TECHNOLOGY PLAN

2 0 1 8 – 2 0 2 3

Prepared by:

Terrence McGowan, *Vice President of Information Technology*
Jacinth Coultman, *Assistant Vice President of Academic Affairs / Academic Technology*

MONROE COLLEGE

BRONX • NEW ROCHELLE • ST. LUCIA • ONLINE

TABLE OF CONTENTS

TABLES

APPENDICES

EXECUTIVE SUMMARY

The Information Technology Department is responsible for the strategic direction and execution of information technology, communication systems, and support services, as well as the establishment and maintenance of the College's technology infrastructure, related technology architectures, and standards for all information technology-related systems and services. On the academic side of the College, the Academic Technology Department takes the lead in spearheading technology initiatives. Collectively, these two departments – Information Technology and Academic Technology – are responsible for the planning and execution of strategies that touch each of the College's five over-arching goals.

The plan begins with a reflection on the prior planning period, specifically, the following three initiatives of the 2015–2018 period:

- **Simulation Labs** – As part of an initiative to 'modernize the classroom' and take advantage of new technologies, the College promoted and implemented the use of simulation labs to enhance student learning. During the 2015–2018 planning period, the School of Criminal Justice introduced a Law Enforcement Training Simulator (LETS), and the School of Nursing upgraded its Nursing Patient Simulation Center. These two simulation labs are explained in some detail in the retrospective section of the plan.

- **Monroe Tracking System (MTS)** – A system was developed to allow faculty and staff to view student activity related to office/lab visits, provide document workflow between offices, and capture notes related to visits.

- **Upgrade Wi-Fi Networks** – Monroe College has two Wi-Fi networks: the on-campus Wi-Fi network that services the Bronx and New Rochelle campuses, and the Dorm Wi-Fi network that services the New Rochelle residence halls. This ongoing "upgrade" initiative was addressed in 2015–2018 and will continue as an outstanding item in 2018–2023.

The forward-looking planning section of the document provides timetables and tactics that will enable the College to pursue the achievement of the following goals, which are linked to the Strategic Plan.

Table 1. Technology Plan Goal Cross-Walk

TP Goal #	Description	Strategic Plan Goals 2018–2023
TP-1	To provide technological solutions to improve teaching and learning	1, 1.5
TP-2	To implement technological solutions that support the college in attracting, enrolling, and retaining students	1.4, 2
TP-3	To provide analytical tools to support the College's efforts in marketing, admissions, and retention	2.6
TP-4	To assess and improve the levels of responsiveness to students, faculty, and staff with administrative and academic technology issues	3, 3.1
TP-5	To improve faculty expertise in online course design and delivery, while receiving external validation of exemplary status	4
TP-6	Execute a cloud-first strategy for storage, software, and services and integrate artificial intelligence and virtual reality into business practices	5
TP-7	To continually assess and improve network infrastructure, inspire new technological approaches to education, and provide space and technology for faculty training	5.2, 5.3

SECTION ONE: INTRODUCTION

Monroe College's 2018–2023 Technology Plan demonstrates the College's commitment to providing a state-of-the-art information technology environment that will sustain and enhance teaching and learning, support the College's mission, and increase the effectiveness of the College's operations and services. To ensure that the College's technology planning process is continuous and responsive to both technology and academic changes, the plan will undergo periodic reviews each year. The tactics described herein are integrated with the College's other sub-plans through the Integration Maps.

The Technology Plan is driven by the College's Vision, Mission, Core Values, and Strategic Goals.

VISION

To be a national leader in educating urban and international students.

MISSION

Monroe College, founded in 1933, is a national leader in higher education access, affordability, and attainment. We believe in the power of education to facilitate social mobility and transform communities, and embrace our responsibility to advocate national policies that serve students' best interests. We are proud of our outcomes and unique caring environment, especially for first-generation college students, newly arriving immigrants, and international students. Our innovative curriculum, taught by experienced industry professionals, integrates local, national, and global perspectives. Our academic programs align with industries that drive the New York and international economies that we serve. Our graduates are prepared for continued scholarship, professional growth, and career advancement.

CORE VALUES

- *Outcomes drive us.*

  We are committed to remaining a national leader in delivering strong outcomes for students and always strive for continuous improvement.

- *Integrity guides us.*

  Honesty, transparency, accountability, and fairness are the bedrock of our work.

- *Relationships define us.*

  We build strong personal connections among students, faculty, and staff, as well as with external educational, corporate, and community partners.

2018–2023 STRATEGIC GOALS

Goal 1: To ensure graduates possess the competencies for successful careers, advanced education, and lifelong learning.

Goal 2: To shape institutional enrollment by attracting, enrolling, and retaining students with the potential to succeed academically, graduate, and advance professionally.

Goal 3: To formally cultivate and institutionalize a responsive culture and structure to more effectively serve students, faculty, and staff.

Goal 4: To validate program quality and learning outcomes through rigorous self-assessment and enhanced external institutional and programmatic recognition.

Goal 5: To allocate resources effectively and efficiently in support of the Strategic Plan and institutional priorities.

SECTION TWO: BACKGROUND

REFLECTIONS ON THE PREVIOUS PLANNING PERIOD

Three technology achievements of the prior planning period (2015–2018) are presented below:

1. **Simulation Labs** – Selected schools introduced or enhanced simulation labs during the previous planning period:

   a. The School of Criminal Justice introduced a Law Enforcement Training Simulator (LETS), which provides students with the opportunity to be trained in high pressure situations that they may encounter upon joining a law enforcement agency.

   b. The School of Nursing's Nursing Patient Simulation Center allows students to treat patient mannequins, from infant to adult, in a life-like medical setting.

   c. The School of Information Technology utilizes "virtual" labs to simulate activities associated with networking equipment.

   d. Both the Criminal Justice and Nursing programs have dedicated facilities on-campus that are outfitted with appropriate furniture and equipment in addition to the technology components required to provide the proper learning experience and feedback.

   All of these initiatives have enhanced learning for involved students. In addition, both the LETS and nursing simulators have generated positive publicity for the College.

2. **Monroe Tracking System (MTS)** – MTS was developed and implemented in 2010 as an outgrowth of the Counselor Tracking System (CTS) and Student Tracking System (STS), which were introduced in 2005. MTS underwent significant enhancements throughout the previous planning period, and is used by virtually all offices who interact with the current student population.

   a. A primary refinement of the system allows faculty and staff to better serve students by providing a comprehensive documented history of a student's office visits and activity. With this modification, faculty and staff have a better understanding of a student's behavior and can ensure that they are taking advantage of all services available.

   b. The system also provides metrics regarding the usage of services, allowing for enhanced utilization of resources.

   c. Other recent enhancements include grade change workflow, dorm access control, electronic forms, and transportation tracking

3. **Upgraded Wi-Fi Networks** – Throughout the planning period, the need to improve Wi-Fi networks (on-campus and in the residence halls, or "dorms") has remained a challenge. Similar to other institutions, the proliferation of wireless devices, usage of bandwidth for

both personal and/or academic and business purposes, and performance/availability expectations have had an impact. While the dorm network has been upgraded, the on-campus network has required a complete redesign based on newly available equipment, and is awaiting deployment. This has pushed the deployment date into the new planning period.

