Technology Plan
2021 - 2025

Recommended by the Participatory Governance Council 11/18/21
Accepted by the Chancellor 12/2/21

Version 2.0

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Mission Statement

Consistent with our Vision, City College of San Francisco provides educational programs and services that promote student achievement and life-long learning to meet the needs of our diverse community.

Our primary mission is to provide programs and services leading to

- Transfer to baccalaureate institutions;
- Associate Degrees in Arts and Sciences;
- Certificates and career skills needed for success in the workplace;
- Basic Skills, including learning English as a Second Language and Transitional Studies.

In the pursuit of individual educational goals, students will improve their critical thinking, information competency, communication skills, ethical reasoning, and cultural, social, environmental, and personal awareness and responsibility.

In addition, the college offers other programs and services consistent with our primary mission as resources allow and whenever possible in collaboration with partnering agencies and community-based organizations.

City College of San Francisco belongs to the community and continually strives to provide an accessible, affordable, and high quality education to all its students. The College is committed to providing an array of academic and student development services that support students' success in attaining their academic, cultural, and civic achievements. To enhance student success and close equity achievement gaps, the college identifies and regularly assesses student learning outcomes to improve institutional effectiveness. As a part of its commitment to serve as a sustainable community resource, our CCSF mission statement drives institutional planning, decision making and resource allocation.

Education Master Plan Goals (2018 – 2025)

I. Improve the student experience
II. Institutionalize equity
III. Improve communication
IV. Strengthen credit and noncredit programs
V. Improve operation of the College
VI. Strengthen community, education, and industry partnerships
VII. Maintain, improve, and build facilities
VIII. Expand and encourage opportunities for professional development

Technology Plan Overview

Technology Plan Purpose and Context

This plan supports CCSF's mission and achievement of the goals laid out in the Education Master Plan. The plan provides a vision for technology at CCSF through five college-wide technology goals and strategic directions as determined through reflective analyses with the Technology Committee. To achieve the five broad goals and strategic directions, the plan articulates key college-wide technology priorities identified primarily through an assessment that elicited technology needs and interests from across the College.

In addition to its college-wide focus, this plan provides a framework for programmatic projects and IT operational plans. The framework explicitly connects each programmatic project to college-wide technology goals and strategic directions. Projects are prioritized using technology guiding principles. These principles were developed by the Technology Committee and refined based on constituency input. Results of the initial assessment for programmatic projects can be found in Appendix A.

Emerging programmatic projects and technology items requested via Annual Planning and Program Review will be reviewed and prioritized based on the technology guiding principles and fit with the broad technology goals and strategic directions. Implementation will occur based on priority and availability of resources such as ITS support services, other College personnel, and funds from the CCSF budget, including general funds and certain categorical funds where applicable.

CCSF also has in place Board Policies and Administrative Procedures regarding computer use, user rights, responsibilities and ethics; privacy and confidentiality; information security; copyright requirements; and distance education. These policies and procedures are reviewed and updated as necessary to address changing internal and external requirements.

This plan will help ensure that CCSF's technologies meet the requirements of Accreditation Standard III.C Technology Resources, Sections 1 – 5:

1. Technology services, professional support, facilities, hardware, software, and licenses that are appropriate and adequate to support the institution's management and operational functions, academic programs, teaching and learning, and support services.
2. The institution continuously plans for, updates and replaces technology to ensure its technological infrastructure, quality and capacity are adequate to support its mission, operations, programs, and services.
3. The institution assures that technology resources at all locations where it offers courses, programs, and services are implemented and maintained to assure reliable access, safety, and security.
4. The institution provides appropriate instruction and support for faculty, staff, students, and administrators, in the effective use of technology and systems related to its programs, services, and institutional operations.
5. The institution has policies and procedures that guide the appropriate use of technology in teaching and learning processes.

College-Wide Technology Goals and Strategic Directions

A. Support instruction and learning

Use technology to provide and enhance student support services, address student equity, and enable student access to learning.

B. Enhance information security

Use best practices and implement technologies to enhance information security and enable compliance, ensuring confidentiality, information integrity, and availability.

C. Create efficient and coherent processes

Streamline processes and implement technology to improve and remove barriers in service delivery. Ensure equity, transparency and collaboration in technology validation processes.

D. Support communication, collaboration, and innovation

Provide more efficient and equitable means of communication through collaboration technology while reducing costs and increasing efficiency. Develop high-quality, equity-centered innovative educational programs and services.

