San Diego Miramar College Technology Plan

Three Year Rolling Technology Plan
Fall 2024-Spring 2027

Approved by College Council 2026/02/24

The Foundation for the Technology Plan

San Diego Miramar College has a student-centered integrated planning framework that uses its strategic plan as the overall guide for all campus planning. The Technology Plan is informed by Miramar's Mission Statement, as well as our Vision Statement and College Strategic Goals and is written by the Technology Committee.

Mission Statement

San Diego Miramar College's mission is to prepare students to succeed by providing quality instruction and services in an environment that supports and promotes success, diversity, inclusion, and equity with innovative programs and partnerships to facilitate completion for degrees/certificates, transfer, workforce training, and/or career advancement.

The Technology Committee

The mission of the Technology Committee is to provide organization, recommendations, and standards for college-wide technology. Their responsibilities are to do the following:

- Establish technology standards and procedures for the college.
- Coordinate and assist with technology strategic planning efforts across the college, division, school, and department planning.
- Assist technology needs and priorities to support all instruction, services, and administration.
- Establish and recommend high-level, college-wide guidelines and procedures for the development, maintenance, and evolution of the college website presence.
- Provide technology expenditure recommendations to appropriate departments and the Budget and Resource Development Subcommittee.
- Coordinate college-wide technology training efforts.
- Provide technology data, reports, and assistance for Accreditation.
- Work with the District on the integration of technology for the college.
- Perform work and provide evidence to ensure the college meets applicable areas of Accreditation Standard 111.

For more information: https://sdmiramar.edu/governance/committees/technology-committee

Technology Plan Purpose

The San Diego Miramar College Technology Plan is a "rolling document," meaning that it is a living document open to revision as constituents see a need. It serves as a framework to support college-wide technology initiatives, guide participatory governance in resource allocation, and inform personnel about campus technology, resources, and upcoming developments. It is informed by feedback from SDMC employees gathered from surveys, feedback, and committee input to ensure that the technology needs of the different areas and programs across the college are met as well as to help Miramar satisfy ACCJC standards. While the SDCCD's broader Technology Strategic Plan is still pending, it will provide additional context and support long-term planning.

The plan is guided by the following principles:
- Facilitating Learning and Teaching: Provide faculty and classified professionals with essential information about campus technology.
- Supporting Participatory Governance: Establish a clear framework for making informed technology resource allocations.
- Aligning with Accreditation Standards and Strategic Goals: Ensure compliance with Accreditation standards and alignment with the College's Strategic Plan and Mission.

ACCJC Standard 3: Infrastructure and Resources:

3.9 The institution implements, enhances, and secures its technology resources to support and sustain educational services and operational functions. The institution clearly communicates requirements for the safe and appropriate use of technology to students and employees and employs effective protocols for network and data security.

3.10. The institution has appropriate strategies for risk management and has policies and procedures in place to implement contingency plans in the event of financial, environmental, or technological emergencies and other unforeseen circumstances.

Instructional Technology & Accreditation Alignment to ACCJC Standards:

3.9 Secure, Supported Technology for Instruction: Miramar College Technology Services manages classroom and student-facing technology, including open labs. Systems are secured with Microsoft Defender and DeepFreeze, ensuring protection from malware and consistent performance with each reboot. Operating systems are kept up to date to maintain compatibility and receive critical updates. These measures support a stable and secure environment for student learning.

3.10. Standard 3.10 - Risk Management and Contingency Preparedness: Miramar operates a virtualized infrastructure with physical servers distributed across campus to ensure high availability. In the event of hardware failure, automatic failover minimizes service disruption. All virtual servers are regularly backed up via Veeam, with copies stored in multiple locations to support data recovery and operational continuity during emergencies.

Technology Divisions, Roles & Responsibilities

Administrative Computing Services

Enterprise and administrative computing is managed by District IT Services. Enterprise services consist of the enterprise-wide applications and services such as email, PeopleSoft, MFA, Canvas, etc. These services are either housed within the District IT facility or are cloud-based. Campus-based faculty and staff office desktops, and other systems that are not generally student-facing are referred to as "Administrative Computing". The District provides an Enterprise Network Specialist who is housed on campus to support the College's administrative computing needs.