4. **The Challenge of Staying Current with Academic Technology** – The College transformed many of its legacy "chalk & talk" classrooms over the years to Smart Rooms with large monitors and/or projectors to be used for instructional purposes. During this same time period, substantial new construction and/or renovations were completed on the New Rochelle and St. Lucia campuses, which provided a degree of modernization. The main campus in the Bronx, which has an inventory of older facilities, would benefit from a similar upgrade during the upcoming planning period.

SECTION THREE: STRATEGIC PLANNING GOALS

TP-1	Provide technological solutions to improve teaching and learning	**Link to SP Goals** 1, 1.5

LEARNING MANAGEMENT SYSTEM

1. Baseline

In the early 2000s, the College utilized a home-grown learning management system (LMS), but soon realized the advantages of mass marketed systems that were being developed at the time. The Angel Learning Management System was adopted in 2007. Blackboard purchased Angel in 2012, which the College transitioned to in 2013. Since then, the College has used three different versions of Blackboard and will move to a fourth, Blackboard Ultra, in Fall 2019. About two years ago, the College migrated to a "managed host"[1] implementation, which eased pressure on the institution's infrastructure created by the increased use of the platform. In Fall 2018, the College served 700 fully online students and over 1,500 onsite students taking some of their coursework online.

The College has leveraged its LMS by enabling faculty and students to access materials at convenient times and places and in various formats including text, video, and audio. The material is reusable and the system lends itself to student evaluations such as quizzes, exams, and other assessments. However, the College has experienced some difficulty in fully incorporating the LMS into onsite classes as some faculty are reluctant to adapt their materials to digital format. This is a challenge moving forward.

The academic content in Blackboard is populated by the faculty with the assistance of course developers who work within the Academic Technology Department. The School Deans directly supervise faculty teaching online courses.

In Fall 2018, the College introduced Blackboard Ally, an add-on to the LMS, which ensures that all lecture notes and documents are both usable and accessible to users regardless of special needs. Ally was adopted in all Blackboard courses during Fall 2018 to ensure course content is Section 508[2] compliant.

With the additional flexibility provided by Ally, students who require assistive technology are granted access to information in the manner in which they need it – audio, electronic braille, or tagged PDF – thus granting students the ability to use mobile devices, highlight documents,

---

[1] Managed hosting is an IT provisioning model in which a service provider leases dedicated servers and associate hardware to a single customer and manages those systems on the customer's behalf. https://searchitchannel.techtarget.com/definition/managed-hosting

[2] Section 508 of the Rehabilitation Act of 1973 (as amended in 1998) requires electronic and information technology (EIT) be accessible to people with disabilities. https://www.section508.gov/manage/laws-and-policies

take notes while listening to an audio file, or utilize text-to-speech technology. Specific examples of options provided by Ally appear below:

- *Audio* – Reads the document aloud; provides descriptions of images in the document
- *Electronic Braille* – Creates a BRF file which can then be used on a refreshable Braille display (RBD)
- *ePub* – Creates digital publishing files that can be read on a mobile device
- *Tagged PDF* – Uses tags and elements (such as additional paragraphs and block quotes) to add meaning to a page; aids screen readers with the content on the screen

2. Objectives and Timing

Thirty-five sections of Blackboard Ultra will be piloted in Spring 2019, providing a group of seasoned online faculty with the opportunity to test it for a full semester. Faculty certification of Blackboard Ultra will begin in June 2019, and the system will be fully implemented by Fall 2019.

Over the next two years, the College's LMS goals are to

- Certify faculty in Blackboard
- Revamp course shells
- Fully implement Ally by Spring 2020
- Resolve any issues that arise once the system is fully adopted

The College's over-arching goal is to make the LMS an everyday tool for all courses running onsite, at all campuses.

ADAPTIVE LEARNING SOFTWARE

1. Baseline

The College began piloting the use of adaptive learning software with the introduction of Aplia[3] in 2016 for English language skills, and ALEKS[4] in 2017 for mathematics. The results of these two pilot programs appears below:

- Aplia was adopted in developmental and selected 100-level college courses. The pilot was successful and faculty reported that students who experienced difficulty with selected topics benefited greatly from the software. This feedback was anecdotal. The software is integrated into Blackboard and was easy to access.
- ALEKS was piloted in a similar way with remedial courses, but proved to be difficult to use. As a result, the College migrated to a new Cengage software called MindTap Math

---

[3] Aplia by Cengage, adaptive software to improve English language skills. https://www.cengage.com/aplia/
[4] ALEKS, adaptive software to improve mathematics skills. https://www.aleks.com/

Foundations[5] in Fall 2018. Feedback is not yet available on this new software as of the date of this plan.

2. Objectives and Timing

Publishers of eBooks continue to incorporate software as "assets" within course materials, passing on the savings to students. This combination of easy access, embedded content, and cost savings will likely prompt the College to begin utilizing adaptive software in discipline-related subject areas (e.g., Business, Criminal Justice, IT, Nursing) within the next few years.

Additionally, the inclusion of adaptive software (with reduced prices for books) may prompt the College to join Cengage Unlimited[6] in Fall 2019, which will allow students to purchase all of their Cengage resources for one flat fee per semester, regardless of the number of courses taken.

SIMULATIONS

1. Baseline

As explained in the retrospective, the College has fully developed simulations in the Schools of Criminal Justice, with the Law Enforcement Training Simulator (LETS), and in the School of Nursing, with the Nursing Patient Simulation Center. Both of these full-scale simulations have added in a substantive way to the learning experience for participating students.

2. Objectives and Timing

The College plans to improve existing simulations with software upgrades during the upcoming period as well as to consider new simulations in other schools. For example, the School of Business and Accounting has submitted a proposal for a Bloomberg Training Room, which would simulate an actual trading floor operation. No other schools have submitted simulation proposals to date. The trading room proposal was deferred during the last budget period, but will be considered again moving forward.

---

[5] MindTap Math Foundations by Cengage, adaptive software to improve mathematics skills.
   https://www.cengage.com/mindtap/devmathdemo/
[6] Cengage Unlimited, all-in-one digital subscription. https://www.cengage.com/unlimited/

| TP-2 | Implement technological solutions that support the College in attracting, enrolling, and retaining students | Link to SP Goals 1.4, 2 |

ATTRACTING & ENROLLING

1. Baseline

    -   **Website** – The College website is built on the Ektron[7] platform. At the time it was constructed, Ektron provided a responsive system, enabling mobile users to properly view the website. The IT department provides upgrades to and maintenance of the Ektron content management system (CMS) software, but the system, which is hosted onsite, is no longer being supported by the developer. One staff member in the marketing department inputs all informational updates to the website while the IT Department performs required upgrades and maintenance to keep the site current with new functionality and capabilities. The design, which was appropriate seven years ago, now feels outdated and in need of a change.

    -   **Customer Relations Management (CRM)** – Currently, the College utilizes the original version of Salesforce[8], which is built upon a TargetX[9] platform. The use of this platform enabled the College to implement the new system more quickly, but limited set-up options and added to the cost, which became exorbitant. The College is unhappy with some of the functionality of the system, but realizes that several identified problems relate to the set-up of the system. The IT Department performs required upgrades to Salesforce applications and provides systems administration support to Salesforce.