E. Develop sustainable strategies for technology (funding, staffing, and training)

Develop technology acquisition, support, and funding strategies to sustain equitable practices and enhance mission-critical technologies.

Technology Plan Connection to Education Master Plan (EMP) Goals

	EMP Goals *See page 3 for EMP goal statements*							
Technology Goals & Strategic Directions	**I**	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**
A. Support instruction and learning	x	x		x				
B. Enhance information security					x	x		
C. Create efficient and coherent processes	x		x		x	x		
D. Support communication, collaboration, and innovation	x	x	x	x	x	x	x	x
E. Develop sustainable strategies for technology (funding,staffing, and training)					x		x	x

College-Wide Technology Priorities

College-wide priorities were identified through an assessment process based on a questionnaire developed by the Technology Planning Workgroup with assistance from the Office of Research and Planning (ORP). In presentations at meetings of Deans and Chairs, Student Affairs leaders, and discussion with Finance and Administration leaders, the questionnaire was introduced and participation invited. Multiple online drop-in sessions were provided jointly by ITS and ORP to support those completing the questionnaire. Responses were reviewed and distilled into themes by ORP, with input from the workgroup. A draft set of college-wide priorities were identified which total nine when combined with IT infrastructure priorities.

The draft set of college-wide priorities was presented to the Technology Committee on May 25, 2021, for review prior to full draft Technology Plan being released for constituent group input. In September 2021, the Technology Planning Workgroup brought the draft Technology Plan 2021 – 2025 to the Associated Student Council, Classified Senate, Academic Senate, and the Administrators Association for discussion and feedback, and provided an online form to allow for asynchronous responses. Substantive input was received and used to improve clarity, including more clearly identifying equity considerations and specifying the ongoing role of the Technology Committee in assessing implementation progress.

Technology Goals and Strategic Directions		College-wide Technology Priorities
(A), (C), (D), (E)	1	Improve technology supporting student services
(A), (D), (E)	2	Update and support instructional equipment
(A), (D), (E)	3	Update, standardize & share student computer labs
(A), (C)	4	Update and standardize systems used by students
(B), (C), (D), (E)	5	Update and standardize systems used primarily by employees
(C), (E)	6	Technology training for all employees
(A), (D)	7	Improve student access to training / training materials for technology
(A), (B), (E)	8	Technology training for faculty
(A), (B), (C), (D), (E)	9	Update and improve IT Infrastructure

TECHNOLOGY GUIDING PRINCIPLES

Equity, Student Success and Completion

Technology will expand opportunities and remove access barriers to equitably support students in completing their educational goals.

Sustainability

Information technology equipment will be purchased, maintained, replaced and recycled using a continuous sustainable model.

Integration

Information technology resources will be allocated in accordance with the needs of CCSF through the ongoing Program Review process, aligned with the goals of the Educational Master Plan.

Standardization

All information technology systems will be configured to CCSF standards to ensure adequate support and reduce downtime. The College will ensure that technology complies with federal and state mandates such as ADA, FERPA, and HIPAA requirements.

Security

Data integrity, confidentiality, and access to information will be protected in accordance with legal requirements and industry standards for best practices.

Shared Resources

Appropriate information technology equipment should be made available equitably to the entire College community to maximize efficiency, sharing and utilization.

Staffing

Adequate staffing levels for both functional users and those charged with implementation and maintenance.

Training

Training programs will provide access to equitable opportunities and will incorporate equity considerations as part of addressing technological changes and program needs.

Innovation

New technologies will be evaluated and implemented at CCSF in order to enhance programs and services, achieve cost savings, and maintain a high level of educational equity and excellence.

Accessibility

Technologies will be useable by those with disabilities, in compliance with the Americans with Disabilities Act (ADA).

APPENDIX A. PROGRAMMATIC PROJECTS (POTENTIAL)

Implementation of specific projects subject to prioritization based on the technology guiding principles, resource availability, and timelines. The Technology Committee will conduct an annual assessment of implementation progress based on the technology guiding principles in order to cultivate an equitable, inclusive and accessible learning environment for all employees and students, with focus on disproportionately impacted populations. For more information, see the Technology Committee website.

