San Diego Miramar College Technology Plan

Three-Year Rolling Technology Plan

Fiscal Year 2027 - 2030

Draft for Technology Committee / College Council Review

Updated: March 2026

Plan Update/Edit History

Date	Notes	Author
2026-03-10	Initial Draft reviewed by committee	Hill, Committee
2026-03-17	Added updates recommended by committee: Noted that managers should submit technology priorities to Tech. Services by December and, Chairs to have technology focused meeting in the “Rhythm” section, onboarding processes was already present under “Classified Senate”,	Committee
2026-03-17	Added document history (this table)	Hill
2026-03-24	Added clarification that the Technology Committee is a recommending body reporting to College Council	Battisti
2026-03-24	Added ACMM section	Hill/Battisti
2026-04-14	Approved by Technology Committee	Committee

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Note: Update this Table of Contents in Word after final edits (References → Table of Contents).

1. Purpose and Scope

This Technology Plan is a three-year rolling plan that sets priorities for instructional and student-facing technology at San Diego Miramar College (SDMC). It provides a shared framework for decision-making, funding requests, and implementation sequencing. The plan is intentionally aligned to a summer start so approved priorities can be executed during the high-impact summer maintenance and upgrade window.

Because SDMC is part of the San Diego Community College District (SDCCD), many enterprise responsibilities (identity, email, ERP/SIS, learning management systems, district-wide cybersecurity, and core network services) are managed at the District level. This plan focuses on college-controlled and college-influenced technology, while clearly identifying the dependencies and coordination required with SDCCD District IT and District Facilities.

Scope includes:

- Instructional classroom and lab technology (computers, displays, AV control, lecture capture where applicable).
- Student-facing computing environments (open labs, loaner devices in collaboration with the Library, specialized instructional software).
- College website platform and content management support.
- Technology planning inputs for bond-funded facilities modernization, especially classroom design standards for 2029 and beyond.
- Governance processes for prioritization, pilots, and lifecycle replacement.

Out of scope (District-led, but coordinated):

Examples of processes & procedures outside the scope of this document include:

- Enterprise applications and platforms (SIS/ERP, HR, Finance, procurement, district email, Canvas).
- District-wide identity, MFA, network security tooling, and security operations.
- District-managed faculty/staff office computing standards and endpoint management (unless delegated locally).

2. Planning Context and Governance

2.1 Why a new cycle beginning FY 2027

SDMC is beginning a new planning cycle earlier than a typical third-year refresh because conditions have materially changed. Key drivers include the 2023 formation of the Technology Services Division (integrating Instructional Computing Support and Audio Visual services), ongoing modality shifts in teaching and learning, and the District's facilities modernization program. These changes require a college-level plan that explicitly defines roles, interfaces, and campus priorities.

2.2 Governance and participatory development

The Technology Committee is the primary shared-governance body for campus technology priorities and standards. The Committee works with Budget and Resource Development, Academic Senate, Classified

Senate, Associated Student Government, and District partners to ensure needs are validated, prioritized, and resourced. The Technology Committee is a recommending body reporting to the College Council.

Annual update rhythm (rolling plan):

- Dept. Chairs are encouraged to consider one technology focused meeting per semester and invite Technology Services representatives.
- Each constituency submits feedback and proposed updates by December each year.
- Deans/Managers provide technology priorities to Technology Services by December
  Priority list should also be included in Program Review
- Technology Services provides an annual inventory and lifecycle status summary by December.
- The Technology Committee updates priorities and drafts changes in February and March.
- College Council approval target: late spring, enabling summer execution.

2.3 Technology Services roles and responsibilities

Technology Services at SDMC includes Instructional Computing Support (ICS), Audio Visual (AV) Services, and Website Services. Together, these teams support instructional technology and student-facing services across campus classrooms, labs, and learning spaces as well as providing event support, including major events such as Commencement. Technology Services also maintains local server infrastructure required for instructional environments and college web hosting, in coordination with District IT security and networking standards.