2. Objectives and Timing

    -   **Website** – In March 2019, the College contracted with Digital Pulp[10], a New York Digital Agency, to build a new website with open source content, to be hosted off-site. The new website will more effectively link to Salesforce and will better enable interaction with prospective students. The redesign will also provide us with an opportunity to better tell the Monroe story. Specific project timelines appear below:

        -   Evaluate/select agency and platform, Spring 2019
        -   Build a new website, Fall 2019
        -   Implement the new Monroe College website, Winter 2020

---

[7]   Ektron (now part of Episerver) is a comprehensive web content management system (CMS). https://www.episerver.com/products/platform/ektron/

[8]   Salesforce is a customer relations management (CRM) platform. https://www.salesforce.com/products/what-is-salesforce/

[9]   TargetX provides higher education CRM solutions for full student lifecycle management. https://www.targetx.com/

[10] Digital Pulp, https://www.digitalpulp.com/

- **CRM** – In the beginning of 2018–2019, the College investigated alternatives and seriously considered moving to an entirely new CRM (Slate), at a much lower cost. Discussions with Salesforce, however, led to a proposal to switch to the new version of Salesforce (Lightening) at a reduced expense. While this decreased cost is not quite as low as Slate, the decision to stay within the platform made sense once the costs of disruption and training were factored into the equation.

  The adoption of this new version also provides an opportunity to rethink process, set-up, and workflows. Transitional work will take place during 2019–2020, with implementation scheduled for 2020–2021. Other plans include evaluating and potentially implementing a marketing automation platform bolted onto Salesforce. This analysis will be done in conjunction with the setup work for Lightening.

RETAINING

1. Baseline

The College has utilized Colleague[11] since the 1990s. The system provides Monroe with an adequate platform for financial aid, registrar, and bursar operations. It was never used for Admissions, however, and proved to be less than desirable for registration and financial purposes. The new release of Colleague will include an academic planning module that will provide a better online interface for student self-service registration.

The College has developed two additional systems that support the retention of students. These systems are outlined below:

- **MyMonroe (Student, Faculty and Staff Portal)** – The IT Department ensures that MyMonroe is updated in a timely manner so that it remains a valuable targeted communication channel for all college-related information; specifically, activities and announcements. System availability is critical and targets of 99.99% should be expected. This system, which provides a great communications tool with and for students, contains the following helpful gadgets:

Announcements	File Uploader	My ID Badge
Athletics	Financial Services	Notifications
Calendar of Events	Help	Photos
Campus Dining	Human Resources	Shuttle Bus Schedule
Career Services	Library Resources	Single Sign-On
Directory	Maps and Locations	Social Media
Downloads	Monroe Videos	Student Activities
Faculty Assets		

---

[11] Colleague by Ellucian is a student information system (SIS), https://www.ellucian.com/solutions/ellucian-colleague

- **Monroe Tracking System (MTS)** – The Monroe Tracking System has developed into a valuable tool for tracking interactions and communication among faculty, staff, and students. The IT Department upgrades and maintains functionality of MTS to provide counselors and administrators with a comprehensive "view" of a student's status and behavior. A system availability target of 99.99% is expected. Counselors and managers use MTS extensively to:

  - Sign in students to the office
  - Track student academic progress (Early Alert and Mid-term grades)
  - View current and previous attendance
  - View final grades from previous semesters
  - Read and make contemporaneous comments
  - View personal and background information
  - View course schedules
  - Track students who are waiting to be seen in the office
  - View previous office and lab visits by the student
  - View holds
  - View cohort information

  In addition, managers can manage caseloads, run attendance reports, and set up subscriptions so that certain reports arrive at scheduled times.

- **Other Systems** – The IT Department performs required upgrades and maintenance for the primary SIS components, Colleague and WebAdvisor[12]. While Colleague utilization is reflective of the cyclical activities during the academic year, WebAdvisor contradicts that model and requires systems availability on a more consistent basis throughout the year.

  In addition, the IT Department ensures that Blackboard is updated in a timely manner, meeting performance expectations and availability targets of 99.99%. The department also manages any interaction with Blackboard personnel or services that may become necessary.

2. Objectives and Timing

- **Student Information System (SIS)** – Long term, the College needs to move to a better student information system. Workday[13] has been identified as a good choice, but implementation was delayed based on cost considerations. In the short-term, the College will implement Colleague Self-Service functionality as follows:

---

[12] WebAdvisor is a secure online interface designed for Monroe College.
https://webadvisor.monroecollege.edu/WebAdvisor/WebAdvisor?TYPE=M&PID=CORE-WBMAIN&TOKENIDX=5650258497

[13] Workday is an on-demand student information system. https://www.workday.com/en-us/homepage.html

- – Implement core services, Spring 2019
- – Implement custom code conversion (grades, transcripts), Fall 2019
- – Implement student planning, Fall 2019
- – Further evaluation of Workday, 2021–2022

- **MyMonroe** – Incremental improvements will be made on a regular basis to MyMonroe.

- **Monroe Tracking System (MTS)** – Continuation of MTS will need to be evaluated when the new SIS is adopted. In the meantime, MTS will be reviewed annually for possible changes.

- **CRM** – The existing Salesforce/TargetX application does not allow Monroe College to take advantage of the Salesforce Lightning platform and improve enrollment processes as needed. This makes migrating from the Salesforce/TargetX application to Salesforce Lightning a necessity. As previously mentioned, implementation of the new CRM is scheduled for 2020–2021.

TP-3	Provide analytical tools to support the College's efforts in marketing, admissions, and retention	Link to SP Goal 2.6

1. **Baseline**

The following analytics are currently in use at the College:

- **Google Analytics** – In order to gauge the effectiveness and use of the college website, Google Analytics provides data regarding user access modality, and individual and aggregated session, navigation, and engagement information. This data can be used for comparison of period(s), impact of marketing campaigns, and content applicability, among other analytical uses related to new enrollment.

- **Learning Analytics** – Introduced via the Civitas[14] products Illume Courses and Inspire, learning analytics, have been available for use by Student Services since April 2017. These products identify current students' persistence probability based on historical data, current engagement data, and proprietary algorithms. This information can be provided individually, by institution, or other groupings through the use of filters.

- **Enrollment Analytics** – This type of analytics, which addresses new enrollment, was attempted within the College's CRM. Several reports were designed to measure prospective student status through the Admissions stages. Typically, these metrics focused on market segment goals, both headcount and financial, in order to better manage enrollment reporting and projections together with budget impact. Reports were developed, but not heavily utilized.

---

[14] Civitas Learning, https://www.civitaslearning.com

2. Objectives & Timing

- **Google Analytics** – Of the three types of analytics employed at the College, Google Analytics is used to the greatest extent. The current use is more surface-level, however, and focused on website usage, page visits, etc. The College has begun to use Google Analytics to track the impact of marketing campaigns.

  The planned introduction of the new website will provide opportunities for improving the use of Google Analytics to better monitor and evaluate website activity. In addition, the website redesign will allow for the implementation of required integrations to assist in communicating with prospective students, personalizing messages, tracking campaigns, and improving market attribution as identified in the digital marketing plan. Specifically, the College will:

  - Incorporate requirements into website development, Fall 2019
  - Implement new analytics reporting, Winter 2020

- **Learning Analytics** – Plans for learning analytics include an expansion of data populated in the LMS so that the Civitas student services application, Inspire, can be more helpful. Effectiveness of this tool depends upon the reliability of academic data in Blackboard. Faculty of onsite courses do not always fully populate student activity in Blackboard (an area that must be addressed).

  The Illume Courses module of Civitas will be deployed during the upcoming planning period. This software enables the College to evaluate specific courses through the lens of student persistence and graduation. This, in turn, will enable academic departments to have a full appreciation of the significance of selected grades in key courses on both persistence and graduation.