College Technology Services

College Technology Services encompasses three College support departments which provide a wide array of support for instructional and student-facing technology. Duties listed below are neither exhaustive nor exclusive:

- Instructional Computing Services, responsible for services such as:
    - Classroom computer technology
    - Instructional servers providing services and processes to manage/maintain classroom technology
    - Various local instructional software and ensuring such software is installed in needed lab/classroom spaces
    - Certain local services, such as Pay-for-Print

- Audio Visual (AV) Services, responsible for services such as:
    - Managing/maintaining AV technology the in classroom, such as:
        - Projection systems
        - AV control equipment
        - Audio systems
    - Assisting with campus special event setups, including:
        - Commencement
        - Academy Graduation
        - Board Visits
        - Summits
    - Captioning requests

- College Website Services, responsible for such services as:
    - Maintaining College Content Management System (CMS)
    - Providing content-author training and training resources
    - Working with the Schools & Divisions to maintain certain top-tier pages

Help Desk

The Help Desk exists to help all technology users on the Miramar Campus, and the SDCCD, with all of their technology issues. **All tech issues-whether Instructional or Administrative-start here:** https://help.sdccd.edu

Collegewide Technology Goals & Initiatives

Miramar Technology Services supports over 2,000 systems across 200 instructional and support spaces. These nine goals help us stay responsive, equitable, and future-ready-especially as instructional needs and technologies evolve.

1. **Provide a clear process for requesting new technology.**
2. **Provide some flexibility in standard hardware in staff offices.**
3. **Ensure technology in all classrooms are "fit for purpose."**
4. **Update classroom technology in stages or on a rolling basis.**
5. **Adopt cost-effective solutions.**
6. **Pilot different technologies.**

7. **Continue to improve collaborative efforts (e.g. between District, inter-campus, intra-campus, in areas such as software and hardware purchasing).**
8. **Implement regular surveys of employees regarding their experience using the technology at Miramar.**
9. **Support professional developmentforCollege Technology Services Department staff as well as all college employees.**

See below for details on the above goals.

Goal 1: Provide a clear process for requesting new technology.

The Technology Services website should provide accurate guidance on the purchasing and requesting of technology (https://sdmiramar.edu/services/tech-services/technology-requests).

Goal 2: Provide some flexibility in standard hardware in staff offices.

The Technology Services website should provide accurate guidance on the purchasing and requesting of technology (https://sdmiramar.ed u/services/tech-services)

- **Process for requesting non-standard computer hardware:**
  - Faculty or staff who require non-standard hardware must submit a justification. Before submitting a request, faculty and staff are encouraged to consult Technology Services to determine actual needs. The request should be sent via email to the Dean or Manager and must include:
    - Specific job duties necessitating non-standard hardware.
    - Expected measurable outcomes (e.g., "The system will be used to create a series of instructional videos within six months").
- **The College aims to provide some flexibility in standard hardware, including:**
  - Monitor choice: Single standard monitor, dual monitors, or a single wide monitor.
  - The College is piloting a laptop/docking station model.

Goal 3: Ensure technology in all classrooms are "fit for purpose."

Office Systems:

The current District vendor for computer systems is Dell. Current minimum standards for Faculty/Staff office computers are set by the District and are listed below (this list is current as of Q4 2024):

- System must support Windows 11
- Intel iS or i7
- 16GB RAM or more
- 256GB SSD
- DisplayPort out
- Laptops: Faculty and staff who wish to use a laptop for their workstation must obtain approval from their Dean or manager.

Classroom Systems:

Current minimum standards for "standard" classrooms with a podium and projection system are as follows:

- Projection system or large interactive display

- PC with Windows 11 operating system[1]
- Guest laptop hookups - HDMI and USB-C

Goal 4: Update classroom technology in stages or on a rolling basis.

The campus has a well-established roll-down process where the most current instructional (classroom} systems that are upgraded become available for use to replace older faculty/staff systems.

Most campus technology replacements are funded through the PPIS block grant, which is limited to instructional equipment. Administrative systems are mainly upgraded through the "roll-down" process, where older instructional systems are repurposed if they meet minimum specs.