2.4 Accessibility Capability Maturity Model (ACMM)

The college should align itself with the Accessibility Capability Maturity Model (ACMM) as proposed by the State Chancellor's office. Core components include:

- Move from a reactive approach to a proactive approach to accessibility.
- **Continuously Improve Accessibility**: Make iterative updates to policies, procedures, and business processes, ensuring inclusivity for students, employees, and the public.
- **Align with the CCC Vision 2030**: Foster diversity, equity, and inclusion by removing institutional barriers for individuals with disabilities.
- **Proactively Meet Legal Requirements**: Address the needs of the Americans with Disabilities Act (ADA) and Section 508 of the Rehabilitation Act, and incorporate Office of Civil Rights (OCR) recommendations, reducing legal risks.
- **Collaborate Across the Institution**: Administrators, faculty, and staff work together within an organized framework to enhance the accessibility experience.

Role clarity with District IT

- District IT: enterprise systems, identity and access management, campus administrative computing, district security posture, and core network services.
- College Technology Services: classroom and lab computing, instructional software, AV systems, instructional servers, and the SDMC website platform.

- Shared responsibilities: classroom network readiness (wired/wireless), incident response coordination, and procurement/specification alignment.

3. Current Environment Snapshot

This snapshot summarizes the approximate scale and service environment that informs priorities in this plan.

3.1 Technology footprint (approximate)

- 150+ classrooms and a few dozen conference/lecture spaces.
- Approximately 800 pieces of AV equipment supporting instruction.
- Approximately 2,000 computers, laptops, other devices across instructional spaces, labs, and loaner programs.
- About 30 virtualized servers supporting instructional and web services.

3.2 Staffing (Technology Services Division)

- 1 Network Specialist (highest technical complexity responsibilities: imaging, automation, server infrastructure, backups, web hosting).
- 1 Instructional Lab Technician (frontline support for instructional computing environments).
- 2 Multimedia Specialists (classroom AV installation, configuration, and maintenance, event support).
- 1 Web Developer (Drupal CMS, training/support for content editors, web platform operations in collaboration with Network Specialist).

It is estimated that Technology Services is understaffed compared to other colleges of similar size by at least two FTE positions.

4. Technology Standards and Replacement Cycles

Technology standards reduce support complexity, enable predictable lifecycle replacement, and improve equity of access and experience across learning spaces. Standards are reviewed annually and updated as needed to reflect curriculum requirements, accessibility needs and compliance, security posture, and vendor/product lifecycle changes. These goals are aspirational and dependent upon budget.

4.1 Core standards (summary)

- Security and resilience: systems must follow District security requirements, support timely OS updates, use managed endpoint protection, and include backup/restore and failover planning for critical services.
- Interoperability: classroom systems must support common instructor and student devices (Windows/macOS, HDMI and USB-C connectivity, and network-based casting where feasible).
- Maintainability: select technologies that Technology Services can support with available staffing, documentation, and vendor support contracts.

- Sustainability and cost control: prioritize standardized solutions and total cost of ownership (purchase, warranties, licensing, replacement parts, training).
- Standard Employee (faculty/staff) workstation is a Windows 11-based PC with 16GB RAM and 256GB NVMe Storage offering modern connectivity options (USB 3.0 and USB-C)

4.2 Classroom minimum technology standard (baseline)

- Primary display: either projection system or large-format interactive display appropriate to the room size and pedagogy.
- Instructor station: Windows 11-capable computer with managed updates and endpoint protection.
- Guest connectivity: HDMI and USB-C at the instructor station, with audio support and easy source switching.
- Audio: intelligible speech reinforcement where room acoustics require it.
- Control and switching: digital video switching/control to support modern protected content and reduce adapter dependency (Standardize on USB-C/Alt-DP and HDMI).
- Reliable wired and wireless connectivity, with sufficient bandwidth for multi-modal instruction.
- Installations shall comply with ADA Law. Vendors are contractually required to meet this standard as well.

4.3 Ideal replacement cycles (planning target: 6-8 years)

To keep classroom and student-facing technology viable, secure, and supportable, SDMC targets a 6-10 year replacement cycle for most instructional technology assets. These are planning targets; actual replacement timing depends on funding, condition, usage intensity, vendor end-of-support dates, and instructional need.

Asset Category	Ideal Cycle	Notes
Classroom instructor PC / lab PCs	6 years	Earlier if OS/hardware end-of-support or specialized program requirements.
Loaner laptops / mobile carts	6 years	Battery and wear may shorten lifecycle in heavy-use programs.
Interactive displays	8-10 years	Plan for firmware support and replacement parts availability.
Projectors	7-10 years	Consider lamp/laser lifecycle, brightness degradation, and vendor support.
Classroom AV switching/control	8-10 years	Standardize models to reduce spares and training overhead.

