Institutional Support
Comprehensive Program Review

Department Name:
Technology and Computer Services

Three-Year Review Period:
2026-2029

Completion Date:
June 15, 2026

Part I: Program Statement

Describe your service area, what you do (key functions and duties) and what you plan to achieve. In what ways does your department support the college mission?

Citrus College technology resources provide a dynamic and equitable digital environment that empowers our diverse student population to achieve their academic, professional, and personal goals. In direct alignment with the college mission, our technology infrastructure serves as the essential foundation for delivering high-quality instruction and supportive services both within and beyond traditional geographic boundaries.

Part II: Service Area Overview

This section serves as an executive summary.

Part II.A. Include your department's organizational chart

The Technology and Computer Services (TeCS) Department serves as the strategic steward of the college's digital ecosystem. It manages a robust infrastructure—including cloud-based networking, unified communications, advanced computing environments, and the college's network, virtual, and web infrastructure—that empowers faculty, staff, and students to excel. TeCS also oversees audiovisual (AV) systems and classroom technology to support a high-quality instructional experience, along with day-to-day technology support that ensures the continuous availability and reliability of systems across campus.

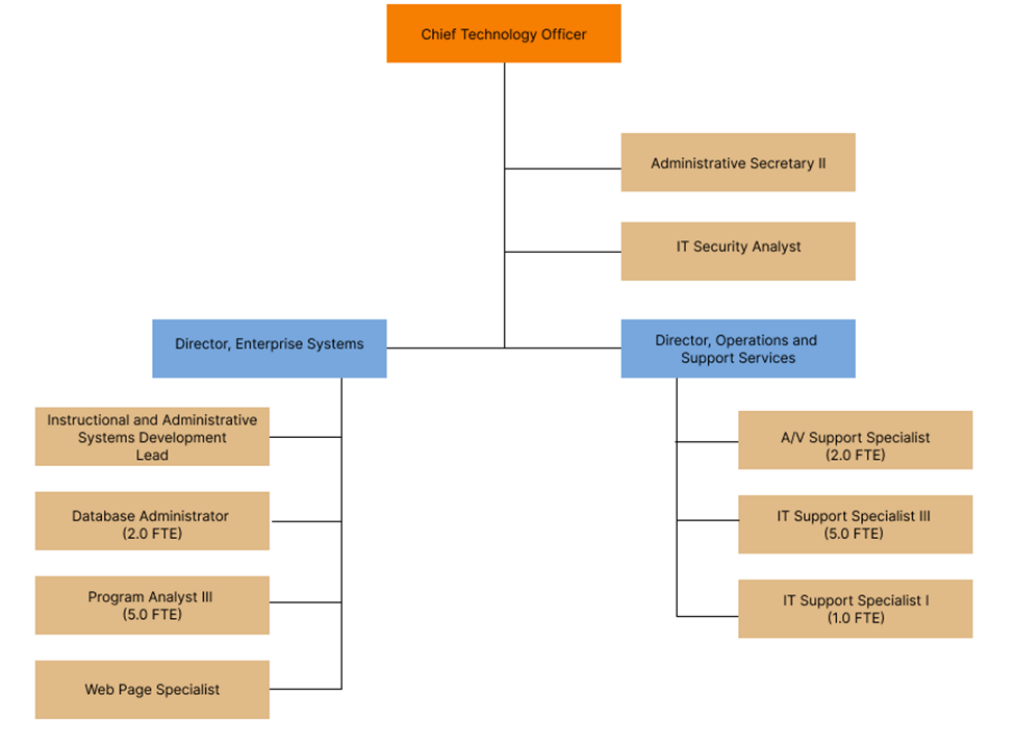
In direct support of the college's commitment to innovation, TeCS has transitioned the core of our institutional data processing, the Banner Enterprise Resource Planning (ERP) system (WingSpan), to a scalable cloud environment. This modernization ensures that the student, financial aid, human resources, and administrative modules provide the reliability and agility needed to support our students' upward social and economic mobility.

Guided by the value of student-centeredness, TeCS integrates essential instructional and student support applications with WingSpan to create a seamless experience that fosters student success and a sense of belonging. Our collaborative approach also extends to the fiscal services and human resources departments, where we use technology to promote transparency, efficiency, and stewardship in business processes.

