INFORMATION TECHNOLOGY SERVICES DIVISION

STRATEGIC PLAN FY25/26
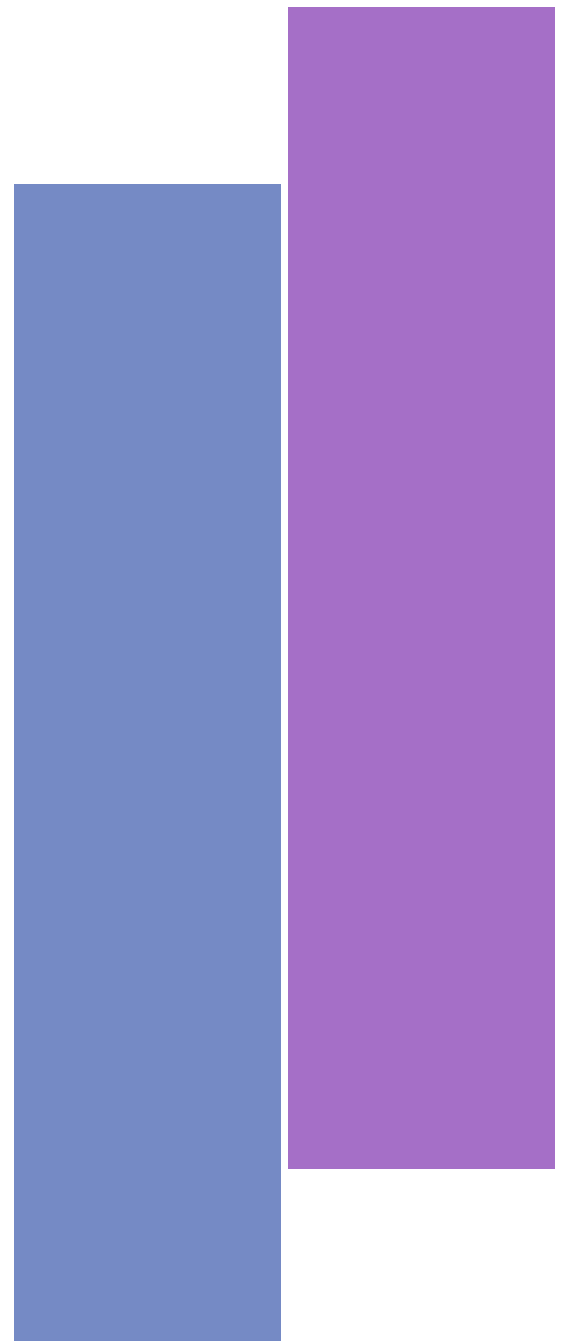
iT SERVICES

UMass Boston

ABOUT US

Technology is no longer an add-on to our lives, it is deeply integrated into everything we do. The UMass Boston IT Service Division's job is to make sure the technology we all need for teaching, learning, working, and research is useful, reliable, and secure.

IT provides extensive services to meet faculty's technology needs of delivering instruction remotely and in the classroom. We offer computer resources in many forms, including computer labs and classrooms, mobile laptop and iPad carts, permanent and loaner computers for office and remote working, as well as virtual cloud-based computer access. UMass Boston is Boston's only public research university, and our Research Computing team provides many technology services to our campus researchers.

IT also values technology innovation with efforts including 3D printing and virtual reality, and through encouraging internal "technovation" working groups to investigate and systemize other emerging technologies. IT offers support and system administration for many applications powering the services that we offer and that are offered by groups across the campus. Additionally, IT supports the base essentials such as telephones, wifi, and email.

It is one of IT's most important duties, in all we do, to ensure that our users leverage these technologies in a secure manner. Therefore, our Information Security Office operates within the IT department and is responsible for security technology and security training.

Each day, the UMass Boston IT services team lives out its vision, fulfills its mission, and maintains a steadfast devotion to its values. Every member of the UMass Boston IT team has a unique perspective and skill set, just like the population it serves. IT's successes can be found in the tangible results of the team's work, but more importantly, in the collaboration and sense of unity that shine through each project.

OUR SERVICES

IT's applications help your teaching, learning, and working every day, but each app has a name that might not be totally clear if you haven't used it before.

> **Echo 360, Office 365, 25 Live... Get IT, BookIt, TurnItIn...**

We recognize that technology can sometimes be confusing and frustrating. To help, we have built an "IT Toolbox" page to help summarize some of our most important apps so you can more quickly and easily understand which are useful to you and learn more.

