HEOs), and non-instructional professionals are evaluated regularly and systematically by their supervisors. Quantitative and qualitative goals and targets are submitted annually by administrators, deans, and department chairs; outcomes are reviewed at the end of the year and become a part of the record in the annual evaluation process³⁴ ([See Standard I, Criterion 4](#)).

Decision-making at City Tech is shaped by influential groups that include the president's cabinet, Personnel and Budget (P&B), departmental governance, College Council, and Student Government. The decision-making and organizational structures at City Tech are clearly delineated with defined reporting relationships, performance assessment, and accountability. College executive, administrative, and academic management is evaluated on annual goals and targets for their respective areas.

Criterion 6. Planning for facilities, infrastructure, and technology includes consideration of sustainability and deferred maintenance, and is linked to strategic and financial planning processes;

CUNY develops an annual capital budget five-year request, which takes about six months to develop, beginning in April after the state budget ends. Meetings are held with senior staff at every college to discuss the progress of the existing construction projects, priorities, costs, and procurement. Over the summer, the facilities planning, construction and management staff refines details of projects, incorporates the results of state and city budgets, and updates scopes and costs. The college presidents

33. Requirement of Affiliation 11 – The institution demonstrates a record of responsible fiscal management, has a prepared budget for the current year

34. Requirement of Affiliation 10 – Institutional planning integrates goals for academic and institutional effectiveness and improvement, student achievement of educational goals, student learning, and the results of academic and institutional assessments.

then approve their college programs and priorities, which are presented to the CUNY Board of Trustees in October [[CUNY Master Plan 2016-2020](#), page 106-7; [5-Year+Reso-A Capital Requests CityTech 2017; CUNY-Capital-Budget-FY-2017-2018 through 2021-2022](#)].³⁵ The individual colleges produce four-year financial plans with projected operating resources and expenditures that provide a roadmap for fiscal sustainability [[FY2018 4-year FINANCIAL PLAN](#)].

Catching up on deferred maintenance has been a major focus of capital planning at City Tech over the past decade [[Administration and Finance Newsletters 2012-2017](#), [Status of Major Projects NYCCT January 2016](#), [NYC Funding](#)]. City Tech continues to prioritize projects to address decades of deferred maintenance, including:

- The conversion of ill-utilized space to useful spaces and much needed classrooms: \$1,950,000
- Namm Building elevator replacement: \$2,900,000
- Voorhees Building elevator replacement: \$2,200,000
- Atrium Building elevator replacement: \$700,000
- New central plant serving the existing main campus complex and designed to also serve the new academic building currently in construction: \$70,000,000
- Renovation of Voorhees Building façade: \$38,000,000
- Renovation of the lobby, corridors, cafeteria and student lounge in the Voorhees Building: \$7,000,000
- Renovation of portion of the Pearl building to provide upgraded spaces for Communications Design programs: \$14,200,000
- Enhancements and upgrades in security systems: \$1,400,000
- Namm Building bathroom renovations to achieve ADA compliance and with modern and efficient equipment: \$4,500,000
- Implementation of a new e-mail system as a result of stakeholder needs for more flexibility in technology services and mobile devices
- Namm fire pump replacement: \$120,000
- Namm replacement of heat exchangers: \$495,000
- Namm roof and plaza replacement: \$2,600,000
- Atrium lighting upgrades: \$700,000
- Upgrades of Hospitality and Culinary Arts facilities: \$750,000
- Namm Building Complex Fire Alarm system upgrade: \$500,000
- Welcome Center: \$1,300,000
- Namm Hall Façade renovation: \$11,000,000
- Namm Hall kitchen and cafeteria renovation: \$1,500,000
- College Bookstore: \$800,000
- Accommodation for accessibility in the design of all new construction and renovation projects in accordance to the guidelines set by the Americans with Disabilities Act (Namm restrooms, new entrance to the Namm complex, new entrance to Voorhees Building)

The colleges and CUNY collaborate on technology initiatives needed for achieving strategic objectives. Such is evidenced in the University Technology Initiatives plan. Colleges and CUNY Central IT plan and facilitate university-wide initiatives through the IT Steering Committee, which is composed of college Chief Information Officer (CIO), University CIO, and faculty and academic representatives. The college Office of Computing Information Services (OCIS) constructs annual goals and targets for planning college-wide technology

35. Requirement of Affiliation 11 – The institution has documented financial resources, funding base, and plans for financial development, including those from any related entities (including without limitation systems, religious sponsorship, and corporate ownership) adequate to support its educational purposes and programs and to ensure financial stability.

projects, upgrades, and maintenance based on input from the College Council Technology Committee and from the provost's Council on Academic Affairs. The implementation of a new email system, rescheduling of email password expirations and system maintenance, and goal-setting for a separate network that allows flexibility in teaching and research isolated from the secure campus network, virtual desktops and off-campus software access have resulted from user needs assessments.³⁶ [[CIS Goals Targets 2016-2017](#)]

CUNY Central IT collaborates with the colleges to assess needs for university-wide procurement contracts, maintenance contracts and software licensing. Examples include, but are not limited to the university-wide CISCO maintenance contract, Microsoft Software licensing and Internet Service provider contracts. A number of college-specific IT-related and facilities-related maintenance and equipment contracts promote cost-saving. Examples include college elevators, fire alarms, and other equipment utilized in academic programs such as radiologic technology mammography systems.

CUNY has taken a number of steps to improve the security of its data systems and to protect against disasters, including establishing information security forums, improving incident reporting and tracking of compliance, disseminating alerts and advisories, revising a security awareness-training module, implementing anti-phishing technology, applying more rigorous security architecture reviews, and coordinating centralized acquisition of security protections and services. CUNY also designed and launched a comprehensive program to bring professional best practices and a standardized approach to business continuity and disaster recovery (BCDR) planning university-wide [[CUNY Master Plan 2016-2020](#), page 113, [CUNY Information Security Policies and Procedures](#)]. The college's OCIS maintains a comprehensive BCDR plan. Critically identified data is replicated off-site. Colleges are working with university IT to build a more robust BCDR plan whereby colleges can replicate to university datacenters for business continuity purposes. CUNY is planning to deploy hybrid cloud services to improve IT service delivery efficiency and disaster preparedness across the university. Design is complete for a new state-of-the-art university data center with capacity for expansion and to offer disaster recovery computing environments to the colleges. CUNY will complete the new data center, migrate applications and operations, and go live by 2018 [[CUNY Master Plan 2016-2020](#), page 112].

City Tech maintains an [Emergency Response Plan](#), an [Emergency Response Guide](#), and various emergency and evacuation information resources available on the [Public Safety](#) webpages, including information how to react in an [active shooter scenario](#). All faculty and staff at CUNY are required to participate in an annual workplace violence prevention training program [[CUNY Policy Campus and Workplace Violence Prevention](#), [Fire Safety Director Maintenance Schedule](#)].

DASNY (the Dormitory Authority of the State of New York) and CUNY Central collaborate frequently to review facilities projects and university-wide technology initiatives. Opportunities exist through the continued development of university-wide maintenance agreements for similar equipment/services to minimize costs and ensure that preventative maintenance is a top priority. Planning is linked to strategic goals through the university PMP and goal-setting and resource request processes at the college and university levels.

Criterion 7. Annual independent audit confirms financial viability with evidence of follow-up on any concerns;

Audits are conducted externally and internally. CUNY also conducts audits on a yearly basis. Additionally, all auxiliary entities are audited by an external auditor. There were no concerns reported and no follow-

36. Requirement of Affiliation 10 – Institutional planning integrates...the results of academic and institutional assessments

up required. [[KPMG Basic Financial Statements June 2015](#), [Auxiliary Enterprise Board of NYCCT FY16, AEB MINUTES JAN 28 2016](#), [AEB MINUTES MAY 19 2016](#), [AEB Bylaws NYCCT](#), [Auxiliary Enterprise Corp and Boards CUNY Guidelines](#), [City Tech Foundation Bylaws](#), [College Association Financial Statements](#)]. These audited financial statements³⁷ are submitted to MSCHE through the MSCHE annual reporting.