  Illume Courses is designed to empower school deans and directors with academic pathway analytics. Through the usage of signals, the evaluation of specific courses on a student's persistence to graduation can be determined. This new Civitas module will enable academic departments to identify and evaluate how a particular grade in a course can affect a student's persistence and graduation.

  The last year of the Civitas agreement begins in May 2019. A full review of the effectiveness of the product will take place in Fall 2019 in order to make a decision about continuing with the software.

- **Enrollment Analytics** – As the College moves forward with migration to the Salesforce Lightning platform, reporting capability will be improved based upon new built-in functionality. This will immediately impact descriptive (*what*) and diagnostic (*why*) analytics regarding the enrollment process across market segments, stages, etc., which have been a struggle in the past.

In order to advance to predictive or prescriptive analytics, it is likely that the institution will need to invest in other Salesforce, or third party, products. Specifically, the College will:

- Implement improved reporting of Salesforce Lightning, Winter 2020
- Develop predictive models and reporting, Spring 2020
- Develop prescriptive models and reporting, Winter 2021

TP-4	Assess and improve the levels of responsiveness to students, faculty, and staff with administrative and academic technology issues	Link to SP Goals 3, 3.1

1. Baseline

The College prides itself on unmatched customer service for students, faculty, and staff through the implementation of the IT HelpDesk and the Academic Technology (AT) Department. The IT HelpDesk became operational in 2002 in order to provide technology services to students, faculty, and staff. In 2009, with the expansion of Monroe Online, the Academic Technology Department was created.

- **Help Desk** – The team supporting the HelpDesk is comprised of three tiers:
    - Tier 1 – Helpdesk support
    - Tier 2 – Technicians
    - Tier 3 – Administrators of various systems

    HelpDesk responsibilities include:

    - Assisting students, faculty, and staff with access to equipment and systems
    - Providing Tier 1 support for any technical problems encountered by students, faculty, and staff. In the event the Help Desk is unable to provide first-call resolution, items are escalated to the appropriate Tier 2 or Tier 3 support member.
    - Documenting all contacts to ensure issues and questions are resolved and communicated to the appropriate parties. This documentation is also used to identify areas in need of improvement through enhanced instruction, training, or technical solutions.

In 2002, the HelpDesk began using UniPress FootPrints[15] to track calls and tickets created by the Tier 1 support staff. In 2010, the software was changed to Web Help Desk[16], which was then taken over by SolarWinds[17] in 2013.

The IT Helpdesk is operational at these times:

– Monday and Thursday, 8:30 am to 7:00 pm
– Tuesday and Wednesday, 8:30 am to 5:00 pm
– Friday, 8:30 am to 2:00 pm

In July 2013, the College implemented a Blackboard 24/7 Student Support service to assist students and faculty with on-demand Blackboard support. This service was discontinued in 2016 due to a lack of usage by the College community.

• The Academic Technology (AT) Department provides support to faculty and students on all educational technology that is used in the classroom (eBooks, software, and LMS). Onsite workshops, webinars, and daily walk-ins or telephone support are provided on a regular basis. A large volume of calls are received each day from faculty and students, but no specific software is in place to track and categorize the volume of requests. Calls are funneled through an AT telephone extension; emails are received through a dedicated acadtech@monroecollege.edu address.

Walk-ins are also welcomed and are handled on a first-come, first-served basis. In 2015, the AT Department was revamped to include the addition of two full-time and two part-time instructional designers. While their primary responsibility is to assist in the design and implementation of exemplary level online curriculum, the designers are also active trainers in the online environment.

Students who are new to the online environment are encouraged to participate in a semester-based LMS workshop to familiarize themselves with the product. Each semester, at least 15 workshops are held over a three-week period. The facilitators for these workshops are either the designers themselves or staff from the AT Department.

The AT Department also provides training to the faculty of the College. A semesterly Academic Affairs Professional Development schedule lists workshops regarding various educational technology products for faculty. This training is provided to both onsite faculty (face-to-face) on all campuses as well as online faculty via Blackboard Collaborate. In all cases, follow-up training sessions are supported in-house, although the department's recent move to a new location has hampered this effort.

---

[15] UniPress FootPrints, https://www.unipresssoftware.com/
[16] Web Help Desk, https://www.webhelpdesk.com/
[17] SolarWinds, https://www.solarwinds.com/

The AT Department is currently staffed during these times:

- – Monday through Thursday, 8:30 am to 7:00 pm
- – Friday, 8:30 am to 2:00 pm

2. Objectives & Timing

- **Effective Onboarding** – A priority initiative to be addressed involves the onboarding of all students, faculty, and staff. This includes enhancing information regarding technology services, preparing how-to training material (including videos), streamlining workflows in order to provide credentials and associated systems access in a more timely manner, and making all sources of information available through the Monroe College website, MyMonroe, and other online sources. Current plans call for completion of the initial implementation to take place in the Winter 2020 semester.

- **Development of a More Responsive Culture** – Both the IT and Academic Technology Departments pride themselves on the degree to which all student/faculty inquiries/issues are acknowledged, addressed, and resolved. Processes and standard operating procedures must be evaluated, however, against the new standard of responsive culture created by the third over-arching goal in the 2018–2023 Strategic Plan. During 2019–2020, both departments will institute a full assessment of operations in light of the objectives of this new goal. Recommendations for change will be developed as part of this assessment.

TP-5	Improve faculty expertise in online course design and delivery, while receiving external validation of exemplary status	Link to SP Goal 4

1. Baseline

The College is committed to the design, implementation and delivery of online courses through continuous faculty training and professional development. Quality Matters[18] and Blackboard Exemplary Course Design were introduced to the College to assist in this effort.

The Quality Matters Peer Course Review Rubric is designed to evaluate the quality of online courses. This rubric was introduced in 2006 as a way of assessing the quality of online courses based on industry standards. Semester-based workshops were then established to ensure that best practices in online learning were implemented in each online course. An online faculty evaluation rubric was designed in 2007 and was updated in 2010 to ensure that faculty were adhering to the online requirements as set forth by the AT department.

---

[18] Quality Matters, https://www.qualitymatters.org/

In 2015, seven online master shells were submitted to Blackboard for evaluation on accessibility and effective course design. Based on feedback from Blackboard, the College then adopted the Blackboard Exemplary Course Design Rubric as a way of insuring that all future courses would be developed to meet this standard.

In 2015, the College became a member of the Online Learning Consortium[19] (OLC) – formerly Sloan-C – which opened our faculty members to discounted training courses and webinars. Through these webinars, best practices in online learning were established and rolled out to the College's online faculty. Faculty were encouraged to become a members of the OLC as a way of increasing their online teaching expertise. Certification can also be attained as a Quality Matters Peer Reviewer or Blackboard Exemplary Course Reviewer. As the Dean of Academic Technology is certified in these areas, all online faculty workshops and master shells are designed to meet these standards.

2. Objectives and Timing

Short-term objectives include increasing the current active online faculty pool from 125 to 150 during the 2019–2020 year. In addition, the College will seek to redesign all 300-plus Blackboard master shells to meet both Quality Matters and Blackboard Exemplary Course Design Standards by the end of the 2020–2021 year.

Long term objectives include the ongoing training of onsite faculty so that all classes may benefit from the learning enhancements and efficiencies provided in the Blackboard environment.