IT TOOLBOX
umb.edu/IT/toolbox

Need more help? We have many tech support offerings, including walk-in, phone, email, and live chat. Get help from the IT Service Desk today!

WALK-IN
IT Service Desk - 3rd Floor Healey Library
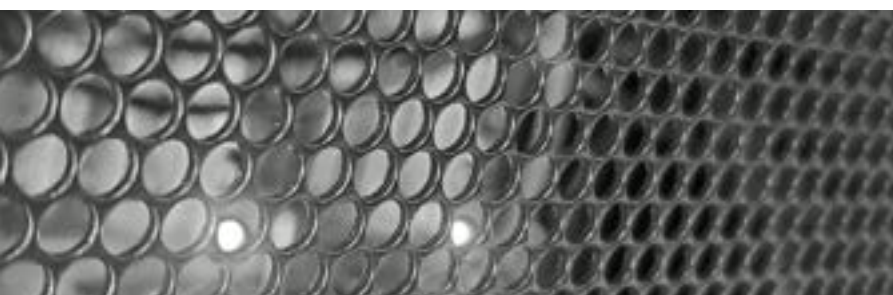
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LEARN MORE ABOUT OUR SERVICES
umb.edu/IT

UNIVERSITY'S MISSION

The University of Massachusetts Boston is an academic community dedicated to pursuing locally rooted and globally engaged research, teaching, and learning at the highest level of scholarly excellence. Firmly rooted in the city of Boston, we are committed to truth-seeking and service in the quest for social justice.

Our expansive scholarly and creative contributions are directed at advancing knowledge in partnership with the communities we serve, especially the historically marginalized. We honor and uplift the cultural wealth and well-being of our students, faculty, and staff to sustain a vibrant and just campus community.

UNIVERSITY'S VISION

We are a public research university with a teaching soul. UMass Boston brings diverse people and ideas together to seek knowledge and improve lives, here in Boston, across the nation, and around the world. We are dedicated to promoting the practice of democratic citizenship; preparing a diverse, talented workforce; informing equitable public policy; and strengthening the social and economic resilience of our city.

Our rigorous academic environment supports the intellectual growth and success of students from diverse socioeconomic, racial, ethnic, linguistic, and cultural backgrounds. Our student body, drawn from and embodying the world's immense cultural wealth, will be the primary source of Boston's future talent. Our students' future is Boston's future. Equity and an ethic of care are core values that drive institutional policies, practices, and culture. And we thrive as a community of people who learn from each other and from life experiences different from our own.

UMass Boston's community-engaged scholarship, service, and strategic collaborations promote the interests of our partner communities. Our academic programs reflect alignment between racial and environmental justice and the principles of sustainable humanity that guide university planning and operations.

MISSION

Information Technology Services (ITS) provides a diverse population of students, faculty, and staff with reliable and secure technology, services, and solutions to continuously improve scholarship; teaching and learning; research; and business processes to enhance student success and support the mission of the university.

VISION

To be a trusted partner in providing secure, transformative, and innovative Information Technology services to advance teaching, learning, research, and administrative practices through dynamic and adaptive customer service.

VALUES

UMass Boston IT Services is committed to the values of:

CARING
We interact with students, faculty, and staff with respect, empathy, and professionalism.

INCLUSION
We embrace our differences to provide the best service to a diverse UMass Boston community.

INNOVATION
We value creativity and critical thinking, focusing on developing efficient, effective technology services and solutions.

COLLABORATION
We work together to implement new services and technologies to solve problems and improve the quality of life for all.

DEDICATION
We are committed to the mission of the university and the people we serve, and we work hard to ensure successful outcomes.

EXCELLENCE
We strive to provide high-quality service and support to our community of students, faculty, and staff.

PRIMARY GOALS

UNIVERSITY GOAL 1
Holistic Student Success

DIVISION'S MAPPED GOAL
Collaborate with faculty, academic leadership, and students, to apply technology to teaching and learning & student administration in ways that promote pedagogical innovations and student success.

UNIVERSITY GOAL 2
Impactful Research & Scholarship

DIVISION'S MAPPED GOAL
Partner with the Research Computing Advisory Committee, researchers, and distributed Research Computing IT personnel to strengthen support for Grand Scholarly Challenges and other research initiatives.