The **CUNY Research Foundation (RFCUNY)**, a 501(c)(3) organization, serves as the fiscal agent for all governmental grants awarded to City Tech and for all grants from private sources that support personnel costs. Awards under RFCUNY management for all CUNY institutions exceed \$400M annually. RFCUNY issues a consolidated financial statement each July, audited by KPMG LLP.³⁸

Criterion 8. Strategies are in place to measure and assess the adequacy and efficient utilization of resources;

City Tech is continually measuring the adequacy of the institution through the utilization of the City Tech Strategic Plan, 2014 – 2019, annual goals and targets processes, and assuring goals and objectives are supported and realized through surveys and reports. The annual CUNY Performance Management Process allows for linking planning and goals initiated by the university to be integrated by City Tech and then assessed. The CUNY Performance Management Process (PMP), as described in [Criterion 1 above](#), has provided a sustainable measurement tool to improve effectiveness and transparency. CUNY PMP data are analyzed and evaluated. The college then addresses shortcomings formally in the next year's goals and targets, reviews progress, and adopts and implements improvement strategies.³⁹

In addition to the PMP data, local assessments are fully available and easily accessible with successful participation rates on [AIR website](#) [[AIR Surveys](#)]. Internal assessment surveys support the rigorous internal review by City Tech to assure transparency and compliance with planning and resource allocation. The COACHE Survey is a critical feedback tool on faculty satisfaction utilized by the college's administration and further evaluated by focus groups led by the Provost.

Criterion 9. Effectiveness of planning, resource allocation, and institutional renewal processes are periodically assessed.

Senior level administrators, including the vice presidents and deans set annual goals and objectives for the areas they oversee and, at the end of the year, meet with the president to review progress and prioritize new goals and objectives for the coming year. Goals are linked to measurable targets that can be evaluated based on data provided by the annual university PMP reports. Likewise, directors of administrative units and academic departments set annual goals and assess their achievement and evaluate their progress with the president and provost. [[Performance Goals and Targets 2015-2016](#), [Performance Goals and Targets 2015-2016 for CUNY Executives](#), [CIS Goals Targets 2016-2017](#)]. In this way, each office operates in the context of clearly stated goals for which there exist transparent assessment measures [[See Standard I](#) for details].

37. Requirement of Affiliation 11 – The institution demonstrates a record of responsible fiscal management, has a prepared budget for the current year, and undergoes an external financial audit on an annual basis.

38. Requirement of Affiliation 11 – The institution...undergoes an external financial audit on an annual basis.

39. Requirement of Affiliation 8 – The institution systematically evaluates its educational and other programs

The CUNY Performance Management Process (PMP) links planning and goal setting by the university and its colleges and professional schools, measures annual progress towards key goals, such as raising academic quality, improving student success, and enhancing financial and management effectiveness. For each goal, the university articulates objectives with representative indicators, and the college identifies specific targets each year. At the end of the year, City Tech reports to the university the results for each objective. Progress towards each performance target is assessed and the president meets with the Chancellor to review the college's progress and identify areas to be emphasized in the coming year [[PMP Target Report - NYCCT 2015-2016](#), [Year-End Progress Report - NYCCT](#)].

Conclusion and Future Focus: City Tech has a tripartite organization with a vice president for each institutional function: academics, student life and development, and budget, finance, planning, and facilities ([See organizational charts in Criterion 5](#), above). These three vice presidents are responsible for the management and oversight of their respective areas and report directly to the president. The CUNY PMP assesses university-wide goal attainment by which each college president is evaluated annually. The PMP uses the principles of continuous improvement management to help advance each CUNY college along a comprehensive set of benchmarks of institutional effectiveness. At City Tech, the three major organizational domains are at varying levels of assessment implementation. In the academic sphere, the measurement of student learning outcomes is driven by faculty under the guidance of the Office of Assessment and Institutional Research (AIR) and governed by Middle States and specialized accreditation agencies for particular programs ([See Standard V](#)). Assessment in the academic domain is highly developed. Increasingly, assessment of the effectiveness of enrollment management and student support resources and initiatives is being integrated with college-wide academic assessment activities so that major institutional indicators such as retention and graduation reflect not only academic assessment but a more holistic incorporation of non-academic aspects of the student experience. This integration of student support assessment with academic assessment will continue to expand. The assessment of operational and managerial functions for non-academic units including budget, finance, planning, and facilities is required by the PMP, which also uses a continuous improvement model to measure institutional effectiveness against CUNY-wide benchmarks for non-academic functions. While benchmarking the effectiveness of these functions against other CUNY colleges reveals excellence in indicators such as percentage of the institutional budget spent directly on students, an effort will be made to make the assessment process more transparent and widely understood.

Recommendation 4:

***Refine our facilities and technology master plans to take advantage of new opportunities.
(Standard VI and III)***

Optimize opportunities created by the new academic building, including space made available by the relocation of programs from the Pearl Building. To this end, the college will:

- Engage stakeholders in a cross-institutional review of facilities and technology plans in order to empower the college to fulfill its mission into the future: to attract external partners; to remain nimble and responsive to workforce needs; to support course availability and new modalities of instruction; to leverage technology for intellectual exchange and collaboration in an increasingly commuter context; and to cultivate a positive and cohesive institutional identity; and
- To respond to the increasingly interdisciplinary context for our programs, make resource sharing and collaboration a primary consideration.

Standard VII: Governance, Leadership, and Administration

The institution is governed and administered in a manner that allows it to realize its stated mission and goals in a way that effectively benefits the institution, its students, and other constituencies it serves. Even when supported by or affiliated with governmental, corporate, religious, educational system or other unaccredited organizations, the institution has education as its primary purpose, and it operates as an academic institution with appropriate autonomy.

Current Snapshot: City Tech has an administrative leadership and governance structure that supports attainment of its mission and goals. The governance structure is explicitly outlined and has built-in checks and balances. The president and administrators bring a wealth of experience and expertise to their positions. Built-in structures assure periodic assessment.

Criterion 1. A clearly articulated and transparent governance structure that outlines roles, responsibilities, and accountability for decision making by each constituency, including governing body, administration, faculty, staff and students;

New York City College of Technology has a well-defined system of governance in place that meets all of the attributes expected of an accredited institution [[City Tech Governance Plan](#)]. As outlined in Section 6204 of the New York Education Law, CUNY has a governing board of 17 trustees, with ten members appointed by the Governor and five appointed by the Mayor of New York City with the advice and consent of the New York State Senate. The CUNY Board of Trustees (BOT) has oversight over all branches of CUNY and is responsible for governing and administering all constituent colleges. The chairs of the University Faculty Senate [[CUNY University Faculty Senate](#)] and the University Student Senate [[CUNY University Student Senate](#)] serve as ex officio trustees, the former in a non-voting capacity, to avoid any conflict of interest. The University Faculty Senate consists of 136 elected senators and performs essential roles in governance by fostering the collective voice of all the colleges. The University Faculty Senate represents both full- and part-time faculty. Undergraduates participate in governance through the University Student Senate.

City Tech is one of 11 senior colleges, seven community colleges and four graduate or professional schools in the City University of New York (“CUNY”), with a total enrollment of 243,526 undergraduates as of Fall 2016. CUNY has a governance structure that serves the university’s mission [[Bylaws CUNY Board of Trustees](#), [CUNY Board of Trustees Handbook](#)]. The BOT conducts itself pursuant to the provisions of the BOT Bylaws, which are easily accessible on the CUNY website. In accordance with the BOT Bylaws, the BOT holds regular meetings in January, February, April, June, September and November that are open to the general public. Notice of time, place, and agenda for each regular meeting are posted online. All BOT meetings are webcast live at www.cuny.edu/livestream. Summaries of BOT actions and approved minutes are made available at <http://www2.cuny.edu/about/trustees> [[Minutes of Board of Trustees Meetings](#), [Podcasts of Board of Trustees Meetings](#)].