TP-6	Execute a cloud-first strategy for storage, software, and services and integrate artificial intelligence and virtual reality into business practices	Link to SP Goal 5

1. Baseline

Monroe College has adopted a cloud-first strategy as a critical component of the Technology Plan that will make better use of resources, allow for faster delivery time for products and services, prioritize SAAS (Software as a Service) offerings when evaluating products, and provide enough flexibility to allow for certain services to remain in-house. As of the date of this plan, the College is in the initial stages of this migration to a cloud-first strategy.

A component of the new Technology Plan is to develop a digital business strategy that will address new and existing technologies. While the entire digital business plan is a distinct deliverable, there are some technologies that can be utilized as part of, or independent of, the

---

[19] Online Learning Consortium, https://onlinelearningconsortium.org/

formalized plan. Artificial intelligence (AI) can encompass the use of Bots, enhanced search methodologies and algorithms, prescriptive or predictive analytics, etc. Voice interfaces can be defined as simple voice response and/or digital (virtual) assistants. Mixed or augmented reality is the melding of the physical and virtual environments to replicate or enhance experiences. While each of these technologies will be a part of the digital business plan supporting the operations of the College, they also offer promise in new ways of delivering course material, providing support, and expanding experiential offerings to the student population.

2. Objectives & Timing

- **Cloud-First Strategy** – The College expects to have completed the transition to cloud-first technology by the end of the 2020–2021 year. Following are target dates:

Table 2. Cloud-First Strategy

Description	Target Date
Online Application Portal	Winter 2019
Azure AD/MFA Deployment	Spring 2019
Exchange Online (Staff/Faculty)	Spring 2019
Data Archiving/Backup	Fall 2019
MTS	Fall 2019
MyMonroe	Fall 2019
SAAS Migration (O365, Adobe, etc.)	Fall 2019
Exchange Online (Students)	Fall 2019
DevOps	Winter 2020

- **Digital Business** – Each of the following digital business technologies will be investigated and potentially implemented during the 2019–2020 and 2020–2021 years.

  - AI (artificial intelligence)
  - Voice interfaces
  - Mixed reality (physical and virtual)

| TP-7 | Continually assess and improve network infrastructure, inspire new technological approaches to education, and provide space and technology for faculty training | Link to SP Goals 5.2, 5.3 |

1. Baseline

The Monroe College network infrastructure incorporates all components and services, whether contracted or provided in-house. The network infrastructure can be segmented into three distinct, but complimentary categories.

Table 3. Network Infrastructure Improvements

Network	Description	Ongoing Improvements
Data Network	Includes all carrier services for internal circuits and external data/internet circuits, in addition to all wiring, routing, switching, and endpoint devices.	Upgrade, maintain and support components of the institution's inventory of data network equipment.
Wireless Network (On Campus)	Includes the wireless network controller, access points (APs), and management connections; and is dependent on the Monroe College data network	Upgrade, maintain and support components of the institution's inventory of the on campus wireless networking equipment.
Dorm Wireless Network	Has its own wireless network controller, access points, and management connections; and is completely independent of the Monroe College Data Network	Implementation of wireless network to major dorm facilities. Upgrade, maintain and support components of the institution's inventory of data network equipment.

2. Objectives & Timing

- **Modernize Infrastructure** – The ability to deliver existing and new technological approaches to education is dependent on the underlying network capabilities available on-campus. An objective from the previous planning period was to ensure that all network components (excluding those in the primary switching areas due to their higher capacity requirements) are capable of supporting transmission speeds of 1GB (one gigabyte) in order to meet performance expectations. To achieve that goal from endpoint to carrier circuit, all components involved in that transmission must be able to handle 1GB speeds. If any component operates at a slower speed, the transmission will operate at that lower speed.

  This ongoing initiative will be modified in the new planning period due to the need for faster transmission speeds on wired networks addressed by the NBASE-T (Ethernet speed) standard that allows for transmission of data at speeds exceeding 1GB over existing data wiring.

All technology inventories including wired and wireless network components, servers, storage, desktops, A/V equipment, and supporting systems are evaluated annually. Based upon age, measurements of service availability and reliability, technology changes, and reported issues, inventory items are identified as candidates for replacement or upgrade. The data from these reviews is incorporated into the prioritization and budget processes, and ultimately used to formulate the IT five-year capital budget.

- **Data Network** – Modifications of infrastructure include:
    - 1GB initiative – Winter 2019
    - NBASE-T conversion (>1GB speed) – Ongoing

- **Wireless Network (On Campus)** – Modifications will include complete conversion from existing Meru[20] wireless network to upgraded Cisco[21] wireless network – Spring 2019

- **Dorm Wireless Network** – Due to continued growth in the usage of video streaming, gaming, social networks, and other services, the dorm wireless network is reaching saturation levels. A detailed assessment of the current usage, options to address underperforming network throughput, and potential budget impact will be concluded. – Spring 2019

- **All Wireless Networks** – The IT Department will continue with the Wi-Fi buildout for students, faculty, and staff. Ongoing

- **Other Systems/Issues**:
    - Technology Updates in all Classrooms (Bronx and New Rochelle) – Fall 2019
        - Virtual desktops
        - Replace projectors with flat panel TVs
        - Tablets to assist with Aplia and MindTap
    - Faculty Center for Training and Innovation (Bronx and New Rochelle) – Fall 2020
    - Law Enforcement Training Simulator (New Rochelle) – Fall 2020
        - New simulator scenarios for the current LETS equipment (Bronx)
    - Drone Technology (Simulator) (Bronx) – Fall 2020

---

[20] Meru Networks was a supplier of wireless local area networks (WLANs) to higher education and other markets. It was acquired by Fortinet in 2015. https://www.fortinet.com/

[21] Cisco Wireless, https://www.cisco.com/c/en_in/solutions/small-business-technology/products/wireless.html

SECTION FOUR: CONCLUSION

Technology is inextricably linked with the future of higher education, revolutionizing all college campuses – both real and virtual. Over the years, Monroe College has taken bold, strategic steps to leverage the right kind of technology to help students get the most out of every learning opportunity. The two College technology centers support the college community through helpdesk operations, updated infrastructure, modifications of ancillary systems, course design, and training, so that faculty and staff may support students as effectively as possible.

With the mission of the College as its guiding principal, the 2018–2023 Technology Plan is fully aligned with the College's Strategic plan and with the other five sub-plans. It charts the path for the departments of Information Technology and Academic Technology to support the institution as it pursues its mission. Given the ever-changing nature of technology, the College is committed to updating this plan during the planning period as it becomes necessary. At a minimum, an annual review of the Technology Plan will be conducted at the end of each academic year.

The College is confident that this Technology Plan lays out reliable strategies for implementing systems that are cost effective, easily integrated, and user-friendly. The technology solutions described herein are designed to meet the learning and service needs of all students, faculty, and staff at the College.

APPENDIX A: FACILITIES BASED TECHNOLOGY ASSESSMENT

The physical assets associated with Monroe College's technology are categorized as infrastructure (network, data center, distributed management, and other related equipment) or non-infrastructure (end-user equipment connected to the network).

MAINTENANCE

Existing critical assets (predominately in the infrastructure category) that are necessary to keep all locations operational are covered by maintenance contracts negotiated by asset type, vendor, purchase date, and range in length from one to five year agreements. At the expiration of the original contract period the manufacturer, or third-party, will extend maintenance until EOL (End Of Life). Though there are circumstances where infrastructure is kept 'in-service' beyond its supported lifespan, those circumstances are rare. During the annual budget review process, inventory is evaluated to ensure there is sufficient coverage under maintenance agreements, plans are formulated for upgrade or replacement if needed, and/or risks are mitigated in the event the asset will remain 'in-service' beyond EOL.