Because of limited funding, the Technology Committee should advocate for dedicated administrative tech funding. Most faculty and staff use standard systems for basic tasks, but those needing higher-performance equipment must justify the need and get approval and funding through their dean or manager.

More information is in the FAQ section below and in the Technology Services web pages: (https://sdmiramar.edu/services/tech-services}.

Minimum specifications for "rolled down" technology include:
- Newer, faster storage technology -- Solid State Drive (SSD}
- Minimum 8GB RAM

Note: some classrooms may have additional technology beyond the standard where needed, such as document cameras or dedicated DVD players.

Goal 5: Adopt cost effective solutions.

Given the varying and often high cost to equip a "standard" classroom, ensuring each room is up to these standards can be difficult. While all classroom PCs were replaced in January 2023 and current meet or exceed standards, Miramar College currently has approximately 50 classrooms (nearly 1/3 of classrooms} with older, analog switching & projection technology. These rooms present several challenges:
- Instructors in rooms with analog technology will face increasing difficulty showing online content as analog connections cannot display HDCP protected content (e.g., a Netflix movie}.
- Instructors wishing to use a laptop in these rooms must also provide an appropriate adapter to connect to the guest VGA connection.

Therefore, it is a priority to upgrade classroom technology with the following goals:
- Replace analog (VGA} projection systems with HD-BaseT projection systems or large interactive display technology
- Replace analog video switching equipment with digital IN1608xi MA switches

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[1] In 2022/23 the District implemented a plan to update faculty and staff systems to support a Windows 10 minimum operating system. The current minimum required operating system is Windows 11. Any faculty or staff with a computer that is not running Windows 10 at a minimum should submit a help-desk ticket. As this requirement remains a part of the District's adopted "security posture," the District is replacing systems that cannot support the latest minimum operating system.

- Bring modern connectivity (HDMI, USB-C) to the desktop for guest/faculty laptop use

Adopting cost-effective solutions is important to sustaining College technology long-term. A strategic approach should prioritize standardized, budget-conscious technology for most classrooms while designating one or two high-end classrooms per building for specialized needs. **Meeting this goal will require the following:**
- Working closely with faculty on the design of several classroom models
- Management and faculty coordinating to ensure that rooms are scheduled appropriately
- Flexibility-should a high-end classroom be scheduled for a class for the entire semester, or should faculty/deans work together to utilize the room in a rotation? (See ACCJC Standard 3.9, 3.10)

Goal 6: Pilot different technologies.

Technology Services is piloting alternative technologies for use in the classrooms and economical ways to provide more modern connectivity in analog classrooms until they can be brought up to the college standard.

Laptop/docking station pilot program: Technology Services is piloting a Laptop+ Docking Station Model to replace desktop computers for suitable candidates. Suitable participants include those with job duties that require mobility, such as: attending frequent meetings at other locations and instructional faculty who benefit from using the same device in both office and classroom settings. A key benefit of this program is that it provides a seamless experience with files, applications, and configurations that eliminates the need to transfer files via USB or cloud storage **{Note:** This pilot program does not support remote work.)

Mobile interactive displays: Technology Services has acquired three 86" interactive displays and an additional two demo units. These are self-contained computer systems with a wireless keyboard & mouse, freeing the instructor from the fixed-position podium. Technology Services would like to get user, as well as student, feedback on these types of displays.

Goal 7: Continue to improve collaborative efforts

Technology Services will continue to work internally to improve communication and internal processes. They will also work with the District and other campus's Technology Departments to share knowledge, develop processes, and make recommendations that contribute to improved College experiences for students, faculty and staff.

For example, as of QI 2025, the District is working on a process to identify globally used software that may benefit from centralized purchasing through the District Technology Committee.

Software and hardware purchasing should be a collaborative process between Technology Services and the requesting school or program to ensure support, network connectivity, cost efficiency, and funding success. Technology purchases-especially large or planned ones-should go through the Program Review process and proper departmental approval chains. BRDS will forward the list of annual Program Review requests for funding to Technology Services, who will then provide input, such as suggesting roll-down inventory to satisfy some requests.

Technology Committee members and others who serve on the District Technology Committee and any related workgroups will maintain two-way communication with the areas they represent as well as with other committees as needed. Further, Technology Committee members will maintain two-way communication with their areas as well as with other committees as needed.