The BOT Bylaws outline the authority and duties of the chancellor, president, vice-presidents, deans, department chairs, and faculty at the individual colleges. The chancellor is appointed by the BOT and serves as the chief executive, educational and administrative officer. The president of each constituent college is appointed by the BOT upon recommendation of the chancellor and has full authority over all matters of the college. Specifically, the president of the college is an “advisor and executive agent of the chancellor ... with full discretionary power to carry into effect the bylaws, resolutions, and policies of the

board, the lawful resolutions of any board committees, and policies, programs, and lawful resolutions of the several faculties and students where appropriate.”

Section 8.11 in Article VIII of the BOT Bylaws addresses the power of individual colleges to establish their own governance plans. The BOT Bylaws also provide that duly adopted college governance charters govern in areas not otherwise covered, in Article VIII. City Tech’s current governance plan was approved by City Tech’s College Council on March 16, 2010, by the faculty on April 30, 2010 and by the CUNY BOT on June 24, 2013. City Tech’s governance plan, which is available online, addresses a number of governance-related issues, including the constitution of College Council, departmental elections and administrative accountability.

Per BOT Bylaws, article VII, college governance charters establish college policy on all matters except for those specifically reserved by the BOT Bylaws, state laws or collective bargaining agreements. College Council is the self-governance body of City Tech. Membership is outlined in Part I, Article II and includes ex officio members with voting rights (e.g., president, provost, all vice presidents, deans), chairs from each instructional department, and voting unit (including college laboratory technicians and higher education officer series), elected delegates-at-large and student delegates (including two students elected by the student government and four students from each school). The governance plan also outlines the power and duties of College Council committees in Article V.

The college constitution is organized according to the Plan of Governance for New York City College of Technology, with a separate set of procedures supplemented in the Bylaws for New York City College of Technology. Both governing documents have been written and amended in compliance with the CUNY Bylaws. While CUNY Bylaws provides rules governing the entire university, campus governing bodies are given wide berth for self-governance [[CUNY Bylaws](#), Articles VIII, Sec. 8.11; IX, 9.9; XV, 15.6; City Tech Governance Plan]. The College Council annually elects a chair, vice-chair, and secretary to serve as officers. Their responsibilities are defined in Article III of the City Tech Governance Plan. College Council is made up of seven Standing Committees: Budget, Building and Grounds, Curriculum, Legislative, Personnel, Students, and Technology. Specific responsibilities of each committee are defined in Article V of the City Tech Governance Plan. Current membership is available online [[College Council Standing Committees](#)]. Each committee elects its own chair and secretary. Standing committees meet once a month for deliberation and report to the entire College Council, when appropriate, at the monthly General Meetings of the College Council [[College Council Minutes](#)]. The chair of College Council is also a member of the University Faculty Senate. Governance Leaders from all CUNY campuses deliberate at monthly meetings and also communicate with one another through the committee listserv.

In addition to the governance plan, City Tech also has its own set of bylaws [[City Tech Bylaws](#)]. The College Bylaws, which were approved by College Council on May 31, 2001 with amendments approved by council on May 15, 2007, April 2008 and April 13, 2010, were “developed to define procedures necessary for orderly functioning of the College Council and other bodies described in the college constitution.” The college Bylaws address a number of matters including college-wide and departmental elections.

At the academic department level, the chairperson serves as the executive officer for the department. At City Tech, there are currently 28 academic chairpersons who are responsible for carrying out the department’s policies as well as those of the faculty and BOT. In each department, the chairperson and four other departmental faculty members constitute the departmental appointments committee, which is responsible for making recommendations to the college Personnel and Budget Committee (P&B).

In accordance with the BOT Bylaws, the college Personnel and Budget (P&B) Committee makes recommendations to the president regarding the appointment, tenure, and promotion of academic personnel following recommendations made at the department level [[Personnel Budget Committee Memo](#)]. Voting members of P&B include the chairs of the 26 academic departments, the chief librarian, the VP of enrollment and student affairs, the provost and the dean of continuing education. The executive director of the Office and Faculty Staff Relations (OFSR) and Labor Designee serves as secretary to the committee. P&B meets regularly during the academic year and minutes of these meetings are available in the OFSR.

City Tech's Student Government Association (SGA), consisting of an executive board and the SGA body, represents City Tech's students on all college policy issues. As outlined in the SGA Constitution, which was approved and ratified on October 2016, the executive board, all elected by the student body annually, includes the president, vice president, chief justice, treasurer, secretary, social director, and part-time/evening student representative. The SGA body is comprised of seven elected officers and 13 senators. The powers and duties of the Executive Board and the SGA Body are outlined in the SGA constitution [[SGA Constitution](#)].

Analysis: The College meets this criterion of the standard. Governance at the local level is organized to assure that the college fulfills its mission with respect to academic quality, planning, and fiscal well-being. Minutes demonstrate that the College Council is an active governance body.

Criterion 2. A legally constituted governing body that:

a. Serves the public interest ensures, that the institution clearly states and fulfills its mission and goals, has fiduciary responsibility for the institution and is ultimately accountable for the academic quality, planning and fiscal well-being of the institution;⁴⁰

Local governance at City Tech is active, participatory, dynamic and shaped by influential groups that meet regularly and include the president's cabinet, P&B, departmental governance, College Council, and Student Government. These multiple sources of authority and governance influence the college and set the climate of the institution. The president is the chief executive officer and is assisted by three vice-presidents. The job descriptions of these senior administrators clearly outline their roles and responsibilities [[Instructional Staff Handbook](#)]. Provost Bonne August has responsibility for overall academic quality, teaching and learning, faculty scholarship and research, and interfaculty collaboration. Vice President Miguel Cairol is responsible for facilities and the financial well-being of the institution. Vice President Marcela Katz-Armoza is responsible for the supervision of enrollment services and college life. Other senior members of administration assist the three vice-presidents.

Personnel & Budget (P&B) is chaired by the president and typically meets eight or more times during the academic year. A review of minutes demonstrates that the department chairs, provost and deans communicate important information about academic quality and planning. The Vice President for Enrollment and Student Affairs regularly updates the group on registration and enrollment. The president provides fiscal updates at most meetings. Chairs volunteer to serve on committees that review faculty in accordance with BOT Bylaws. Heightened attention to faculty scholarship has accompanied the improvements in faculty workload and reassigned time for scholarship.

40. Requirement of Affiliation 12 – The institution fully discloses its legally constituted governance structure(s) including any related entities (including without limitation systems, religious sponsorship, and corporate ownership). The institution's governing body is responsible for the quality and integrity of the institution and for ensuring that the institution's mission is being carried out.

Eligible tenure-line departmental faculty (reappointed at least once, not on Travia leave, have not submitted their resignation) elect chairpersons for a three-year period per CUNY guidelines. Responsibility for oversight of academic quality and renewal begins at the departmental level. Departments review their curriculum and outcomes and make revisions through votes at faculty meetings.

b. has sufficient independence and expertise to ensure the integrity of the institution. Members must have primary responsibility to the accredited institution and not allow political, financial, or other influences to interfere with their governing responsibilities;⁴¹

Myriad policies at the college, university, and state level help ensure independence and the avoidance of undue influences [[Conflict of Interest Policy](#), [Public Officers Law 73 JCOPE](#), [Public Officers Law 74](#)]. For instance, all employees must comply with the CUNY Conflict of Interest Policy, which provides that “all [university] activities shall be conducted in accordance with the highest standards of integrity and ethics...” The CUNY Conflict of Interest Policy includes several general standards of conduct including a prohibition on accepting other employment that will impair independence of judgment. Similarly, as previously noted in Standard II, as state employees, City Tech employees are subject to several sections of New York State Public Officers Law and Civil Service Law, including Section 73-2, which requires decision-makers to file annual financial disclosure statements. In addition, strict workload rules apply to faculty and staff members. Faculty must also adhere to the CUNY BOT Statement of Policy on Multiple Positions and complete multiple position forms each semester [[Multiple Position Policy](#), [Multiple Position Form](#)].

c. ensures that neither the governing body nor its individual members interferes in the day-to-day operations of the institution;⁴²

As previously noted, CUNY and City Tech have a complex, multi-tiered governance structure that emphasizes collective decision-making and self-governance. BOT Bylaws, for example, clearly outline the power and duties of the chancellor, president, and individual colleges. In addition, members of the various governing bodies on campus are elected to their positions and must meet specified qualifications in the Bylaws and Governance Plan. Curricular changes are initiated and approved at the departmental level and are vetted and approved by the College Council and CUNY BOT. Hiring, promotion, and tenure recommendations begin at the department level, then are vetted by the P&B which makes recommendations to the president, whose decisions must also be approved by the CUNY BOT. This system of checks and balances prevents individual members from interfering in the day-to-day operations of the institution. The Governance Plan has several provisions providing that individual members of College Council do not have the authority to act on behalf of the council. [[City Tech Governance Plan](#), art. III.A.7, III.B.6, III.D.8, V.B.9.]