UNIVERSITY GOAL 3
For the City

DIVISION'S MAPPED GOAL
Build and strengthen local partnerships by providing technological opportunities and advancement locally & regionally.

UNIVERSITY GOAL 4
Enriching Our Human Core

DIVISION'S MAPPED GOAL
Enhance IT service management and delivery to ALL Administrative and Academic units across the University by implementing a state of the art, secure, reliable, and scalable technology infrastructure.

UNIVERSITY GOAL 5
Reimagining Campus Space

DIVISION'S MAPPED GOAL
Ensure learning experience of our students & work experience of our employees is supported by our physical and technology infrastructure.

GOAL 1

> **Collaborate with faculty, academic leadership, and students, to apply technology to teaching and learning & student administration in ways that promote pedagogical innovations and student success.**

The IT Division has a total of **13 individual objectives** that support *Holistic Student Success* by applying technology to enhance teaching, learning, and student services. The 13 objectives, summarized below, represent a range of efforts, from teaching & learning enhancements to implementing the Canvas learning management system and improving the start of semester activities. These initiatives collectively strengthen the university's ability to foster innovation, streamline operations, and enhance the student experience.

Teaching and Learning Enhancements

- **MakerSpace Integration:** Embed MakerSpace resources into academic programs.
- **One Button Studio Implementation:** Collaborate with the Dean of Libraries to establish a video production space.
- **Polling Solution Replacement:** Investigate tools to replace iClicker.
- **Academic Technology Expansion:** Promote adoption of new tools and classroom designs.
- **AI in Teaching & Learning:** Host training sessions and provide support for faculty using AI.
- **Course Evaluation System:** Support and enhance course evaluation processes.
- **Teaching & Learning Events:** Host TEACH Sessions, Ed Tech Conference, and other events to enhance teaching and learning.

Canvas LMS Implementation

- **Canvas LMS Implementation:** Configure, integrate, migrate data from Blackboard, and decommission the old system.
- Partner with Academic Affairs implementing Community & Executive Education program leveraging Canvas Catalog, Credentialing, and Payment Processing.

Other Initiatives

- **UMAX Advancement Support:** Provide technical assistance for new university Advancement platform.
- **Classroom and Lab Maintenance:** Keep educational spaces updated with the latest technology.
- **Start-of-Classes Coordination Template:** Create a process to streamline IT readiness for semester beginnings.
- **Immersive Nursing Suite:** Partner with the Manning College of Nursing & Health Science to implement state-of-the-art immersive teaching & learning environment.

Holistic Student Success

GOAL 2

> **Partner with the Research Computing Advisory Committee, researchers, and distributed Research Computing IT personnel to strengthen support for Grand Scholarly Challenges and other research initiatives.**

This section summarizes **our 11 initiatives** aimed at advancing *Impactful Research & Scholarship* through improved research computing, infrastructure, and faculty support. These initiatives range from expanding high-performance computing resources to rolling out new survey tools and supporting key research programs. By investing in cutting-edge technology and strategic partnerships, these objectives empower researchers to tackle complex challenges with the tools they need.

Research Computing and AI Initiatives

- **Research Computing Investments:** Expand resources, including personnel, to support cross-disciplinary research, particularly in data science.
- **Generative AI Exploration:** Investigate applications and implications of generative AI for research computing.
- **GPU Cluster Node Replacement:** Update aging GPU nodes to better meet the needs and machine learning for researchers.
- **OnDemand Implementation:** Provide researchers with easier access to computing resources.

Library and Academic Support

- **Digital Humanities Program Rollout:** Support the library's initiative with resources, software, and technology for its December 2024 launch.

Strategic Research Initiatives

- **Grand Scholarly Challenges:** Await the establishment of committees to guide efforts in addressing significant academic research challenges.

Survey and Data Collection Tools

- **Qualtrics Replacement Exploration:** Collaborate with UITS and UPST to identify and potentially implement a cost-saving alternative to Qualtrics.
- **New Survey Platform Implementation:** Replace Qualtrics with the selected platform, as determined by UITS.

Infrastructure and Hardware Upgrades

- **ITCGA Project Deployment:** Install compute, GPU, storage, and login nodes as part of the NSF-funded project supporting cancer genomics research.
- **Storage Pod Procurement:** Acquire and implement additional storage and backup resources for research computing.