Technology Goals and Strategic Directions	College-wide Technology Priorities (Draft)		Programmatic Projects (potential)	Timeframe	Funding source	Cabinet Lead*	Cabinet Priority 1 - in progress 2 - critical need 3 - high priority if resources available
(A), (C), (D), (E)	**1**	**Improve technology supporting student services**	Class scheduling and registration - Registration communication improvements	Aug 2021 – Dec 2021	U Fund	VCAIA, VCSA, CTO	1
			Noncredit attendance tracking	Fall 2022 (pilot in progress)	Categorical	VCSA, VCAIA	2
			Counseling, degree audit/ education planning tool	Aug 2021 – June 2022	Categorical	VCSA	1
			Convert paper forms to electronic format (e.g., graduation petition)	Spring 2021-Spring 2023	U Fund	VCSA	1
			Electronic Health Record (EHR) system (Medicat)	Ongoing	Categorical	VCSA	1
			Continue to work with programs including EOPS, CalWORKs, HARTS, Guardian Scholars, and other student services and resource centers to address technology needs	Ongoing	Categorical and U Fund	VCSA, VCAIA	1
			Tools for effectively communicating with students (as part of an integrated approach to student services and information sharing)	Jan 2022 – Jan 2023	TBD	VCAIA, VCSA	3
	2		Smart Classrooms (need prioritized list of locations)	Jul 2021 – Dec 2025	Bond funds	VCAIA, CTO	3

(A), (D), (E)		**Update and support instructional equipment**	Expand instructional computer refresh	Jan 2022 - ongoing	One-time special funds	CTO	1
			Dept/Program-specific equipment and software (list to be prioritized; equipment to be shared across departments where possible)	Ongoing	Various	VCAIA	1
			Library database subscriptions, electronic materials, and libraryservices platform	Ongoing	Categorical	VCAIA	1
			Overhaul EATV's master control facility equipment	Fall 2021 – Spring 2023	One-time special funds	VCAIA, CTO	1
			Shared software and equipment to create videos or images	Fall 2022 – Fall 2023	TBD	VCAIA	3
			Expand subjects covered by online tutoring service and expand tutoring platform	Sum 2021 – Sum 2022	One-time special funds	VCAIA	1
			Expand use of AR/VR technology supported via Workforce Education	Ongoing	Categorical	VCAIA	1
			Establish a proctoring center and join the statewide Proctoring Network	TBD	TBD	VCSA, VCAIA	3
(A), (D), (E)	**3**	**Update, standardize & share student computer labs**	Equip student computer labs with standard hardware and equipment (computers, printers)	Dec 2021 – Dec 2022	One-time special funds	CTO, VCAIA	2
			Update student computer labs with standard/shared software (e.g., Splashtop; Adobe Creative Suite, others to be prioritized)	Dec 2021 – Dec 2022	TBD	CTO, VCAIA	3
			Update, support, and share Mac labs across programs to improve sustainability	Dec 2021 – Dec 2022	TBD	CTO, VCAIA	3
			Standardize online reservation systems for labs	TBD	TBD	CTO, VCAIA	3

			Standardize computer logins in labs	TBD	TBD	CTO, VCAIA	3
			Share simulation-related labs/equipment across related Allied Health programs	May 2022 – Sept 2022	Categorical	VCAIA	1
(A), (C)	**4**	**Update and standardize systems used by students**	Provide and support standard software for tracking use of services	Jan 2022 - Dec 2023	TBD	VCSA	3
			Sustain and enhance website	Ongoing	Categorical, Grants	DMGRM	1
			Shared chat platform for students to interact with services	Ongoing	One-time special funds	CTO, VCSA, VCAIA	1
			Standardize software and results reporting for surveys of students	In progress	U Funds	VCAIA	1
			Card scanners for all output devices (e.g., printers)	TBD	TBD	CTO	TBD
			Single system for student authentication for PC booking, print management, including credit card payment and wireless printing from student devices	TBD	TBD	VCFA, CTO	TBD
			Standardize method for students to access student-facing staff and services, including common calendar	TBD	TBD	VCSA, CTO	3
(B), (C), (D), (E)	**5**	**Update and standardize systems used primarily by employees**	Tools for accurate Financial Reporting from Banner	Apr 2021 – Dec 2023	U Funds	VCFA	1
			Faculty and staff laptops in response to pandemic	Mar 2021 – Sep 2022	One-time special funds	CTO	1
			Document institutional practices for data quality and completeness within Banner and across other data repositories (e.g., AccuTrak, Canvas, CurriQunet, SARS)	Ongoing	U Funds	VCAIA, VCSA, VCFA, CTO	1