41. Requirement of Affiliation 13 – A majority of the institution’s governing body’s members have no employment, family, ownership, or other personal financial interest in the institution. The governing body adheres to a conflict of interest policy that assures that those interests are disclosed and that they do not interfere with the impartiality of governing body members or outweigh the greater duty to secure and ensure the academic and fiscal integrity of the institution.

42. Requirement of Affiliation 13 – The institution’s district/system or other chief executive officer shall not serve as the chair of the governing body.

Table VII.1 City Tech governing bodies

Office/Organization	Responsibility
President	Conserving and enhancing the educational program of the college and providing leadership to the college community for the purpose of achieving these ends.
Provost	Chief Academic Officer
Department Chairperson	Executive Officer of the Department. Assigns faculty teaching schedule; chairs departmental Appointments Committee. Chairs departmental meetings where curricular changes must be approved at the departmental level.
Personnel and Budget	Review of the candidacies of faculty members for appointment, reappointment, promotion and tenure and recommendation to the president [Personnel Budget Committee Memo]
College Council	Body which establishes college policy on all matters except those specifically reserved by the bylaws of the state of New York, by the bylaws of the Board of Trustees of the City University of New York and the collective negotiation agreements in force. Most active in approving curriculum. [City Tech Governance Plan]
Departmental Appointments Committee	Review of the candidacies of faculty members for appointment, reappointment, promotion and tenure at the departmental level and recommendations to Personnel and Budget

d. oversees at the policy level the quality of teaching and learning, the approval of degree programs and the awarding of degrees, the establishment of personnel policies and procedures, the approval of policies and by-laws, and the assurance of strong fiscal management;

The College Council Curriculum Committee evaluates curriculum, [[City Tech Governance Plan](#), Article V.D.8] including the review of proposals to develop and/or modify curricula, and to formulate curriculum policy, as discussed in Standard III. Online records indicate that 18 major modifications were presented by the Curriculum Committee to College Council in the 2016-2017 year and all 18 were approved, along with two that had been submitted the previous year [[Past Proposals College Council](#)]. New programs undergo further review and approval at CUNY Office of Academic Affairs, the Board of Trustees, and the New York State Education Department.

Other policies to assure quality teaching and learning include college wide student evaluation of teaching, peer review at the departmental level ([Standard III, Criterion 8](#)), college-wide assessment of learning at the course and program level ([Standard V, Criteria 2b](#) and [3c](#)). Course outlines must include learning outcomes and assessment [[City Tech New Course Submission Form](#)] and are posted on departmental websites. New programs must have assessable programmatic goals and must demonstrate that they are projected to be financially sustainable when figuring in the cost of equipment and supplies, faculty, and revenue generated by tuition [[CUNY New Academic Program Handbook](#)].

The Personnel Committee is working on modifications to the Governance Plan regarding promotion procedures, and will collaborate with the Legislative Committee. Recently, the committee also reviewed the peer observation process for online and hybrid courses [[College Council Agenda March 22 2016](#), [College Council Minutes March 22 2016](#)].

The Legislative Committee is building a concordance table of the three components of the Governance Plan [[City Tech Governance Plan](#), [City Tech Bylaws](#), and [CUNY Bylaws](#)] in order to make university policy and procedure clearer and is testing a new electronic voting system, which will increase accessibility to voting on college-wide issues. The Buildings and Grounds Committee is collaborating with the Technology Committee to produce new models of classroom design that incorporate general education principles. The Technology Committee initiated a trial model for peer observation and student assessment of online courses, which received the approval of College Council.

As described in more detail in [Standard III](#), teaching is evaluated in accordance with the collective bargaining agreement. Every semester, faculty's teaching is evaluated by students [[Student Evaluation of Teaching \(SET\)](#)] in accordance with contractual guidelines. The results of the SETs are included in the faculty member's annual evaluation and reported in P&B. Teaching is also observed each semester by a peer designated by the department's appointments committee, in accordance with the collective bargaining agreement.

e. plays a basic policy-making role in financial affairs to ensure integrity and strong financial management. This may include a timely review of audited financial statements and/or other documents related to the fiscal viability of the institution;⁴³

The vice president for finance and administration reports to the president and is responsible for the fiscal operation of the college and the development of plans and procedures that are congruent with sound business practices and academic objectives. The Budget Committee of the College Council is "responsible for recommendation, review and evaluation of policy relating to the financial planning, budget allocations, the use of allocated funds and long-term planning of the college" [[City Tech Governance Plan](#), Article V. D. 10]. The Committee is also required to produce a report to college council every academic year. The Budget Committee meets monthly with the vice president for administration and finance. The president also attends the monthly College Council general meetings and makes a report to the body as a whole. The president's report provides information on matters of budget and administration with an opportunity for questions and responses from those in attendance. The college is audited annually.

The City Tech Foundation is a 501(c)(3) not-for-profit corporation chartered in 1981 under the laws of the State of New York. It is charged with the solicitation and acceptance of gifts to the college in support of City Tech's educational mission and programs. In addition to raising in excess of one million dollars for a variety of student scholarship, support of undergraduate research, faculty professional travel and other financial assistance programs, the foundation has secured a million dollars more in recent years in donated equipment to enhance both the educational and operational activities of the college. Decisions are discussed and voted upon at Board meetings [[City Tech Foundation](#)].

f. appoints and regularly evaluates the performance of the Chief Executive Officer;

The appointment of a president follows the CUNY guidelines for presidential searches and must be approved by the chancellor and the board of trustees [[Presidential Search Guidelines](#)]. The president is evaluated in accordance with the policy for executive evaluation as outlined in CUNY Policy 5.05 Chancellor and Presidents, Review and Assessment [[Chancellor and President Review Policy](#), [Executive Competencies Form](#)]. The criteria for evaluation include academic leadership, administrative leadership, relationship with the college community and role outside the college. President Hotzler has had an

43. Requirement of Affiliation 11 – The institution demonstrates a record of responsible fiscal management

annual evaluation meeting with the chancellor. CUNY is moving this to an every other year cycle beginning in 2017-2018. The content of the meeting is then summarized in an annual evaluation letter from the chancellor to the president.

g. is informed in all its operations by principles of good practice in board governance;

The governing bodies on campus are charged with guiding the overall direction of the college. The board of trustees approves the operating and capital budgets that the college president recommends, as well as any curricular changes. The president and vice president of administration and finance supervise investment in the college's infrastructure at the local level, and oversee campus real estate and long-range physical planning. They exercise prior review and approval concerning changes in major policies, such as those in instructional programs and admission, as well as the hiring of faculty members. Thus, it is imperative that they agree to abide by certain principles to ensure that personal and external bias do not influence policy. Further, best practices with regard to data collection and analysis, representation of the diversity of stakeholders, the use of key decision-makers, and the validation of policy decisions with respect to feasibility and transparency are followed. Lastly, closing the loop, the effectiveness of policy is assessed through well- defined processes.

h. establishes and complies with a written conflict of interest policy designed to ensure the impartiality of the governing body by addressing matters such as payment for services, contractual relationships, employment, and family, financial or other interests that could pose or be perceived as conflicts of interest;⁴⁴