Maintenance of non-critical components (or end-user equipment) is most often covered by basic manufacturer warranties, with the exception of leased equipment. Maintenance then becomes the responsibility of the College and is managed by the Information Technology department. During the annual budget review process, this inventory is evaluated to ensure operational effectiveness. In the event a particular equipment type is designated, or projected, to be obsolete, multi-year refresh/replace programs are developed in order to address the issue in a planned, financially responsible manner. For leased equipment, maintenance is covered for the duration of the lease by the vendor. Prior to the expiration of the lease term, needs are reevaluated, a market review for potential vendors and new technologies is developed, and a vendor selection is completed to provide the new leased equipment.

CURRENT PLANNED INITIATIVES

INFRASTRUCTURE

1. Wi-Fi Program

   • Upgrade on-campus and dorm Wi-Fi networks. This initiative began in the 2017–2018 plan year and is to be completed with the replacement of the on-campus Wi-Fi network in the 2019–2020 plan year.

2. Redundant Internet Gateway

   • Provide additional internet gateway at the NR campus that will allow for continued accessibility to the internet in the event of disruption to the internet gateway located at

the Bronx campus. This initiative is scheduled to be completed in the 2019–2020 plan year.

3. Network Router/Switch Upgrade to 10Gb

    - Replace all outdated network components with equipment capable of handling 10Gb speeds. Upgrade all equipment currently capable of 10Gb speeds that does not have the required components installed. This initiative is to begin in the 2019–2020 plan year, to be completed in the 2021–2022 plan year.

4. VDI Server Upgrade

    - Replace servers that have limited ability to add resources in order to meet performance requirements of the new VDI platform and existing student use. Expand solid-state storage capacity in order to align resources with the upgraded servers to be put in service. This initiative is scheduled to begin in the 2019–2020 plan year, to be completed by the 2020–2021 plan year.

NON-INFRASTRUCTURE

1. PC Replacement Program

    - Multi-year plan to replace all PCs in inventory over a five year period. This initiative will begin in the 2019–2020 plan year and conclude in the 2023–2024 plan year.

2. Printer to Multi-Function Printer (MFP) Migration

    - Multi-year plan to eliminate individual printers in use by staff and make greater use of the Canon MFP fleet on campus. An additional objective of this initiative is to eliminate printers in classrooms and allow for student print capability in labs/libraries. This initiative began in the 2016–2017 plan year and will continue through the 2022–2023 plan year.

APPENDIX B: INITIATIVES & TIMETABLES – AT A GLANCE

UPGRADE APPLICATION PORTFOLIO

Project	Status	Date
Slate vs. Salesforce Lightning (Short Term)	Review	TBD
Colleague Self Service		
• Base Self Service Module	Complete	WN'19
• Custom Code (Grades, Transcripts)	Review	FL'19
• Student Planning	Review	FL'19
• FASS (Financial Aid)	Review	TBD
• Purchase Order, etc.	Review	TBD
Workday (Long Term)	Hold	TBD
Blackboard Ultra		
• Ally Implementation	Ongoing Hold	–
• Cengage Integration	Hold	SP'19

MODERNIZE INFRASTRUTURE

Project	Status	Date
Wi-Fi Buildout		
• Upgrade 'on campus' Wi-Fi	On Sched	WN'19
Complete 1Gb Initiative		
• Existing Switch Upgrades	Ongoing	–
NBASE-T Conversion (>1Gb Speed)		
• Infrastructure Migration change to accommodate new standards and speeds	Ongoing	FL'22

CLOUD FIRST STRATEGY

Project	Status	Date
Azure Ad/MFA Deployment		
• Self Service, MFA, and Single Sign On	On Sched	FL'18
• Add Apps Office 365, Salesforce	On Sched	WN'19
• Exchange Online	Pending	WN'19
AWS Migration		
• Data Archiving/Backup	Complete	–
• OAP	Complete	WN'19
• MyMonroe	Pending	FL'19
• MTS	Pending	FL'19
• Exchange Online (Faculty/Staff)	On Sched	SP'19

Project	Status	Date
• Exchange Online (Students)	Pending	FL'19
SAAS Migration		
• New Website(s)	Review	FL'19
DevOps	Pending	SP'19

DIGITAL BUSINESS

Project	Status	Date
AI (Artificial Intelligence)		
• Bots (Chat)	Pending	SP'19
• IOT (Internet of Things)		
Voice Interfaces		
• Digital Assistants	Pending	TBD
Mixed Reality (Physical and Virtual)	Pending	TBD
Develop Integrated Digital Plan	Review	FL'19
• Marketing/Admissions		
• Academics		
• Other Operations		

ANALYTICS

Project	Status	Date
Website/Application Analytics		
• Google Analytics	Ongoing	–
• AWS Analytics	Pending	FL'19
Enrollment Analytics		TBD
Learning Analytics	Complete	–

OPEN ITEMS

1. Salesforce Renewal (2yrs)

   • Reduction to 140 Licenses

2. Self Service Student Planning

   • Likely 6 month Implementation

   • Available Approximately October/November

   • Implementation Approach

   • Graduate Program or Incoming Freshman

3. Migration of Student Email to Exchange Online

   - MS Licensing

   - Management of Accounts Currently 30,000+

   - Terminate Accounts of Non-Active Students after 6 months/2 semesters

4. Website

   - Clarification of Roles

   - Development, Content Migration, and Maintenance

   - Need for a Development Partner

5. Admissions Student Folders

   - Address Back Log

   - Replacement for ImageNow

   - License Therefore, used in Finance, include in Budget for 2019–2020

6. Location of School of IT Labs

   - Bronx

   - New Rochelle

7. Blackboard Ultra Migration

   - Training requires classroom(s) throughout Spring 2019 in order to complete migration for Fall 2019

APPENDIX C: CAPITAL BUDGET 2018–2023 (TECHNOLOGY RELATED PROJECTS/INITIATIVES)

Technology Based	PC*	2018–19	2019–20	2020–21	2021–22	2022–23
Bronx						
SIT Upgrade	8	$105,000	–	–	–	–
Classroom Upgrades	8	9,000	9,000	9,000	9,000	9,000
Thin Clients	6	15,000	15,000	15,000	15,000	15,000
Administrative Technology Updates	6	95,000	95,000	95,000	95,000	95,000
Chasis Switch Upgrades	10	65,000	65,000	–	–	–
Battery Replacement	6	40,000	20,000	20,000	20,000	20,000
General Infrastructure	8	184,000	1,200,000	100,000	100,000	100,000
CPU/Memory Upgrades	6	24,000	24,000	12,000	–	–
Power Supply (UPS)	4	13,000	13,000	13,000	13,000	13,000
Server Vmware Host Upgrades	4	105,000	–	–	–	–
Campus Wireless	10	50,000	–	–	–	–
EqualLogic	7	20,000	–	–	–	–
Total		*$537,000*	*$1,428,000*	*$251,000*	*$239,000*	*$239,000*
New Rochelle						
Classroom Upgrades	8	6,000	6,000	6,000	6,000	6,000
Thin Clients	6	15,000	15,000	15,000	15,000	15,000
Administrative Technology Updates	6	95,000	95,000	95,000	95,000	95,000
General Infrastructure	8	300,000	300,000	300,000	300,000	300,000
Campus Wireless	10	60,000	–	–	–	–
Power Supply	4	13,000	–	–	–	–
Total		*$489,000*	*$416,000*	*$416,000*	*$416,000*	*$416,000*
College Total		*$1,026,000*	*$1,844,000*	*$667,000*	*$655,000*	*$655,000*