			Data storage/data warehouse for consistency and shared use	Fall 2022 – Fall 2023	TBD	CTO, VCFA, VCAIA	3
			Standardize Argos report infrastructure and access	Ongoing	TBD	VCAIA, VCSA, VCFA, CTO	1
			Maintain curriculum inventory, integrated with SLOs, assessment reporting, and program review to meet accreditation requirements	Ongoing	U Funds	VCAIA	1
			HR System for student employment (SHEP)	Ongoing	Categorical	VCFA, VCAIA	1
			Room and resource reservation system	Fall 2022 – Spr 2023	U Fund	VCAIA	2
			Asset management and inventory tracking software	Jul 2021 – Dec 2022	U Fund	CTO, VCFA	1
			Application management platform to support lifecycle process for software applications, covering applications operate, maintenance, version control, and upgrades	Jul 2023 – Dec 2023	U Fund	CTO	3
			Standardize online forms workflow and processes	Ongoing	U Fund	VCFA	1
			Standardize tools for large format printing	TBD	TBD	CTO	3
(C), (E)	**6**	**Technology training for all employees**	MS Office Suite	Annual	TBD	CTO	2
			AdobeSign	Annual	TBD	CTO	2
			Argos	Annual	TBD	CTO	2
			Vision Resource Center	Ongoing	U Fund	VCFA, VCAIA	1
			Self-Service / MyRAM	Ongoing	U Fund	VCSA, CTO	1

			Other platforms (e.g., Banner, Creative Cloud, etc.)	TBD	TBD	CTO	3
(A), (D)	**7**	**Improve student access to training / training materials for technology**	Registration and matriculation processes	Ongoing	U Fund	VCSA	1
			Ongoing Canvas / tools for online learning	Ongoing	U Fund	VCAIA	1
			Student computer lab tools (PC and Mac)	TBD	TBD	CTO	2
(A), (B), (E)	**8**	**Technology training for faculty**	Sustain Canvas / tools for online instruction	Ongoing	Categorical, U Fund	VCAIA	1
			Ongoing training on instructional (educational) software / equipment	Ongoing	Categorical, U Fund	VCAIA	1
(A), (B), (C), (D), (E)	**9**	**Update and improve IT Infrastructure**	RamID/PortalGuard, IDaaS	Jul 2021, ongoing	One-time special funds	CTO	1
			Cloud-based infrastructure (hosted datacenter services)	Jan 2021 - Ongoing	U Fund	CTO	3
			Fully implement Active Directory authentication	Jul 2021, ongoing	U Fund	CTO	1
			Hosted virtual firewall	July 2021 – Dec 2021	One-time special funds	CTO	1
			Upgrade campus-based firewalls	Jul 2021 – Dec 2021	One-time special funds	CTO	1
			Upgrade wifi – outdoor	May 2021 – Dec 2021	One-time special funds	CTO	1
			Upgrade wifi - indoor	Jan 2022 – Dec 2023	Infrastructure bond funds	CTO	2
			Replace all network switches	Jan 2022 – Dec 2023	Infrastructure bond funds	CTO	2
			Telephone system enhancements	Jan 2022 – Dec 2023	Infrastructure bond funds	CTO	2

			Emergency Telephones replacement	Aug 2021 – Aug 2023	Infrastructure bond funds	CTO	1
			Upgrade hardware and infrastructure for data centers (On-premise and cloud based location(s) that house core IT and computing services and infrastructure)	Jan 2022 - Dec 2023	Infrastructure bond funds	CTO	2
			New Building Network, Telecommunication, and Classroom Systems	Jan 2023 - Dec 2025	Infrastructure bond funds	CTO	2
			Broadcast infrastructure and partnership enhancements (CCSF/EATV, City Government, and Cable Companies)	Ongoing	Various	VCAIA, CTO	1

* Cabinet leads: VCAIA- Vice Chancellor, Academic & Institutional Affairs; VCFA- Vice Chancellor, Finance & Administration; VCSA- Vice Chancellor, Student Affairs; CTO- Chief Technology Officer; DMGRM- Director, Media, Governmental Relations & Marketing

APPENDIX B. ACKNOWLEDGEMENTS

The Technology Plan was made possible through the work and collaboration from the following Technology Committee members, alternates, and resources (2019-2021):

Classified: James R. "JR" Hall, Jill Kersey, Robert Lam, Gerard Layug, Sheila Pontanares, Jay Robinson, Tim Ryan, Nicholas Wang,

Faculty / Department Chairs: Michele Alaniz, Sheila McFarland, Craig Persiko

Administrators: Cynthia Dewar, MaryLou Leyba, Monika Liu, Ellen Rayz, David Yee, Cherisa Yarkin