As already discussed, myriad rules and regulations at the college, university, and state level help ensure independence and the avoidance of undue influences. For instance, the CUNY Conflict of Interest Policy provides that "all [university] activities shall be conducted in accordance with the highest standards of integrity and ethics..." [[Conflict of Interest Policy](#)]. The Policy includes several general standards of conduct including a prohibition on accepting other employment that will impair independence of judgment. Similarly, as previously noted in Standard II, as state employees, City Tech employees are subject to several sections of New York State Public Officers Law and Civil Service Law, including Section 73-2, which requires certain employees with decision-making authority to file annual financial disclosure statements. Information on the New York State Joint Commission on Public Ethics is available online at [NYS Joint Commission on Public Ethics](#). The Special Counsel is the designated resource person at campus who also provides trainings to applicable City Tech employees at specified intervals.

i. supports the Chief Executive Officer in maintaining the autonomy of the institution;⁴⁵

Although City Tech is part of CUNY and subject to many of its regulations and rules, the BOT Bylaws also provide that duly adopted college governance charters govern in areas not otherwise covered, in Article VIII. In addition, as previously discussed, there are several governing bodies on campus that work together in order to effect the mission of the college [[City Tech Governance Plan](#), [City Tech Bylaws](#), [CUNY Bylaws](#)].

44. Requirement of Affiliation 13 – The governing body adheres to a conflict of interest policy that assures that those interests are disclosed and that they do not interfere with the impartiality of governing body members or outweigh the greater duty to secure and ensure the academic and fiscal integrity of the institution.

45. Requirement of Affiliation 13 – The institution's district/system or other chief executive officer shall not serve as the chair of the governing body.

The governing board of CUNY has the legal authority and accountability in the area of policy as evidenced by the CUNY Bylaws, CUNY BOT policies and CUNY BOT minutes, available on the website [[Bylaws CUNY Board of Trustees](#), [Minutes of Board of Trustees Meetings](#)]. On campus, various other governing bodies ensure that City Tech achieves its mission and goals. There are ample opportunities for administration, faculty, staff and students to participate in governance at CUNY. Rules and regulations are in place to ensure that the governing bodies at City Tech have sufficient independence and expertise to ensure the integrity of the institution. The shared governance structure at the university and college levels ensures that no governing body or individual member may interfere in the day-to-day operations at City Tech. College Council, through its various committees, has continued to work diligently to further the mission of the college and make improvements wherever possible. Teaching is evaluated through peer observations and student evaluation of teaching. College Council through its Budget Committee also plays an active role in the fiscal operations of the college. City Tech's system of governance supports the President in maintaining the autonomy of the college while at the same time participating in the larger university system. The college abides by a rigorous conflict of interest policy.

Criterion 3: A Chief Executive Officer who:

a. is appointed by, evaluated by, and reports to the governing body and shall not chair the governing body;

The CUNY BOT appoints the president, who serves as the chief executive officer and has primary responsibility for leading the college and overseeing the administration. President Hotzler was appointed by the CUNY Board of Trustees in 2004 after a presidential search consistent with the guidelines of the CUNY bylaws [[Presidential Search Guidelines](#)]. The president participates in the Council of Presidents [[CUNY Bylaws](#), Article IV Section 4.2] and advises the chancellor on issues important to the college.

b. has appropriate credentials and professional experience consistent with the mission of the organization;

President Hotzler holds a Bachelor of Science Degree and Master of Science degree in Metallurgical Engineering and a Ph.D. in Physical Metallurgy from the Polytechnic Institute of Brooklyn (now NYU Tandon School of Engineering). He has vast experience in both teaching and administration. President Hotzler is particularly attuned to the CUNY mission, having served in many capacities at the university since 1971. [[President Hotzler Bio](#), [CUNY Bylaws](#), Section 11.4 The President]

c. has the authority and autonomy required to fulfill the responsibilities of the position, including developing and implementing institutional plans, staffing the organization, identifying and allocating resources, and directing the institution toward attaining the goals and objectives set forth in its mission;

The authority and autonomy of the president derive from the CUNY Bylaws [[CUNY Bylaws](#), Section 11.4 The President]. The president has identified and implemented institutional plans, staffed the organization, allocated resources, and directed the institution toward attaining the goals and objectives set forth in its mission. Examples of these actions included the expansion and modernization of the physical structure of the college, the creation of partnerships that benefit the organization, the expansion of faculty lines and increased emphasis on scholarly work. The workload for faculty was reduced from 24 to 21 workload hours per academic year in 2015. Other improvements included the creation of the Faculty Commons in 2009, the addition of the Office of Assessment and Institutional Research (AIR) in 2009, the recruitment of a chief diversity officer in 2007, and the creation of an assistant vice president and chief information officer position in 2015.

d. has the assistance of qualified administrators, sufficient in number, to enable the Chief Executive Officer to discharge his/her duties effectively; and is responsible for establishing procedures for assessing the organization's efficiency and effectiveness;

The president works closely with his dedicated and well-qualified senior administrative team in order to efficiently effect the mission of the college. The current members of the senior administrative team (president's cabinet) are listed below.

- Bonne August, PhD, Provost and Vice President for Academic Affairs
- Miguel Cairol, PhD, Vice President for Administration and Finance
- Marcela Armoza, PhD, Vice President for Enrollment and Student Affairs
- Pamela Brown, PhD, Associate Provost
- Kevin Hom, MArch, Dean, School of Technology and Design
- Justin Vazquez-Poritz, PhD, Dean, School of Arts and Sciences
- David Smith, DMA, Dean, School of Professional Studies
- Carol Sonnenblick, EdD, Dean, Continuing Education
- Gilen Chan, JD, Special Counsel
- Stephen Soiffer, PhD, Special Assistant to the President
- Angelo Pace, CPA, Assistant Vice President, Budget and Finance
- Rita Uddin, JD, Assistant Vice President, Chief Information Officer
- Vincent Roach, MPA, Assistant Vice President, Enrollment Management
- Wayne Robinson, MS, Executive Director, Business Management
- Sandra Gordon, JD, Executive Director of Office and Faculty Staff Relations and Labor Designee
- Vera Amaral, JD, Executive Director, Human Resources
- Jacinth Hansen, MA, Executive Director, BEOC
- Faith C. Corbett, MPA, Executive Director, Public Relations

As evidenced by their resumes, the senior administrative team members are well qualified by training and experience for the positions they hold. In addition, many members of the senior administrative team are long-term CUNY and City Tech employees, who have brought much stability and institutional knowledge to the process. For example, Bonne August has served as provost and vice president for academic affairs at City Tech since September 2006, having served as acting provost beginning in February 2005. Previously, she was chair of the English Department and professor of English at Kingsborough Community College/CUNY, where she had been on the faculty since 1982. Miguel F. Cairol came to City Tech in 2004 as acting dean for planning after serving in a similar capacity at York College, which also included responsibilities as special assistant to the president. Prior to his role at York College, Dr. Cairol served at Queensborough Community College/CUNY as Professor of Business Administration, Dean of Administrative Affairs, Dean of Facilities Management, Dean of Faculty and Staff Relations and Dean of Academic Planning. Marcela Armoza has served as vice president of enrollment and student affairs at City Tech since 2006, after serving one year as acting vice president. Prior to her appointment as vice president, Dr. Armoza, was dean of enrollment management and director of the SEEK (Search for Elevation and Education through Knowledge) program at City Tech, a dual position she had held since 2002. Dr. Armoza began her tenure at City Tech in 1994 as director of the SEEK program.

The role of college presidents in the governance structure of CUNY is well-defined. President Hotzler has extensive knowledge of CUNY based on his long tenure. He served as interim President at two other CUNY colleges during periods of transition. He is dedicated to CUNY's mission. The president has been

the architect of many improvements at City Tech and made dramatic progress since our last Middle States visit. Leadership is more effective, transparent, and participatory. The governance structure has been enhanced since the last Middle States visit. The president has the assistance of qualified and dedicated administrators who are equally committed to City Tech's important mission. The president works closely with his administrative team, which has enjoyed a period of stability since the last Middle States visit as indicated by the hire dates of the cabinet positions. Looking to the future, a new generation of administrators has come on board to carry on the institutional mission.