* Priority Code

APPENDIX D: TECHNOLOGY INVENTORY

MAY 2019 CAMPUS-WIDE OVERVIEW

Bronx Classrooms	Fat Client	Thin Client	Printer	A/V	MFP*
King Hall	53	273	24	20/22	–
Jerome Hall	–	92	7	9/9	–
West Hall	–	74	9	20/22	–
Monroe Hall	–	172	3	10/11	–
Annex	–	–	–	–	–
Ustin Hall	21	144	11	18/18	–
Total	*74*	*755*	*54*	*–*	*–*

Note: A/V shown is classrooms with audio visual/total number of classrooms, i.e., 20/22 = 20 out of 22 classrooms have A/V set-ups

Bronx Offices	Fat Client	Thin Client	Printer	A/V	MFP*
King Hall	175	25	79	–	23
Jerome Hall	35	–	28	–	5
West Hall	51	7	26	–	4
Monroe Hall	17	–	17	–	4
Annex	2	–	4	–	1
Ustin Hall	25	–	6	–	4
Total	*305*	*32*	*160*	*–*	*41*

Bronx Lab/Common Areas	Fat Client	Thin Client	Printer	A/V	MFP*
King Hall	–	–	4	–	–
Jerome Hall	–	34	–	3	–
West Hall	2	8	–	–	–
Monroe Hall	–	27	1	–	–
Annex	–	–	–	–	–
Ustin Hall	–	21	3	–	–
Total	*–*	*90*	*11*	*–*	*–*

New Rochelle Classrooms	Fat Client	Thin Client	Printer	A/V	MFP*
Main Hall	–	111	7	7/7-	–
Franklin Hall	–	–	2	–	–
145 Huguenot	–	36	3	–	–
140 Huguenot	–	67	6	11/11	–
Milavec Hall	23	61	4	8/8	–
Harrison Hall	–	21	3	–	–
Syndicate Hall	–	–	–	–	–

New Rochelle Classrooms	Fat Client	Thin Client	Printer	A/V	MFP*
Monroe Athletic Complex	–	–	–	–	–
Alison Hall / Dorm	–	–	–	–	–
Gaddy Hall / Dorm	–	73	3	6/6	–
Locust Hall / Dorm	–	–	–	–	–
Total	*23*	*348*	*25*	*–*	*–*

* *MFP Multi-Function Printer*

New Rochelle Offices	Fat Client	Thin Client	Printer	A/V	MFP*
Main Hall	66	6	35	6	–
Franklin Hall	5	–	1	–	–
145 Huguenot	61	–	21	4	–
140 Huguenot	12	–	3	1	–
Milavec Hall	101	2	37	7	–
Harrison Hall (Res Life)	8	–	–	1	–
Syndicate Hall	–	–	–	1	–
Monroe Athletic Complex	8	–	3	1	–
Alison Hall / Dorm	21	–	3	3	–
Gaddy Hall / Dorm	13	–	1	1	–
Locust Hall / Dorm	1	–	–	–	–
Total	*296*	*8*	*104*	*25*	*–*

St. Lucia Classrooms	Fat Client	Thin Client	Printer	A/V	MFP*
Vieux Fort	5	–	–	–	–
Castries	41	–	–	–	–
Total	*46*	*–*	*–*	*–*	*–*

St. Lucia Offices	Fat Client	Thin Client	Printer	A/V	MFP*
Vieux Fort	6	–	–	–	–
Castries	11	–	–	–	–
Total	*17*	*–*	*–*	*–*	*–*

St. Lucia Lab/Common Areas	Fat Client	Thin Client	Printer	A/V	MFP*
Vieux Fort	–	–	–	–	–
Castries	8	–	–	–	–
Total	*8*	*–*	*–*	*–*	*–*

* *Multi-Function Printer*

WI-FI by Campus	Monroe	Dorm	Cable
Bronx – all buildings	✓		
New Rochelle – all buildings except as follows:	✓		
Allison Hall / Dorm		✓	
Gaddy Hall / Dorm		✓	
Locust Hall / Dorm		✓	
Syndicate Hall			✓
St. Lucia – all buildings			✓

TECHNOLOGY INITIATIVES 2018–2023

Campus	Wi-Fi	Redundant Gateway	Network Upgrade 10Gb	VDI Upgrade	PC Replacement	Printer Migration
Bronx						
King	X	X	X	X	X	X
Jerome	X		X		X	X
West	X		X		X	X
Monroe	X		X		X	X
Annex	X		X			
Ustin	X		X		X	X
New Rochelle						
Main	X		X		X	X
Franklin	X		X		X	
145 Huguenot	X		X		X	X
140 Huguenot	X		X		X	X
Milavec	X	X	X	X	X	X
Harrison	X		X		X	
Syndicate					X	
M.A.C.	X		X		X	
Allison	X		X		X	
Gaddy	X		X		X	
Locust	X		X		X	
St. Lucia						
Vieux Fort	X					
Castries	X				X	

APPENDIX E: INTEGRATION MAPS

2018–2023 Strategic Goal Integration Map

GOAL 1:

To ensure graduates possess the competencies for successful careers, advanced education, and lifelong learning

■ AP — Academic Plan
■ FP — Financial Plan
■ FMP — Facilities Master Plan
■ IE —Institutional Effectiveness Plan
■ SEM — Strategic Enrollment Management Plan
■ TP — Technology Plan

INSTITUTIONAL GOALS		Priority Code	AP	FP	FMP	IE	SEM	TP
1.0	Ensure graduates possess the competencies for successful careers, advanced education, and lifelong learning	–	–	FP-8	–	IE-1a IE-1b IE-1c	–	TP-1
1.1	Enhance the effectiveness of the curricula through assessment of technical, major-related, quantitative, analytical, and written/oral communication skills for advanced education and employment	9	AP-1	–	–	IE-1b IE-4a	–	–
1.2	Expand and diversify the College's undergraduate programs, student body, faculty, and experiential learning capabilities	8	AP-2	–	FMP-5	–	SEM-5	–
1.3	Expand and diversify the King Graduate School's programs, student body, faculty, and research capabilities	8	AP-3	–	FMP-5	–	SEM-5	–
1.4a	Assess and strengthen the student experience delivered through Monroe Online	10	AP-4	–	–	IE-1c	SEM-1	TP-2
1.4b	Assess and strengthen the student experience for adult learners							
1.4c	Assess and strengthen the student experience for English language learners							
1.5	Measure and improve the effectiveness of academic support services (e.g., labs, learning support centers, libraries, academic support classes, adaptive software, and research centers) in preparing students for academic success	7	AP-5	–	–	IE-1c	–	TP-1
1.6	Expand curricular and co-curricular and community service projects as part of curricula to contextualize learning	5	AP-6	–	–	–	–	–
1.7	Expand and diversify internship opportunities aligned with students' career goals, and ensure a high-quality experience for students and employers	7	AP-7	–	–	IE-1b IE-4a	–	–
1.8	Integrate career exploration and preparation into curricular and co-curricular experiences	6	AP-8	–	–	–	–	–
1.9	Improve employment and advanced education outcomes for graduates	9	AP-9	–	–	IE-1b IE-4a	SEM-1	–
1.10	Engage and support alumni by expanding programs that promote lifelong learning and professional development	5	AP-10	–	–	–	–	–