TeCS has also led the transition to a modern Web Content Management System (CMS), which provides a centralized platform for managing the college's website content. The major lift of this project was conducted by our web page specialist. This initiative improves accessibility, consistency, and governance of web content while enabling departments to more easily maintain accurate and up-to-date information. The new CMS supports compliance with accessibility standards and enhances the overall digital experience for prospective and current students, faculty, staff, and the broader community.

In partnership with Facilities, TeCS plays a critical role in new construction and renovation projects by designing and implementing modern technology infrastructure and AV solutions. This includes upgrading network connectivity, wireless coverage, classroom technology, and integrated AV systems to support current and future instructional needs. Through this collaboration, the college ensures that new and renovated spaces are equipped to deliver flexible, technology-enabled learning environments that enhance teaching effectiveness and student engagement.

To remain responsive to the needs of our diverse community, technology planning is deeply embedded in the college's integrated planning framework. Through the College Information Technology Committee (CITC), we ensure that the Information Technology Master Plan remains a living document aligned with the Strategic Plan and the Educational and Facilities Master Plan. This approach helps us proactively embrace technological advancements and expand opportunities for student success.


Chief Technology Officer
Administrative Secretary II
IT Security Analyst
Director, Enterprise Systems
Director, Operations and Support Services
Instructional and Administrative Systems Development Lead
Database Administrator (2.0 FTE)
Program Analyst III (5.0 FTE)
Web Page Specialist
A/V Support Specialist (2.0 FTE)
IT Support Specialist III (5.0 FTE)
IT Support Specialist I (1.0 FTE)

Part II: Service Area Overview (continued)

This section serves as an executive summary.

Part II.B.

- **Highlight major accomplishments over the past three years (since the last comprehensive program review)**
- **List strengths and challenges**

Technology and Computer Services

- Change in title, Chief Information Services Officer to Chief Technology Officer
- Moved from IS building to LI

Enterprise Systems

- Reclassification of Enterprise Systems Supervisor to Director
- Hire new Enterprise Systems Director (from vacancy)
- New website migration
- Banner migration to AWS cloud
- SARS server upgrade
- Degree Works upgrades
- Integration with new Customer Relationship Management (CRM) system, Element 451.
- Equidox integration and implementation

IT Security

- Implementation of third-party Security Operation Center
- Yearly cyber security reviews

Technology Operations and Support Services

- Reclassification of Operations and Support Services Supervisor to Director
- Moved server and networking infrastructure to new modular data center.
- Upgraded equipment provided by CENIC, who provides internet services
- Continual AV upgrades in classroom
- Continual wired and wireless upgrades
- Cloud email archiving
- Cloud hosted external DNS

Strengths

- Enterprise Systems
    - The website migration was a significant undertaking and was completed successfully by our web specialist. Because the previous platform did not support a simple migration, the transition to the new website platform was

complex. Our web specialist effectively managed the migration of assets, and we were able to go live before the previous system reached end of life.
    - The migration of Banner from an on-premises environment to the cloud was a valuable learning experience for our programmers and database administrators. The team worked closely with our provider to move Banner assets to the cloud, which helped us address technical debt and modernize the platform.
- IT Security
    - Our IT Security Analyst played a key role in integrating a third-party Security Operations Center and coordinating efforts across multiple areas of TeCS. The department has also successfully implemented several additional security tools and processes that rely on this role.
- Technology Operations and Support Services
    - Over the past three years, the team has done an excellent job balancing multiple priorities. The department completed a range of AV, networking, and systems upgrades, and each team member contributed to that success. Notable projects include the data center move, the LB and ES building moves, and the relocation of the TeCS team to LI.
- The TeCS team is made up of talented individuals who work together effectively and consistently raise the bar for service and support.

Challenges

- Enterprise Systems
    - As the college continues to migrate core services to cloud-hosted platforms, the Enterprise Systems team is focused on strengthening its operational capabilities in cloud architecture, security, web services, and performance monitoring. This transition represents a significant shift from legacy management to a more resilient, cloud-forward approach. In addition, evolving state and federal reporting requirements demand substantial time for updates and integrations, often creating compressed timelines that compete for limited resources.
- IT Security
    - The district's threat landscape includes more than 2,000 district devices, 1,700 users, more than 9,500 FTES, 100 servers, and 300 network devices. The growth of online learning and remote work has further expanded that landscape. Managing an environment of this scale creates logistical challenges. While we have a strong team that provides solid support, the department currently relies on a single IT Security Analyst.
- Technology Operations and Support Services
    - The Operations and Support Services team continues to provide strong service to the campus by supporting both students and employees. The department

relies on student workers to provide help desk support for students, but there is no dedicated help desk for staff. As a result, team members often respond primarily to tickets and service requests, leaving limited availability for walk-in support. When walk-ins need assistance, managers often step in if they are not in meetings or providing support elsewhere on campus.