Faculty and Student Support

- **Needs Assessment Feedback:** Gather input from faculty and students to understand and address their requirements.

Impactful Research & Scholarship

GOAL 3

" **Build and strengthen local partnerships by providing technological opportunities and advancement locally & regionally.**

IT Services is driving **9 separate initiatives** to expand *For the City* by using technology to build stronger local partnerships and create new opportunities. From student employment programs and industry collaborations to hands-on training for the community, these efforts connect the university with the region in meaningful ways. Through education, internships, and volunteerism, we're fostering technological growth and engagement beyond campus.

Community Engagement and Volunteerism

- **IT CARES Campaign:** Launch and promote volunteerism initiatives to foster community assistance and uplift spirits through IT-related efforts.
- **Student Laptop Donation Program:** Collaborate with U-ACCESS to repurpose surplus IT Chromebook laptops for permanent donation to students in need of a functional computer.

Student Employment and Skill Development

- **UMB PACE Program Support:** Continue placing students in roles that expose them to current and future technology solutions.
- **Student Hiring Programs:** Engage students through various employment initiatives to enhance their education and provide practical, real-world skills.
- **IT Internships for Underrepresented Communities:** Focus on hiring IT interns and student employees from diverse backgrounds.

Community College Partnerships

- **RCC 3D Printing and Product Design Training:** Collaborate with Roxbury Community College to conduct a 5-day training series for Boston high schoolers on 3D printing and product design.
- **BHCC Student Laptop Donation Program:** Collaborate with Bunker Hill Community College to assist them to roll out a Student Laptop Donation Program like the one offered at UMass Boston.

Industry Partnerships

- **Internship Opportunities through Partnerships:** Leverage collaborations with companies like Dell, Microsoft, MathWorks, and VDC to help UMass Boston students secure internships.
- **Stone Living Lab:** Implement Wi-Fi to Stone Living Lab on Thompson Island.

" **For the City**

GOAL 4

Enhance IT service management and delivery to ALL Administrative and Academic units across the University by implementing a state of the art, secure, reliable, and scalable technology infrastructure.

Here we summarize our **65 separate initiatives** to advance *Enriching Our Human Core* by strengthening IT services, security, and infrastructure across the university. These efforts enhance cybersecurity, modernize service management, and expand professional development while ensuring inclusivity and accessibility. By improving systems, processes, and collaboration, these objectives help create a more reliable, efficient, and connected technology environment for all.

Cybersecurity and Risk Management

- Operationalize A5 Data Loss Prevention tools.
- Enhance network security via Infoblox and IoT protection measures.
- Implement passwordless technologies and MFA for departmental accounts.
- Deploy Windows Local Administrator Password Solution (LAPS).
- Prepare and respond to audits, including cybersecurity awareness and penetration tests.
- Consolidate network and security services into a cloud-delivered model.
- Expand the use of AI for threat detection and decision-making.
- Implement and promote enterprise-wide cyber resiliency for backup and recovery.
- Implement Network Access Control (Clearpass)
- Create and execute a risk-based cybersecurity strategy to prioritize & address potential threats.
- Develop, review, and promote information security policies.
- Implement Mimecast Analyzer to enforce DMARC, improve email authentication, and minimize impersonation attacks.
- Conduct a comprehensive information security program assessment.
- Address all critical vulnerabilities identified in adversarial testing, DHS, Tenable, and Defender reports.
- Develop a comprehensive Data Loss Prevention (DLP) strategy.
- Configure Advanced Microsoft Azure password management application.
- Implement least privilege principles by utilizing an access management application.
- Implement a robust Cyber Awareness Program to promote a cybersecurity culture.
- Systematically improve security metrics by applying recommendations for continuous improvement.
- Maximize the advanced security features of M365, emphasizing threat analytics and automated response capabilities.
- Implement Abnormal AI to provide comprehensive protection against attacks that exploit human behavior.
- Enhance the utilization of AI and Security Copilot to optimize security operations through AI-driven insights and automation.
- Configure ClearPass NAC to improve visibility, implement granular access policies, and bolster the network security posture.
- Deploy advanced DNS security solutions to prevent DNS-based attacks.
- Implement and promote enterprise-wide cyber resiliency for backup and recovery.

Enriching Our Human Core

GOAL 4

> Enhance IT service management and delivery to ALL Administrative and Academic units across the University by implementing a state of the art, secure, reliable, and scalable technology infrastructure.