Microphones / small AV peripherals	As needed	Dependent on wear and compatibility with control systems.
Wireless access points (District-managed)	As Needed	Coordinate with District refresh schedules and building projects.
Instructional servers/storage	6-10 years	Align with warranty, virtualization roadmap, and backup strategy.
Core software images & instructional software	Annual review	Per instructional needs for classroom, per administrative requirements for Office computers

4.4 Standards governance

Technology Services maintains standards information (hardware, AV, standard system specifications) and presents changes to the Technology Committee annually. Individual exceptions to standard equipment are allowed when justified by instructional need but must include manager approval.

5. Facilities Modernization and the Classroom of the Future (2029-2039)

The District is planning and preparing to invest billions of dollars in facilities upgrades. SDMC must define a clear, durable notion of the 'classroom of the future' beginning around 2029 and remaining viable for 8-10 years. This plan establishes the design principles, decision process, and near-term work needed to deliver that outcome.

5.1 Initial Design Concepts for 2028+ classrooms

Initial concepts for faculty review are provided below. These concepts are intended to start the discussion, not limiting options. Accessibility features must be a part of the discussion

- Multi-modal ready (not mandatory): classrooms are equipped to support face-to-face instruction by default and ready to accept standard additional equipment to enable HyFlex/streaming/recording when pedagogically appropriate. Faculty choose which rooms to configure as multi-modal.
- Faculty-centered usability: consistent user interface and room controls, quick start experiences, and reliable guest connectivity.
- Student participation: easy display sharing from student devices, inclusive audio, and support for group work.
- Infrastructure: All AV equipment networked, ensure multiple CAT in ceiling, 6 CAT pulls to podiums,
- 20A electrical circuits for podiums, multiple outlets for rack equipment
- Lifecycle-ready: standardized room 'kits' with predictable replacement schedules and staged refresh options.

5.2 Classroom model types (recommended)

Initial concepts for faculty review are provided below. These concepts are intended to start the discussion, not limiting options. To avoid one-off designs, SDMC should define a small set of classroom models that cover the majority of needs while allowing for a limited number of specialized spaces. Recommended models include:

- Standard Classroom (majority of rooms): single primary display or projector, instructor PC, guest HDMI/USB-C, speech reinforcement as needed.
- Active Learning Classroom: multiple displays or collaboration zones, flexible furniture, enhanced wireless presentation and group audio.
- HyFlex / Multi-Modal Classroom: improved camera/microphone coverage, lecture capture or streaming capability, and strong acoustics.
- Specialized Labs: program-driven specifications (e.g., science, automotive, media) with documented sustainment plans.
- Lecture Hall / Large Venue: high-reliability AV with redundancy for critical components and clear event support processes.

5.3 Getting to a 2028 standard now

- Create a 'Classroom of the Future' workgroup under the Technology Committee with strong Academic Senate participation.
- Develop a written Classroom Design Standard that Facilities can use in design/build RFPs.
- Pilot 2-3 rooms representing the model types, collect faculty/student feedback, and refine the standard before large-scale construction.
- Define baseline infrastructure requirements (power, conduit, pathways, IDF capacity, ceiling support) to avoid retrofit costs later.
- Align procurement and integration practices with District standards while preserving campus instructional requirements.

6. Collegewide Goals by Constituency

Technology outcomes require coordinated action across constituencies. Each group below has up to three goals for the 2026-2029 cycle.

6.1 Administration (President's Cabinet / Administrative Services)

- Establish sustainable funding for technology lifecycle replacement, including a transparent plan to address instructional and administrative gaps not covered by restricted funds.
- Integrate classroom technology standards into facilities planning and bond projects, ensuring Technology Services and faculty are involved early in design decisions.
- Support staffing and professional development necessary to operate and maintain modern classrooms, including backfill coverage during major upgrade cycles.

6.2 Academic Senate / Faculty

- Lead, in partnership with Technology Services, the definition of the 2029+ 'Classroom of the Future' standards and ensure faculty are driving classroom technology choices.
- Advance equitable and accessible instruction by promoting accessible course materials, captioning practices, and training on inclusive technology use across modalities.
- Develop discipline-informed guidance for emerging technologies (including generative AI) that supports academic integrity, effective learning, and responsible adoption.