- Technical implementations also compete with day-to-day service responsibilities. Projects can be delayed when team members must prioritize urgent operational needs. In many cases, staff serve as generalists who resolve a wide range of issues across the department.

Part III: Goals and Service Area Outcomes (SAOs)

3.1 and 3.2: This is a review of the past. Goals are broader and SAOs are more specific. It is through the assessment of SAOs that we know if goals are achieved.

3.1. List goals stated in the previous comprehensive program review and the status of achievement.

1. **Upgrade existing Windows 2012 Servers to Windows Server 2022.**
    a. Complete
2. **Migrate desktops from Windows 10 to Windows 11**
    a. Complete
3. **Implement Microsoft Intune and end point device manager to manage devices**
    a. Complete
4. **Implement Microsoft Defender 365 for end points**
    a. Complete
5. **Implement Microsoft Defender for E-Mail filtering**
    a. Complete
6. **Migrate Banner ERP to cloud**
    a. Complete
7. **Update campus core network switches**
    a. Complete
8. **Update Mitel phone system desk phones that are end of life and Mitel Server and switches**
    a. Ongoing — Phones have been replaced; however, the overall system will reach end of life in 2028.
9. **Update End of Life Aruba wireless access points & update Aruba wireless controller**
    a. Ongoing — The wireless controller has been updated, and access point upgrades continue.
10. **Banner 9 adoption**
    a. Ongoing — Most modules are now on Banner 9, with a few limited-use exceptions remaining.
11. **Increase offerings in Banner Self Service**
    a. Ongoing
12. **Implement SuperGlue**
    a. Complete
13. **Increase student fraud prevention resources**
    a. Complete — Implemented N2N and LexisNexis resources.
14. **Cyber Security Training**
    a. Ongoing – Available but not mandated
15. **Inventory of Devices and Software through campus**
    a. Complete — Inventory is managed through Intune and Defender.
16. **Plan for website being end of life by 2026**
    a. Complete – website migrated
17. **Staff professional development**

a. Ongoing – Udemy available for team

18. Inventory of offerings from TeCS to campus

a. Ongoing — Inventory is maintained on a Confluence page.

3.2. List SAOs from the previous comprehensive program review, assessment method, and assessment results.

TeCS previously used ticket counts for assessment. There has been a change in ticketing system since the last Program Review. The numbers now reflect both Enterprise Systems and Operations and Support Services. The average satisfaction with tickets is rated at 4.88 with 5 being the most satisfied.

	2022-2023		2025-2026			Avg Satisfaction
	Tickets	Resolved	Tickets	Resolved	Rated Tickets	1-5 (5, most satisfied)
July						
August	245	244	552	504	53	4.91
September	527	524	492	532	66	4.89
October	315	315	606	508	58	4.93
November	237	236	409	369	29	4.93
December	108	107	324	280	30	4.70
January	222	220	486	447	32	4.66
February	262	260	444	411	54	4.89
March	302	290	405	367	41	4.88
April	234	225	385	327	28	5.00
May	234	189	315	498	32	4.88
June						
Totals	2686	2610	4418	4243	370	
Average Monthly	269	261	442	424	41	4.88

3.3: Looking to the future, identify goals and SAO's to be accomplished during the next 3 years. New goals and SAOs need to be referenced to one or more of the following:

1. ACCJC standards
2. Strategic Plan focus areas
3. EFMP
4. Other institutional support plans (Enrollment Management Plan; Student Equity Plan; Human Resources Plan; Technology Plan; Sustainability Plan)