Criterion 4: An administration possessing or demonstrating:

a. an organizational structure that is clearly documented and that clearly defines reporting relationships;⁴⁶

The organizational structure at City Tech is clearly delineated with defined reporting relationships. Several members of the senior administrative team, including the three vice presidents, the special counsel, the Title IX officer, and executive director of office and faculty staff relations, report directly to the president. In turn, the organizational charts for the three vice presidents list the names and positions of those who report to them. For example, as the chief academic officer, the provost oversees the school deans, the associate provost, and all the full- and part-time faculty members in 28 academic departments, as well as directors of support units in Academic Affairs. [[Organizational Chart Office of the President](#), [Organizational Chart Academic Affairs](#), [Organizational Chart Enrollment Management and Student Affairs](#), [Organizational Chart Administration and Finance](#), [Organizational Chart Continuing Education](#), [Instructional Staff Handbook](#), [Position Descriptions and Resumes folder](#)]

b. an appropriate size and with relevant experience to assist the Chief Executive Officer in fulfilling his/her roles and responsibilities;

A review of the organizational charts and relevant position descriptions reflects that the college administration is an appropriate size and has the relevant experience to assist President Hotzler in fulfilling his roles and responsibilities. Review of the organizational charts shows clearly a defined organizational structure with delineated responsibilities, which is supported by carefully observed institutional policies. The organizational charts were compared to other CUNY four-year colleges such as Brooklyn and Queens College and found to be comparable. The organizational structures of both City Tech and a sample of other CUNY institutions are provided [[Organizational Chart Office of the President](#), [Organizational Chart Academic Affairs](#), [Organizational Chart Enrollment Management and Student Affairs](#), [Organizational Chart Administration and Finance](#), [Organizational Chart Continuing Education](#), [Brooklyn College Organizational Chart](#), [Queens College Organizational Chart](#)]. Comparisons between City Tech and the comparison colleges found that the size of the City Tech's leadership structure, while lean, was comparable to other schools. Hiring at the college is highly competitive and all administrators are hired according to well-established procedures. Accordingly, administrators have the credentials and experience required to effect the college's mission.

46. Requirement of Affiliation 12 – The institution's governing body is responsible for the quality and integrity of the institution and for ensuring that the institution's mission is being carried out

c. members with credentials and professional experience consistent with the mission of the organization and their functional roles;

As already previously noted, all of City Tech’s administrators are well-qualified by training and experience for their positions. Members of the administration are selected from a competitive pool of applicants and undergo a rigorous interview process. All finalists are interviewed by the president. Furthermore, the executive director of Office and Faculty Staff Relations (OFSR) reports directly to the president and oversees all personnel action related to the hiring of administrators and instructional staff at the college. The executive director of OFSR ensures that all relevant policies are adhered to and that finalists have the requisite qualifications and experience.

d. skills, time, assistance, technology, and information systems expertise required to perform their duties;

As previously demonstrated, the administration has the skills, time, and assistance to perform their duties. In 2015, Rita Uddin was promoted to Assistant Vice President and Chief Information Officer and became a member of the President’s Cabinet. This promotion emphasizes the importance of IT services at City Tech. In 2016, City Tech transitioned from GroupWise to Outlook, a faster and more effective email system. The college’s website was also upgraded, based in part on feedback from the college community, including department chairs.

e. regular engagement with faculty and students in advancing the institution’s goals and objectives;

A review of calendars and minutes demonstrates that senior academic and administrative leadership engage with faculty and students on a regular basis. The president and provost attend all College Council Meetings, as well as the P&B, which the president chairs. The provost meets four to five times a semester with the department chairs. Senior leadership, especially the president and the vice president for enrollment and student affairs, is very responsive to Student Government concerns. [[College Council website](#), [Sample P&B Minutes and Agendas](#)]

f. systematic procedures for evaluating administrative units and for using assessment data to enhance operations;

Since 2008, the college has a system to collect feedback from the faculty with the Collaborative on Academic Careers in Higher Education (COACHE) survey. Longitudinal data evaluating faculty assessment of all aspects the nature of their work is tracked and used for improvement. The COACHE Provost’s Report is posted on the [AIR Surveys](#) website [[COACHE Provosts Report 2015](#)]. The COACHE survey evaluates senior, divisional and departmental leadership. Results from the Faculty Job Satisfaction Survey from 2015 reflected that faculty felt recognition from senior administration for teaching, advising scholarship and service. In 2015-2016 Provost August conducted faculty focus groups to share results of the COACHE survey and identify solutions to areas identified for improvement.

One example of a change resulting from COACHE Survey data is that faculty expressed concerns about clarity of the tenure and promotion process in both the 2011-2012 and 2015 COACHE survey. The Faculty Commons now has a Professional Activity Report and Self Evaluation [[PARSE](#)] homepage which clearly describes the annual evaluation process, Tenure Track Reappointment Process, Cumulative Self Evaluation Process, Scholarly and Professional Growth, Service and Samples of PARSE and Teaching

Portfolios. The College Council Personnel Committee is currently working on improving the promotion process. The Office of Faculty and Staff Relations holds yearly seminars on the promotion process for the departmental appointments committees [[OFSR Fall 2017 Calendar](#)].

Higher Education Officers (HEOs), non-instructional professionals and Executive Compensation Plan (ECP) administrators who oversee units are evaluated regularly and systematically by their supervisors. Quantitative and qualitative goals and targets are submitted annually and outcomes are reviewed at the end of the year.

Technological resources and communication with stakeholders are essential to achieving the mission and goals of the institution, and the college has made tremendous strides toward an efficient IT structure. All members of the administration are regularly engaged both directly and indirectly with City Tech's faculty and students in order to advance the college's goals and objectives. For example, the President regularly meets with members of cabinet, including the provost and deans, who in turn regularly meet with the department chairs and faculty members. The college community also has several opportunities to come together at College Council meetings and BOT meetings, which are open to all and widely publicized. The COACHE survey has been an excellent source of data for the college to guide its improvement plan in several critical areas.

Criterion 5: Periodic assessment of the effectiveness of governance, leadership, and administration.

The administration garners feedback from alumni, faculty, students, advisory boards, and community residents through surveys, focus groups, open meetings, board minutes and reports. The data obtained from these various constituencies is utilized in the assessment and decision making process.

Internally, the president meets with his cabinet (vice presidents, deans and directors) regularly. Additional reporting systems aid in effective assessment including: Office of Assessment and Institutional Research documents, Computer Center reports, Affirmative Action and Diversity reports, City Tech budget documents and the Performance Measurement Process (PMP), the university-wide planning and outcomes assessment process. City Tech's PMP is derived from its mission statement and is organized into nine key objectives. This data-driven annual institutional review is designed as a useful tool to evaluate the college's progress in meeting its mission, goals and objectives. The goals and targets are developed at the departmental level and the incorporated into the School level and finally as a college-wide endeavor. City Tech's 2016-2017 goals are aligned with the university goals. The vice presidents and school deans set annual goals and objectives for their respective areas of responsibility, which are reviewed at the end of the year with the provost and president (see [Standard I, Criterion 1](#)).

An important component of assessing the effectiveness of governance, leadership and administration is the Collaborative on Academic Careers in Higher Education (COACHE) faculty and staff satisfaction survey. The findings of the most recent 2015 COACHE survey reveal that at the senior and divisional leadership levels, City Tech, vis-a vis its cohorts at other institutions, scored in the top 30th percentile and ranked higher than the comparison group [[COACHE Provosts Report 2015](#)]. Indeed, the areas of leadership strengths as indicated on the COACHE survey include: pace of decision making, stated priorities, communication of priorities and ensuring faculty input. It is anticipated that the new COACHE survey instrument will specifically include a section on assessing governance. Additional student surveys are used for assessment [[City Tech AIR Home Page](#)].