6.3 Classified Senate / Classified Professionals

- Improve technology onboarding and job-specific training for classified professionals, including clear support pathways and self-service resources.
- Partner in campus communication and feedback loops so technology issues, accessibility concerns, and service barriers are surfaced early and resolved efficiently.
- Support process improvements that reduce administrative burden through digitization and workflow optimization, coordinated with District systems.

6.4 Associated Student Government (ASG)

- Expand equitable access to required hardware/software through loaner programs, low-cost options, and clear student-facing guidance.
- Provide structured student feedback on classroom technology, Wi-Fi, and student computing spaces via recurring surveys and focus groups.
- Promote student technology literacy resources (how-to guides, security basics, and campus technology orientation) in collaboration with Student Services and Technology Services.

6.5 Technology Services

- Publish and maintain campus technology standards (classroom models, AV kits, instructional computing images, web platform standards) and ensure they are used in planning and procurement.
- Implement a lifecycle-driven replacement program aligned to a 6-8 year ideal cycle, with staged refresh options and a clear roll-down/repurpose process where appropriate.
- Improve service delivery through documentation, internal cross-training, preventative maintenance, and measurable response/uptime targets for instructional spaces.

7. Implementation Roadmap (2026-2029)

This roadmap describes the priority work for each plan year. Timing may shift based on funding, construction schedules, and District dependencies, but the sequence reflects the minimum work needed to be ready for 2029+ facilities modernization.

Year 1: Summer 2026 - Spring 2027 (Define and pilot)

- Create Classroom of the Future workgroup and draft Classroom Design Standards.
- Complete campus technology inventory baseline (instructional computing and AV) and identify end-of-life risks.

- Select and implement 2-3 pilot classrooms for model testing; collect faculty/student feedback and revise standards.
- Establish lifecycle replacement schedule and a prioritized backlog for classroom AV modernization (analog-to-digital transitions where applicable).
- Define and publish clear request pathways for non-standard technology, including sustainment requirements.

Year 2: Summer 2027 - Spring 2028 (Scale and align)

- Scale upgrades in prioritized classrooms based on pilots and lifecycle schedule.
- Integrate classroom standards into Facilities project scopes, bid documents, and construction coordination meetings.
- Expand professional development offerings: classroom technology, multi-modal teaching support, accessibility practices.
- Implement recurring technology satisfaction surveys (faculty/staff/students) and publish results annually.
- Refine spare parts strategy, warranty coverage, and documentation to reduce downtime.

Year 3: Summer 2028 - Winter 2029 (Finalize for 2029+ buildout)

- Finalize the 2029+ Classroom Design Standard and room model catalog for use in bond-funded projects.
- Confirm long-range lifecycle replacement funding plan and incorporate into institutional budgeting assumptions.
- Complete targeted modernization of remaining high-risk legacy classrooms where feasible.
- Document operational readiness plans for new buildings (support staffing, monitoring, preventative maintenance, spares).
- Draft the next rolling plan (2029-2032) with lessons learned and updated standards.

8. Assessment and Metrics

Progress will be assessed annually through a combination of operational metrics, survey feedback, and completion of roadmap deliverables.

Proposed metrics (examples):

- Classroom technology uptime and incident rates (per room and per building).
- Average response time to instructional space outages during instructional hours.
- Percentage of classrooms meeting the current baseline standard and the emerging 2029 standard.
- Lifecycle health: percentage of assets within the 6-8 year target window vs. overdue.
- Training participation counts and post-training satisfaction ratings.
- Forward-looking annual technology needs survey (faculty/staff/students), using structured questions about desired capabilities and barriers, plus targeted focus groups and usage data to reduce 'complaint-only' bias.

- Accessibility measures (e.g., captioning turnaround time for requested content, web accessibility remediation progress).

Appendix A: Glossary

- AV: Audio Visual systems used in classrooms and instructional spaces.
- ICS: Instructional Computing Support (instructional computers, labs, and related services).
- SDCCD: San Diego Community College District (district-level IT and facilities functions).
- HyFlex: Course modality allowing students to participate in-person or online synchronously.
- Lifecycle replacement: planned replacement of technology assets before end-of-support or failure risk becomes unacceptable.

Appendix B: Reference Standards and Resources

- ACCJC Accreditation Standards (technology and infrastructure elements) used as alignment references.
- District technology standards and security posture requirements (as published by SDCCD District IT).
- Section 508 / accessibility requirements for web and instructional technology.
- Industry guidance for classroom technology design and maintainability (vendor-agnostic best practices).