3.3. List goals and SAOs for the upcoming 3 years.

1. Cyber Security Training
    a. Strategic Plan Focus Area: 5 Innovation, Institutional Effectiveness and Data-Informed Decision-Making
    b. This is an ongoing goal for TeCS. The security landscape continues to evolve, and training is necessary to help employees and students remain safe. We plan to expand training offerings and increase opportunities across the district.
2. Develop Artificial Intelligence (AI) board and administrative policy
    a. Strategic Plan Focus Area: 5 Innovation, Institutional Effectiveness and Data-Informed Decision-Making
    b. Work with campus stakeholders through CITC to develop an AI policy.
3. Develop comprehensive disaster recovery and business continuity plan
    a. Strategic Plan Focus Area: 5 Innovation, Institutional Effectiveness and Data-Informed Decision-Making
    b. Work with campus stakeholders to develop a plan that supports campus operations related to technology.
4. Migrate Microsoft active directory to the cloud
    a. Strategic Plan Focus Area: 5 Innovation, Institutional Effectiveness and Data-Informed Decision-Making
    b. We are currently operating in a hybrid environment. To reduce our threat surface, we would like to move Active Directory to the cloud.
5. Upgrade existing network firewall
    a. Strategic Plan Focus Area: 5 Innovation, Institutional Effectiveness and Data-Informed Decision-Making
    b. The current firewall will reach end of life and end of support in 2028. The team will upgrade to a new appliance.
6. Upgrade existing phone system
    a. Strategic Plan Focus Area: 5 Innovation, Institutional Effectiveness and Data-Informed Decision-Making
    b. The current phone system will reach end of life and end of support in 2028. The team will coordinate a sitewide upgrade.
7. Upgrade existing Windows 2016 Servers
    a. Strategic Plan Focus Area: 5 Innovation, Institutional Effectiveness and Data-Informed Decision-Making
    b. Windows Server will reach end of life in fall 2026. The team will migrate or upgrade existing servers.
8. Upgrade networking physical layer
    a. Strategic Plan Focus Area: 5 Innovation, Institutional Effectiveness and Data-Informed Decision-Making
    b. Replace wired and wireless equipment that has reached end of life or end of support. Also replace multimode fiber runs with single-mode fiber.

9. Upgrade virtual server and desktop environments
    a. Strategic Plan Focus Area: 5 Innovation, Institutional Effectiveness and Data-Informed Decision-Making
    b. The campus has invested significantly in virtual server and desktop environments, which will approach end of life and end of support in 2029.

Part IV: Budget Planning

Describe the resources (staffing, facilities, technology and equipment, and professional development) you anticipate needing over the next three years in order to accomplish the goals/SAOs for your department. Ideally, this information will inform your resource requests in the annual updates for each of the next three years.

Local IT Staffing

In evaluating TeCS staffing needs, we referenced an EDUCAUSE article, a national resource for higher education technology. The article indicates that the average staffing level at two-year colleges ranges from 3 to 7 IT staff per 1,000 full-time equivalent students, faculty, and staff.

Source: Educause IT Spending and Staffing

Year	FTES per CCC Datamart	Recommended IT staffing level per Educause	IT staffing level
2021-2022	9024	27 to 63	22
2022-2023	9275	28 to 65	22
2023-2024	9724	29 to 68	21 (1 vacancy)
2024-2025	9866	30 to 69	21 (1 vacancy)

1. This document recommends that the college move forward in exploring a reorganization of TeCS to better align the department with significant changes in its work, overtime. Many of the current job descriptions were developed nearly a decade ago, before the college's technology environment expanded to include hybrid infrastructure, private cloud services, broader web platforms, increased endpoint complexity, and a more substantial cybersecurity risk profile. As a result, the existing structure may no longer fully reflect the work now being performed. This recommendation is intended to help shape a structure that better aligns positions with current operational realities, supports recruitment and retention, strengthens continuity of service, and advances institutional priorities identified in the 2023 Program Evaluation.

2. In **Enterprise Systems**, it is recommended that the college explore changes that reflect its increasing reliance on cloud-hosted ERP services, application integrations, data reporting, automation, and modern web development. The scope of work has evolved well beyond what is reflected in several long-standing classifications. To better align the structure with current needs, this recommendation supports converting the **Instructional and Administrative Systems Development Lead** into an **MIS and Data Quality Specialist**, converting one **Programmer Analyst III** into a **Business Systems Analyst**, and converting four **Programmer Analyst III** positions into **Application Developers**. It also recommends updating the **Database Administrator** role and establishing a **Web Page Specialist II** classification. Collectively, these recommendations would help position Enterprise Systems to support data stewardship,

business analysis, application development, web governance, integration, and the long-term stability of core systems.