Leadership effectiveness is also measured in the CUNY bylaws mandated annual report that the president must present to the chancellor and CUNY Board of Trustees. At the end of each academic year, progress towards the college's performance targets is assessed and the president submits a Goals and Targets report to the CUNY chancellor. President Hotzler has consistently met this mandate with satisfactory performance outcomes. The accountability and assessment process includes the evaluation of the president by the CUNY Trustees.

Periodic assessment of the effectiveness of governance is reflected in President Hotzler's annual "State of the College" address to the college-wide community as well as in Provost August's reports. Indeed, the College Council governance plan, which was approved by the CUNY Board of Trustees, provides for such administrative accountability on the part of the president, academic deans, and department chairpersons through annual review of accomplishments at their respective levels of responsibility. Finally, a stated objective in the City Tech Strategic Plan 2014-2019 is to develop a cycle of assessment of college-wide governance efficiency, structures, and procedures. To date, the college's strategic plan is being adequately implemented. [[Strategic Plan 2014-2019](#)]

Conclusion and Future Focus: The college is successfully satisfying the Middle States criterion for periodically assessing the effectiveness of governance, leadership and administration.

Recommendation 2:

Strengthen overall institutional effectiveness by building on practices instituted to assess student learning outcomes.

(Standard V and VII)

Engage all units across the college in a continuous assessment process in which data are gathered and analyzed to guide institutional directions and improvement:

- Expand the City Tech Assessment Committee to include student and faculty support, business services, and administration including non-instructional activities of academic affairs;
- Expand assessment of learning outcomes to include student learning beyond the classroom; and
- Assess the effectiveness of college communications, both intra-institutional and external, in order to ensure that they support the communication-related goals defined in Recommendations 1, 3, and 4.

V. Conclusion and Recommendations

The ten years since City Tech prepared for the last reaccreditation review by the Middle States Commission have seen transformative change for the college—in size, strength of the faculty, scope of the programs, facilities, external relations, and opportunities for faculty and students. The college has adopted an outcomes-oriented general education program that adds dimension and richness to its career-focused degree programs, and has integrated systematic assessment meaningfully into our work. City Tech’s agenda for continued improvement is still urgent and full, but with the ribbon cutting for the college’s new academic building in Spring 2018 the college will attain a significant and highly visible milestone. A tremendous asset in itself, the new building will also free up spaces that can be used to leverage the next stage of City Tech’s growth and development.

Early in the Self-Study process, as directed by Middle States, we developed goals for the process. Each of our five goals speaks not only to City Tech’s current status but also to challenges and opportunities in the short and long terms:

1. Engage college constituencies in an inclusive and transparent Self-Study process that will expand their understanding of the broader context for the institution in which they study or work and thus enable fully informed participation in planning and decision-making.
2. Demonstrate conclusively that the institution meets all the standards and merits reaffirmation of accreditation.
3. Affirm for both external and internal constituencies the transformative process that has taken place at City Tech and will continue from a largely associate degree institution to an innovative college of technology offering an array of baccalaureate programs, well-connected to the disciplines, industries, and professions it represents and playing a unique role within CUNY.
4. Ensure that assessment of each area identified in the Standards is employed in an integrated process to move the institution forward.
5. Use the results of the self-analysis to generate wise and useful recommendations to inform the next iterative step in strategic planning.

The process has surely been both inclusive and transparent, involving virtually every academic and administrative department, as well as students. Committee members have expressed appreciation for the opportunity to learn more about how the college functions, the factors our students must contend with, and the larger issues that affect higher education. We have found, however, that our colleagues who are not directly involved, while interested in the recommendations and often invested in having a role in planning and decision-making, may be more focused on the impact to their own departments or disciplines than in higher education writ large. We now understand that engagement is a longer-term task, and that addressing some of the working groups’ findings related to sharing of information, supporting collaborative work, and facilitating communication and participation is essential to achieving an increased level of engagement. We recognize the role that sharing our Self-Study findings with the college community and considering their responses can play in strengthening that community and we look forward to continuing the process through the team visit and beyond.

The working groups reported that across the board and to a very high degree their analysis confirms that the college meets the Standards. As a constituent unit of CUNY, City Tech is located in a complex context, with many layers of oversight for virtually all aspects of our work. CUNY requires an annual review of the college’s progress toward meeting a structured and systematic set of goals with measurable targets.

CUNY's colleges gain numerous advantages from being part of this vast system, all within a single city. At the same time, under the president's leadership, each college sets its own course and articulates its own mission. City Tech, with nearly 8,000 students enrolled in STEM programs—by far the largest number of any CUNY college—has a unique mission in CUNY, as the only college of technology. It is a mission that is only now being understood and acknowledged by our CUNY colleagues.

City Tech's mission embodies an inherent challenge, charging us to create instructional designs and student experiences and supports that will enable a student population that is enormously diverse in the degree of college readiness to succeed in academically rigorous programs leading to rewarding careers. Like other open admission institutions, City Tech has not been as successful as we would wish in this regard; however, our commitment is unwavering, and we are giving top priority to a retention and completion agenda for our students. Every constituency with whom the committee has shared the results of this Self-Study has affirmed the pre- eminence of this goal for the college.

The college observes ethical standards and maintains integrity in its delivery of services and business practices. It offers programs of high quality, many holding separate accreditations, taught by a highly qualified and dedicated faculty. In keeping with our hands-on, career oriented focus, students have many opportunities for experiential learning. This serves them well, and the college scores high in the movement of alumni up the economic ladder. As the college has become more baccalaureate-focused, an increasing number of graduates continue in professional and graduate programs. The rapid pace of change in STEM disciplines, and especially in technology, has seen fields of study become increasingly interdisciplinary. Correspondingly, City Tech's faculty has eagerly explored potential interdisciplinary collaborations in teaching and in research. Services are in place to support the student learning experience, and a number of special programs offer additional benefits and have been shown to increase student success. Since the last Self-Study the faculty has engaged in comprehensive, ongoing assessment of student learning, and departments routinely incorporate their findings into curricular change, improved pedagogy, and program revisions. The physical resources, severely deteriorated in the early 2000's, have seen sweeping improvements, largely informed by the academic needs of the programs. To come, there will be spaces for students, faculty research and collaboration, Continuing Education's pre-college and workforce programs serving the community, and additional laboratories. Finally, a well-qualified president and administrative staff lead the college, and it enjoys an effective local governance body.

At the same time, the reports identified critical areas where the college is acting forcefully to address needed improvements. They also offered recommendations that will further the goals of the 2014-2019 Strategic Plan and begin to inform the next strategic planning process:

Recommendation 1:

***Implement a comprehensive, cross-institutional plan for student retention and success.
(Standard IV and I)***

City Tech's goals are at least to double the rate at which associate degree students either complete their degrees in three years or transfer to baccalaureate programs, and to achieve a six-year graduation rate of 50 % for bachelor's students. Over the next eight years, City Tech will make measurable progress towards this goal by:

- Coordinating extant retention and completion programs under a single cross-institutional student success effort;

- Identifying and implementing financially viable means of scaling particularly successful programs, like CUNY ASAP and orientation that focus on retention of first year and associate degree students;
- Implementing CUNY’s recent policy on developmental math and streamlining the math sequences to remove a major obstacle to student progress and instead make learning math a path to success;
- Securing resources through grants and other means to acquire digital analytical and communication tools and further support student success programs;
- Effectively communicating to all students, faculty, and staff a broad understanding of student support resources and a shared vision of the student success agenda; and
- Promoting deeper student involvement in the realization and communication of the college mission by increasing student participation in college governance, and in institutional planning.
- Expanding support for faculty work in research, scholarship, and creative work, and in teaching, particularly the teaching of STEM disciplines.

Recommendation 2:

Strengthen overall institutional effectiveness by building on practices instituted to assess student learning outcomes.

(Standard V and VII)

Engage all units across the college in a continuous assessment process in which data are gathered and analyzed to guide institutional directions and improvement:

- Expand the City Tech Assessment Committee to include student and faculty support, business services, and administration including non-instructional activities of academic affairs;
- Expand assessment of learning outcomes to include student learning beyond the classroom; and
- Assess the effectiveness of college communications, both intra-institutional and external, in order to ensure that they support the communication-related goals defined in Recommendations 1, 3, and 4.