System Integration and Data Management

- **Athletics CRM Integration:** Sync academic data between Wiser and ARMS CRM for student-athletes.
- **Enrollment Management Slate Student Success (SSS) Implementation:** Integrate PeopleSoft data for undergraduate and graduate systems.
- **Follett Access Integration:** Support reduced-cost book sales with data automation.
- **MCNHS Data Integration Needs:** Address current and future academic data requirements.

Enterprise Application and Process Enhancements

- Implement SOFTDOCS for document retention, archiving, and legacy data migration.
- Deploy Transact eCommerce to streamline university payments and integrations.
- Automate HR processes, including Employee Classification/Compensation Review, via ServiceNow.

ServiceNow and IT Service Management (ITSM)

- Expand ServiceNow usage across IT and departmental processes.
- Develop Change Management and Request Management modules.
- Refine ServiceNow Service Catalog for Incident and Request modules.

- Assist HR with reviewing and implementing the ServiceNow HR module.
- Implement ITIL/ITSM best practices for continuous process improvement.
- Automate daily event log reviews and develop new ServiceNow forms for the Systems Team.
- Establish IT Pop-up Service Desk in the Campus Center every start of semester to provide point of need service.

Professional Development and Engagement

- Host Lunch and Learn series on AI, PowerShell, and industry-specific topics.
- Plan staff development and certifications in ITSM, Azure, Intune, and other key areas.
- Nurture the IT CARES volunteerism campaign to foster community involvement.
- Oversee the Wellbeats well-being pilot program

Infrastructure and Technology Improvements

- Deploy SolarWinds state-of-the-art monitoring, diagnostics, and automation tools, and establish a SolarWinds affinity group.
- Upgrade Microsoft Active Directory.
- Manage changes in cloud storage allotment.

> Enriching Our Human Core

GOAL 4

Enhance IT service management and delivery to ALL Administrative and Academic units across the University by implementing a state of the art, secure, reliable, and scalable technology infrastructure.

Strategic and Operational Planning

- Launch the "AccessibilITy" theme for 2025, to enhance internal IT collaboration and accessibility in general.
- Document critical systems like Azure, AD, IDM, and IDCS, focusing on connectivity and maintenance.
- Develop a comprehensive Computer Lifecycle Management process with continuous improvement loops.
- Guide AI strategic, tactical, and operational planning.
- Support desktop services by standardizing job descriptions and processes.

Inclusive Excellence and Belonging

- Recruit, retain, and promote a diverse workforce to reflect UMass Boston's community.
- Advance the Enable Inclusive Identity HR project to improve identity-related data and processes.
- Promote accessibility by addressing Title II ADA regulations for web and mobile content.

Education and Community Support

- Host workshops like the Wayfinding Technovation event and industry-focused conferences.
- Participate in the Disability Accessibility Advisory Committee and support accessibility efforts.

- Continue supporting student hiring and professional growth through internships and employment programs.
- Engage with high schoolers through specialized training, such as 3D printing workshops.

Infrastructure and Technology Upgrades

- **Goodmaps Accessibility Project:** Continue working with vendor to test their improved scanning technology for accessible navigation on campus.
- **Chromebook Refresh Program:** Plan, procure, and deploy Chromebooks while retiring outdated ones.
- **Cloud Labs Pilot:** Launch and test virtual computer lab access for faculty.
- **VxRails Upgrade:** Transition to vSphere 8 before vSphere 7 support ends.

Faculty and Student Support

- **Continuing NTT Faculty Laptop Program:** Determine eligibility and secure funding for providing laptops to non-tenure-track faculty with appointments over 50%.

Miscellaneous Initiatives

- Support and maintain various completed projects like T2 Parking and Residential Housing systems.
- Publish the 2025 and 2026 IT Outcomes, including graphics, layout, and distribution.

Enriching Our Human Core

GOAL 5

> **Ensure learning experience of our students & work experience of our employees is supported by our physical and technology infrastructure.**

A total of **42 initiatives** are driving *Reimagining Campus Space* by enhancing technology infrastructure to improve learning and work environments. From upgrading classrooms and networks to expanding research technologies and disaster recovery capabilities, these efforts ensure a modern, adaptable campus. By investing in new tools, spaces, and security measures, we are creating a more connected and future-ready university.