3. In **Technology Operations and Support Services**, it is recommended that the college explore a structure that better reflects the increasingly specialized and demanding nature of infrastructure and support responsibilities. Work that was once reasonably grouped under the **IT Support Specialist III** classification now spans server administration, cloud-connected systems, enterprise storage, network operations, wireless infrastructure, classroom technology, and end-user support. To better match those responsibilities, this recommendation supports converting two **IT Support Specialist III** positions into **System Administrator or Analyst** roles and two into **Network Administrator or Analyst** roles, while also converting one vacant **IT Support Specialist III** position into an **IT Support Specialist I**. The recommendation also supports creating an **A/V Support Specialist II** classification. Rather than relying on broadly defined positions to absorb every operational demand, this recommended structure would provide a clearer and more sustainable way to support infrastructure, network reliability, classroom technology, and daily service needs across campus.

4. At the department level, it is further recommended that the college explore adjustments to the broader support structure needed to keep TeCS operating effectively as a unified service organization. We recognize that the department would benefit from stronger administrative coordination and more dedicated security capacity. For that reason, it is recommended that the **Administrative Secretary II** role be restructured as an **Operations Assistant**, better aligned with work order support, front-line coordination, communications support, and the day-to-day operational needs of the department. At the same time, this recommendation supports adding an **IT Security Supervisor**, a second **IT Security Analyst**, and a **Cloud Architect** to reflect the growing complexity of cybersecurity oversight, cloud infrastructure, and institutional risk management. These recommendations would help ensure that leadership, operations, and security functions are supported in a way that is more intentional, scalable, and responsive.

Technology and Equipment needs

1. MiTel Phone switch/server migration
    a. The district relies on phone services to communicate with students, employees, and the community. The current phone system will reach end of life and end of support in 2028. A replacement system will be needed to maintain reliable phone services.
    b. $400,000
2. Network firewall replacement
    a. The district's network firewall will reach end of life in 2028. It will need to be replaced before that date to maintain security and continuity of service.
    b. $400,000
3. Wireless Access Point upgrades

a. The district provides Wi-Fi access for students and staff, and expectations for reliable wireless coverage continue to grow. Because legacy devices limit our ability to upgrade the wireless controller and onboard newer Wi-Fi technology, we plan to replace all legacy access points. This will allow us to upgrade the controller and support newer-generation Wi-Fi devices.
b. $250,000

Professional Development needs

1. Wireless Network Professional Development (Aruba Conference)
    a. The district continues to grow the number of access points. The complexity of managing and securing that environment continues to be a challenge. Providing professional development to team members is crucial to ensure that we are managing the wireless infrastructure in a secure way while still providing robust coverage throughout campus.
    b. $5,000
2. Cyber Security Training (RSA Conference)
    a. Cybersecurity remains a top priority for higher education institutions and for the district. The RSA Conference offers valuable insights from multiple sectors on improving security posture and understanding the evolving threat landscape. Investing in this professional development would strengthen the team's ability to protect district systems and data.
    b. $5,000
3. Virtualized Environment Training (VMware Conference)
    a. The district relies heavily on virtualized technologies, including both server and desktop virtualization. More than 130 virtual servers support infrastructure across many departments and divisions. As this environment continues to modernize through updates and upgrades, developing the internal team's expertise is essential for security, sustainability, and long-term maintainability.
    b. $5,000
4. CISOA Conference attendance
    a. The CISOA Conference is widely attended by California community colleges and serves as a valuable resource for sharing ideas and best practices. It provides relevant information on topics that directly affect our work and supports professional growth across the team.
    b. $9,000
5. Oracle Database Training
    a. Oracle is a foundational component of the Banner/WingSpan environment because it supports the system's core data. Maintaining this database requires strong expertise. Oracle training and conferences provide information on new tools, techniques, and best practices that help team members strengthen their skills.
    b. $5,000

6. Microsoft Administration Training
    a. The district uses Microsoft products for different infrastructure pieces. Training is needed to provide the team with knowledge of best practices to operate, secure, and maintain our Microsoft infrastructure.
    b. $5,000
7. Amazon Web Services
    a. The district currently uses components of Amazon Web Services. As our presence in AWS grows, additional knowledge and training will be needed to manage those services effectively.
    b. $5,000

Part V: Contributors

List the individuals and their corresponding constituent group (e.g., management, supervisor/confidential, classified, faculty and students) for all those who contributed, at any level, toward the development of this comprehensive program review report. Please ensure broad participation.

Eric Calderon – Chief Technology Officer
Tom Cheng – Director, Operations and Support Services
Bryun Sakaye – Director, Enterprise Systems

Provided to the Office of Technology and Computer Services for comments on June 9, 2026 to June 12, 2026.

Elements of this were also derived from the Information Technology Master Plan