Goal 8: Implement regular surveys of employees regarding their experience using the technology at Miramar.

This goal will include regular, bi-annual surveys of technology end-users, which will be managed by the Office of Institutional Effectiveness office. This plan recommends that these surveys consider:

- Faculty/staff technology satisfaction
- Classroom technology satisfaction
- Hardware Technology needs
- Software Technology needs

A summary of the findings and access to data should be provided via the Technology Committee. Technology Services may need to drill down to better understand specific areas of need or concern and report back to the Technology Committee.

Goal 9: Support professional development for College Technology Services Department staff as well as all college employees.

The College Technology Services Department supports professional development for its staff and all staff are encouraged to provide professional development requests annually. Currently, AV Staff have access to an AVIXA membership and have access to an O'Reilly Books Online subscription. AVIXA offers courses and content aimed at Audio Visual technologies and certifications and O'Reily Books is a large collection of online books and content covering a variety of technologies. Instructional Computing Support also has access to O'Reilly Books and a ChatGPT subscription. Web Services has access to O'Reilly Books as well and has regularly attended the annual DrupalCon conference for a number of years.

It would also be helpful for the District Technology Committee to establish a Technicians Round Table wherein the various technicians across the District would be available as resources for one another. They could share best practices, recommend new equipment, and demo new gear before making local recommendations at their colleges.

The College Technology Services Department also provides training, upon request, to faculty and staff on a variety of topics such as the use of classroom technology or content editing for College website content authors. Additional information related to the Technology Services departments, as well as video tutorials, can be found in the "Training" subsection below and on the College Website at https://sdmiramar.edu/services/tech-services.

Conclusion:

Technology plays a crucial role in helping our students succeed and in supporting the day-to-day work of our faculty and staff. This plan recognizes the need for strong communication, collaboration, and professional development. With thoughtful planning and teamwork, we can keep moving forward-and make sure our technology supports our College Mission: to prepare students to succeed by providing an environment that supports and promotes success, diversity, inclusion, and equity.

How to Get Assistance/Frequently Asked Questions

Quick Access Links:

- College Technology Services: This website provides links and information regarding Audiovisual Services, Instructional Computing, Website Services, Administrative Computing, a video on how to "Get Help" and a link to the District Help Desk.

- District Help Desk: This website enables users to submit help tickets as well as search for solutions and other services.

  - Submit a ticket (you'll receive a response within 24 hours)
  - Track your ticket for status updates, estimated timelines, and communication
  - Note: A response does not mean a immediate resolution, but it starts the process!
  - Using the system ensures your issue is documented and routed to the correct team
- Technology Request Instructions: This website walks users through the process of submitting new technology requests, replacing existing instructional technology, replacing existing administrative equipment, and more.
- Website Services: This website helps users with questions, comments, and issues regarding the campus website.
- Faculty/Staff Resources & Training: This website provides links and information regarding Administrative Services, Technology Services, Institutional Effectiveness, and more.

What is the technology replacement and campus roll-down process?

- **Instructional equipment** is funded by the PPIS grant
- **Administrative devices** are upgraded via a "roll-down" process using repurposed systems
- Minimum specs are maintained for performance; higher-end needs require justification and Dean approval

What technology is available and where?

- **Basic Office Computers** (internet, documents) provided as standard
- **Laptop Checkout** available via the Library (Dean/manager approval required)
- **Classroom Training & HyFlex Support** available upon request
  - HyFlex-enabled rooms: A-223, H-205, Kl-202, M-110 (+ Kl-107 partial)
  - Learn more about HyFlex

How do I request the purchase of non-standard technology?

- Submit a justification and get Dean/manager approval
- Work with Tech Services for compatibility and pricing
- Standards are listed in the Technology Goals & Initiatives Plan

How do I update website content such as department webpages?

- Your **Dean or manager must approve access**

- Training and short videos are available
- Contact Web Services via the Website Services Page

How do I find training?

- Miramar College offers **Web-based tutorials** for common tasks (classroom tech, content editing, etc.) On-demand training available via Technology Services.
    - Visit: Faculty/Staff Resource Page and Tech Services Page