Classroom and Learning Technology Enhancements

- Implement HyFlex technology in classrooms, conference rooms, and the Campus Center Alumni Room.
- Maintain and upgrade classroom and lab technologies, including replacing aging equipment like LCD projectors with laser projectors.
- Partner with Manning College of Nursing and Health Sciences to implement new Immersive Suite.
- Pilot and expand XR (AR/VR) use cases for learning, including custom application development and virtual reality tools like PyMol.
- Develop and implement a comprehensive Learning Commons and enhanced student spaces with the library, integrating resources like learning designers and research computing.

Improve Infrastructure

- Improve physical infrastructure security with video surveillance and enhanced building access technologies.
- Upgrade wireless microphones to compliant versions for classroom use.
- Enhance Wi-Fi accessibility and coverage for mobile device users.

Network Upgrades

- Complete the second phase of the campus-wide network upgrade, replacing end-of-life hardware and improving bandwidth and security capabilities.
- Expand wireless coverage, including outdoor access and support for cameras and emergency phones in common areas.
- Address network closet audit findings and recommendations.
- Upgrade cooling and power infrastructure in critical areas like Uhall 1032 and data centers.

Computer Lifecycle and Asset Management

- Plan and implement programs to replace aging computers in compliance with the Computer Lifecycle Policy.
- Transition existing computers into the Asset Management System and streamline asset intake using the ServiceNow mobile app.
- Prepare for Windows 10 end-of-life by upgrading to Windows 11, implementing Microsoft Windows 10 Extended Support, and surplussing incompatible machines.
- Prepare for MacOS end-of-life by upgrading to supported versions and surplussing incompatible machines.

GOAL 5

" Ensure learning experience of our students & work experience of our employees is supported by our physical and technology infrastructure.

Research and Emerging Technologies

- Explore alternatives to VxRails, like Dell PowerFlex, for FY26.
- Pilot drone technology for 360 tours and XR applications.
- Research and pilot cloud storage solutions like Dell Wasabi to manage data costs and align with Microsoft's storage quotas.
- Continuously monitor and upgrade VxRails clusters.

Disaster Recovery and Business Continuity

- Host and participate in initiatives like the UMass IT Conference, Wayfinding Technovation event, and Zoom room pilot.
- Establish a Knowledgebase Working Committee to review, update, and standardize IT content.
- Strengthen disaster recovery preparedness with geographic redundancy and continuous improvement initiatives.
- Update and catalog all critical documentation required to maintain the enterprise-level cloud services.
- Transition existing Infrastructure Server Inventory into the ServiceNow Asset Management System.

Specialized Projects

- Replace the end-of-life multi-campus document imaging application with a new system for Boston, Dartmouth, and Lowell campuses.
- Replacement of end-of-life border routers for reliable fault tolerant UMassNet access.

Professional Development and Collaboration

- Design and fit out a new police station with IT infrastructure.
- Participate in the UMBPD Consolidation project, relocating the IT Workshop.
- Pilot Zoom rooms for improved remote collaboration and teaching.

IT Service Management and Optimization

- **ServiceNow Expansions:** Asset management, self-service portal, and disaster recovery inventory.
- **Service Desk Operations Improvement:** Define roles, set coverage schedules, and refurbish the IT Service Desk.
- **Problem Management Framework:** Launch process for formal Problem Management for recurrent problem identification and resolution.

Operational and Financial Analysis

- **Telecommunications Trust Fund Analysis:** Assess the sustainability of current expenses and recharges.
- **Microsoft Azure Billing Review:** Ensure cost reductions align with decommissioning actions.
- **Software Tracking Improvement:** Validate and better manage software application purchases.

" **Reimagining Campus Space**

GOAL 5

> **Ensure learning experience of our students & work experience of our employees is supported by our physical and technology infrastructure.**

Administrative Support and Strategic Initiatives

- **FY25/26 IT Strategic Planning:** Develop new and repeatable process for converting IT's working project log into a Strategic Plan document.
- **Technovator Resource Availability:** Broaden access to innovation spaces.
- **LinkedIn Learning Promotion:** Partner with Career Services to drive student adoption.
- **NECHE IT Documentation:** Compile self-study materials for accreditation purposes.

Personnel and Staffing

- **Key Role Replacements:** Fill positions like Information Security Analyst, IT Project Manager, and IT Service Specialist.
- **Learning Design Expansion:** Add capacity for developing non-degree and non-credit programs.

Reimagining Campus Space