Recommendation 3:

Improve scope, documentation, and transparency in the complaint resolution process

(Standard II)

Ensure clarity for all constituents regarding the processes for addressing stakeholder concerns:

- Enhance efforts to publicize complaint policies and procedures consistently online, and in all academic, student affairs, and business services offices, including those policies that are based on law, statute or regulations, i.e., Title IX, Sexual Harassment, Health and Safety;
- Make clear that CUNY and the College have established policies and procedures that address rights of the members of the community to communicate complaints; and
- Capture and utilize these data effectively for institutional improvement.

Recommendation 4:

Refine our facilities and technology master plans to take advantage of new opportunities. (Standard VI and III)

Optimize opportunities created by the new academic building, including space made available by the relocation of programs from the Pearl Building. To this end, the college will:

- Engage stakeholders in a cross-institutional review of facilities and technology plans in order to empower the college to fulfill its mission into the future: to attract external partners; to remain nimble and responsive to workforce needs; to support course availability and new modalities of instruction; to leverage technology for intellectual exchange and collaboration in an increasingly commuter context; and to cultivate a positive and cohesive institutional identity; and
- To respond to the increasingly interdisciplinary context for our programs, make resource sharing and collaboration a primary consideration.

Perhaps the most consistent thread, observed across the self-study, is the powerful conviction that the college is at an exciting point with strong enrollment growth especially at the baccalaureate level, new programs that address the needs of a rapidly evolving economy, an excellent faculty, greatly improved facilities, and exceptional internships and career opportunities for students. To move forward, City Tech as a community needs to address several challenges that are in part specific to this institution but that in large measure are typical of public universities and those experiencing transition and growth: resources, collaboration, integration of processes, and communication. The institution is confident that it will meet these challenges and continue to advance, providing increasing numbers of students with the high levels of economic mobility for which City Tech has become known.

VI. Committee Members

Executive Committee

Bonne August, Provost
Pamela Brown, Associate Provost
Barbara Burke, Director, Office of Sponsored Programs
Kim Cardascia, Executive Associate, Office of the Provost
Tammie Cumming, Director, Office of Assessment and Institutional Research
L. Jay Deiner, Associate Professor, Chemistry—Self-Study Co-Chair
Shelley Smith, Associate Professor, Architectural Technology—Self-Study Co-Chair

Steering Committee

The Steering Committee is composed of all of the members of the Executive Committee and all of the co-chairs of the Working Groups. Members are marked with *.

Requirements of Affiliation/Verification of Compliance

Co-Chair Pamela Brown, Associate Provost, Office of the Provost*^
Co-Chair Angelo Pace, Assistant Vice President, Budget and Finance*
Members Patricia Cody, Chief Diversity Officer and Title IX Coordinator
Ruth Garcia, Assistant Professor, English
Eric Lobel, Assistant Professor, Radiologic Technology and Medical Imaging
Emma Kontzamanis, Associate Professor, Nursing
Corie McCallum, Student Life Manager, Student Life

Standard I: Mission and Goals

Co-Chair Sue Brandt, Associate Professor, Entertainment Technology*
Co-Chair Faith Corbett, Executive Director, Public Relations*
Members John Akana, Assistant Professor, Hospitality Management
Loubna Aly, Student, Communication Design
Barbara Burke, Director, Office of Sponsored Programs
Paul Dorestant, Director, SEEK
Marta Effinger-Crichlow, Associate Professor and Chair, African American Studies
Denise Scannell-Guida, Associate Professor, Humanities (Communication)
Kimberly Strickler, Assistant Professor and Chair, Vision Care Technology
Muhammad Ali Ummy, Associate Professor, Electrical and Telecommunications Engineering Technology

Standard II: Ethics and Integrity

Co-Chair Gilen Chan, Special Counsel*
Co-Chair Peter Spellane, Associate Professor, Chemistry*
Members Alexis Chaconis, Director, Admissions
Sandra Gordon, Executive Director, Office of Faculty and Staff Relations
Amanda Marmol, Student, Legal Assistant Studies
Eli Neugeboren, Assistant Professor, Communication Design
Lisette Santisteban, Assistant Professor, Nursing
Vincent Roach, Assistant Vice President, Enrollment
Wayne Robinson, Executive Director, Business Management

Standard III: Design and Delivery of the Student Learning Experience

Co-Chair	Hong Li, Associate Professor and Chair, Computer Systems Technology*
Co-Chair	David Smith, Dean, School of Professional Studies*
Members	Daniel Alter, Associate Professor, Restorative Dentistry Monica Berger, Associate Professor, Library Jill Bouratoglou, Associate Professor, Architectural Technology L. Jay Deiner, Associate Professor, Chemistry*^ Renata Ferdinand, Assistant Professor, English Gilberto Gerena, Director of Education Programs, Division of Continuing Education Randall Hannum, Assistant Professor, Social Science (Economics) Boyan Kostadinov, Associate Professor, Mathematics Amera-Rime Lulu, Student, Communication Design Masato Nakamura, Assistant Professor, Mechanical Engineering Technology Andleeb Zameer, Assistant Professor, Biological Sciences

Standard IV: Support of the Student Experience

Co-Chair	Marcela Katz Armoza, Vice President, Enrollment and Student Affairs*
Co-Chair	Justin Vazquez-Poritz, Dean, School of Arts and Sciences*
Members	Cynthia Bink, Director, Counseling Yelena Bondar, Director, ASAP Dorie Clay, Director, Student Life and Development Caileen Cooney, Assistant Professor, Library Caroline Hellman, Professor, English Kenneth Parker, Assistant Professor, Mathematics Mariah Rajah, Student, Professional and Technical Writing Hercules Reid, President, Student Government Association, Student, Architectural Technology Tasha Rhodes, Registrar Noemi Rodriguez, Lecturer, Health and Human Services Lourdes Smith, Director, Transfer Center and Recruitment Jenna Spevak, Associate Professor, Communication Design

Standard V: Educational Effectiveness Assessment

Co-Chair	Tammie Cumming, Director, Office of Assessment and Institutional Research*^
Co-Chair	Stephen Soiffer, Special Assistant to the President*
Members	Lauri Aguirre, Director, First Year Programs Ralph Alcendor, Assistant Professor, Biological Sciences Corina Calinescu, Assistant Professor, Mathematics Angela Kavanagh, Director, New Student Center Timothy Medina, Student, Construction Management and Civil Engineering Technology Benito Mendoza, Assistant Professor, Computer Engineering Technology Susan Nilsen-Kupsch, Associate Professor, Dental Hygiene Susan Philip, Associate Professor, Hospitality Management Gerarda Shields, Associate Professor, Construction Management and Civil Engineering Technology

Standard VI: Planning, Resources, and Institutional Improvement

Co-Chair	Miguel Cairol, Vice President, Finance and Administration*
Co-Chair	Lynda Dias, Assistant Professor, Hospitality Management*
Members	Catherine Cullen, Lecturer, Environmental Control/ Facilities management Michael Duddy, Assistant Professor, Architectural Technology Maria Pagano, Associate Professor, Social Science (Psychology) Saul Rodriguez, Student, Computer Systems Technology Denise Sutton, Director of Communication Rita Uddin, Assistant Vice President and Chief Information Officer Luis Vasquez, College Laboratory Technician, Communication Design

Standard VII: Governance, Leadership, and Administration

Co-Chair	Margaret Rafferty, Associate Professor and Chair, Nursing*
Co-Chair	Vera Amaral, Director, Human Resources*
Members	Lucas Bernard, Associate Professor and Chair, Business Tori Carlisle, Student, Legal Assistant Studies Peter Catapano, Associate Professor, Social Science (History) Sandra Cheng, Associate Professor, Humanities (Art History) Lise Hunter, Professor, Law and Paralegal Studies Shelley Smith, Associate Professor, Architectural Technology*^ Darrow Wood, Professor Emeritus, Library