2018–2023 Strategic Goal Integration Map

GOAL 2:

To shape institutional enrollment by attracting, enrolling, and retaining students with the potential to succeed academically, graduate, and advance professionally

- ■ AP — Academic Plan
- ■ FP — Financial Plan
- ■ FMP — Facilities Master Plan
- ■ IE —Institutional Effectiveness Plan
- ■ SEM — Strategic Enrollment Management Plan
- ■ TP — Technology Plan

	INSTITUTIONAL GOALS	Priority Code	AP	FP	FMP	IE	SEM	TP
2.0	To shape institutional enrollment by attracting, enrolling, and retaining students with the potential to succeed academically, graduate, and advance professionally	–	–	–	–	IE-2a IE-2b	–	TP-2
2.1	Continuously improve student engagement, retention, and graduation outcomes	10	–	–	–	IE-2a	SEM-1	–
2.2	Manage enrollment strategically, appropriate to locations, schools, programs, and the employment landscape	9	–	FP-8	FMP-6	IE-2b	SEM-2	–
2.3	Explore, launch, and nurture strategic enrollment partnerships	8	–	–	–	–	SEM-3	–
2.4	Implement innovative practices that facilitate adult learner enrollment	8	AP-4	–	–	–	SEM-4	–
2.5	Expand program offerings and outcomes for specific communities, e.g., English language learners, veterans, transfer students, international students, first generation students, and students with disabilities	7	AP-4	–	–	–	SEM-5	–
2.6	Apply institutional analysis and predictive modeling to support strategic enrollment management college-wide	6	–	–	–	–	SEM-6	TP-3
2.7	Advance enrollment for Spring, intersession, and non-traditional starts throughout the year by leveraging the three-semester academic calendar and multiple delivery formats.	9	–	–	–	–	SEM-7	–
2.8	Pursue additional degree programs	8	AP-2 AP-3	–	FMP-6	–	SEM-8	–
2.9	Evaluate the feasibility of additional extension sites	5	–	FP-5	FMP-7	–	SEM-9	–
2.10	Expand and diversify club athletics programs on both the New Rochelle and Bronx campuses.	5	–	–	–	–	SEM-10	–

2018–2023 Strategic Goal Integration Map

GOAL 3:

To formally cultivate and institutionalize a responsive culture and structure to more effectively serve students, faculty, and staff

- **AP** — Academic Plan
- **FP** — Financial Plan
- **FMP** — Facilities Master Plan
- **IE** —Institutional Effectiveness Plan
- **SEM** — Strategic Enrollment Management Plan
- **TP** — Technology Plan

INSTITUTIONAL GOALS		Priority Code	AP	FP	FMP	IE	SEM	TP
3.0	Formally cultivate and institutionalize a responsive culture and structure to more effectively serve students, faculty, and staff	–	–	–	–	IE-3a IE-3b IE-3c	SEM-1	TP-4
3.1	Codify the College's values to clearly communicate performance expectations and standards	8	AP-11	FP-2	–	IE-3a	–	TP-4
3.2	Implement hiring, onboarding, and professional development programs for all employees that emphasize the College's mission and core values	10	AP-12	FP-2	–	IE-3b	–	–
3.3a	Strengthen relationships with faculty, staff, and students	9	AP-13	–	–	IE-3c	–	–
3.3b	Strengthen relationships with external community groups and organizations	8	–	–	–	–	–	–
3.4	Improve the College's organizational structure to reflect functional areas, campus locations, and opportunities for greater efficiencies	8	Carried out by the President's Cabinet					
3.5	Improve the College's governance structure to ensure appropriate representation of all constituencies and logical decision-making	5	Carried out by the President's Cabinet					
3.6	Develop periodic assessment of governance, leadership, and administration	6	Carried out by the President's Cabinet					

2018–2023 Strategic Goal Integration Map

GOAL 4:

To validate program quality and learning outcomes through rigorous self-assessment and enhanced external institutional and programmatic recognition

- ■ AP — Academic Plan
- ■ FP — Financial Plan
- ■ FMP — Facilities Master Plan
- ■ IE —Institutional Effectiveness Plan
- ■ SEM — Strategic Enrollment Management Plan
- ■ TP — Technology Plan

	INSTITUTIONAL GOALS	Priority Code	AP	FP	FMP	IE	SEM	TP
4.0	Validate program quality and learning outcomes through rigorous self-assessment and enhanced external institutional and programmatic recognition	–	–	–	–	IE-4a IE-4b	–	TP-5
4.1	Enhance and promote the identity of the College as a leader in higher education access, affordability, and degree attainment	10	AP-14	–	–	–	–	–
4.2	Engage students in opportunities for research, study abroad, competitions, and conference presentations that will enhance their academic experiences	7	AP-15	–	–	–	–	–
4.3	Pursue additional program accreditations for validation and engagement in continuous improvement	8	AP-16	–	–	–	–	–
4.4	Expand and strengthen the honors program at the undergraduate level	8	AP-17	–	–	–	–	–
4.5	Enhance and expand internal and external faculty development opportunities	7	AP-18	–	–	–	–	–
4.6	Encourage, support, and articulate faculty contributions to the discipline	6	AP-19	–	–	–	–	–
4.7	Communicate the achievements and distinctions of the College and its students, faculty, and staff to internal and external audiences	6	AP-19	–	–	–	–	–

2018–2023 Strategic Goal Integration Map

GOAL 5:

To allocate resources effectively and efficiently in support of the Strategic Plan and institutional priorities

- 🟥 AP — Academic Plan
- 🟧 FP — Financial Plan
- 🟩 FMP — Facilities Master Plan
- 🟩 IE — Institutional Effectiveness Plan
- 🟦 SEM — Strategic Enrollment Management Plan
- 🟥 TP — Technology Plan

	INSTITUTIONAL GOALS	Priority Code	AP	FP	FMP	IE	SEM	TP
5.0	Allocate resources effectively and efficiently in support of the Strategic Plan and institutional priorities	–	–	FP-4 FP-5 FP-7 FP-8 FP-9	–	IE-5a IE-5b	–	TP-6
5.1	Evaluate and enhance the College's current process of allocating resources (operational and capital) based on institutional priorities	7	–	FP-1	–	IE-5a	–	–
5.2	Continuously assess and improve campus facilities and technology to enhance teaching and learning	8	–	FP-8	FMP-1 FMP-2 FMP-3 FMP-5	–	–	TP-7
5.3	Improve learning environments by evaluating and upgrading classroom settings, as appropriate, to promote innovation and collaboration	8	–	FP-8	FMP-1 FMP-2 FMP-3 FMP-5	–	–	TP-7
5.4	Implement a formal human resources plan that defines staffing levels, strategies for hiring, training, and developing talented faculty and staff	8	–	FP-2	–	–	–	–
5.5	Assess and improve the effectiveness of institutional aid on new enrollment and retention while improving related budgetary controls	10	–	FP-3	–	–	–	–
5.6	Align all sub-plans to prioritize budget resource allocation	10	–	FP-1	–	–	–	–
5.7	Incorporate sustainable practices and programs to make College communities greener and safer	6	–	–	FMP-4	–	–	–