



Citrus Community College District
Information Technology Master Plan
2017-2022

Year 4 - 2020-2021



Table of Contents

Technology Planning Overview	3
Advisory Committee	4
Annual Planning Timeline	5
Factors Driving Information Technology Planning.....	6
Citrus College Strategic Plan.....	6
Accreditation Standards -	7
CITC SWOT Analysis	8
2017-2022 Technology Goals.....	9
Implementation Objectives 2020 - 2021	10
1. Administrative Information Systems (AIP 8.2).....	10
2. Educational Technology (AIP 8.3).....	10
3. Network, Infrastructure and Telecommunications (AIP 8.2).....	11
4. Operations and Support Services (AIP 8.2)	11
5. Web Environment (AIP 8.2)	11
2019-2020 Technology Planning Accomplishments.....	12
1. Administrative Information Systems (AIP 8.2).....	12
2. Educational Technology (AIP 8.3).....	12
3. Network, Infrastructure and Telecommunications (AIP 8.2).....	13
4. Operations and Support Services (AIP 8.2)	13
5. Web Environment (AIP 8.2)	13
Appendix A - SWOT Analysis Details	14
Appendix B – Planning Schedules Integration.....	16
Appendix C – Integration Planning Flow Chart.....	17

Technology Planning Overview

As stated in the college mission statement, “Citrus College provides innovative educational opportunities and student support services that lead to the successful completion of degrees, transfer, career/technical education and basic skills proficiency. To this end, technology supports multiple aspects of learning, teaching, and student support as well as provides the foundation and infrastructure for administrative and business processing. Faculty use technology to develop curriculum, obtain class rosters, input course grades and provide a distance-learning environment. Staff employ technology for purchasing, scheduling, managing student data, communicating, and managing their daily work. Managers rely on technology for data and statistical analysis to support planning and decision-making.

Citrus College integrates technology planning into the overall planning process as described in the Integrated Planning Manual (Appendix C). The Information Technology Master Plan is part of the overall planning process and identifies major information systems and technology goals. The plan encompasses the development, management, operation, maintenance, and evaluation of the infrastructure, administrative information systems, operations support, and management of web resources.

The College Information Technology Committee (CITC) develops the Information Technology Master Plan. CITC ensures that the technology master plan respond to the Strategic Plan and to the technology standard in the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges accreditation standard. In addition to considering the College planning objectives, CITC completes a strengths, weaknesses, opportunities, and threats (SWOT) analysis to ensure that new opportunities provided by technology advancement are appropriately included in technology planning.

The CITC also evaluates and revises the Information Technology Master Plan on an annual basis. The Information Technology Master Plan is therefore a living document. As projects are completed, as new priorities arise, and as strategies change the objectives contained in the plan will be modified to reflect the needs of the Citrus College.

Once the technology needs are defined and prioritized via this planning process, the implementation of the projects and the resources needed to support them are coordinated between the college-wide functional areas and the Technology and Computer Services Department (TeCS). This inclusive method allows the college to most effectively apply funding sources (general budget, instructional equipment, matriculation, construction, bond and grants) to comprehensively meet technology needs.

Advisory Committee

College Information Technology Committee

The purpose of the College Information Technology Committee (CITC) is to develop, oversee, and review the implementation of campus-wide policy and planning efforts pertaining to the use of computers and information technology at Citrus College. The CITC will:

- Act as a focal point for input from all campus constituencies on computer and technology related issues.
- Act as a communication conduit for computer and technology related issues.
- Advise the Steering Committee on policy and planning matters pertaining to computer and technology use.

Composition of Committee

- Chief Information Services Officer (Chair)
- Network, Central Computing and Telecommunications Systems Supervisor (Alternate Chair)
- Technology Operations and Support Services Supervisor (Alternate Chair)
- Dean of Enrollment Services (or designee)
- Dean of Career, Technical and Continuing Education
- Dean of Social and Behavioral Sciences, Online Education
- Digital Communications and Publications Supervisor (or designee)
- Director of Fiscal Services (or designee)
- Director of Human Resources (or designee)
- Director of Institutional Research, Planning and Effectiveness (or designee)
- Executive Director of Communications and External Relations
- Supervisor of Online Education/Library Services
- Management Team representative
- Supervisor/Confidential representative
- Faculty Representative(s)
- Classified Representative(s)
- Associated Students of Citrus College (ASCC) Representative(s)

Annual Planning Timeline

This Annual Planning Timeline outlines the major tasks that the CITC will undertake to support technology planning for Citrus College. This timeline is designed to integrate with the college's budget and strategic planning processes. Technology strategies and objectives for the next fiscal year will be in place prior to the beginning of the budget process and will be available to make informed budget decisions.

September	Evaluate implementation of plan from previous fiscal year
October	Gather further data as needed and update Planning Goals and Objectives for next fiscal year
November/ December	Develop draft Information Technology Master Plan for next fiscal/ year
March/ April	Finalize and approve new Information Technology Plan Master
June	Next fiscal year budget requests made based on planning goals and objectives

Factors Driving Information Technology Planning

The Information Technology Master Plan responds to the Strategic Plan and to the technology standard in the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges accreditation standard as well as to the SWOT analysis conducted by the CITC.

Citrus College Strategic Plan

The 2016 – 2021 Citrus College Strategic Plan was introduced with a single goal - Strategic Plan Goal - Increase Student Success and Completion.

Eleven focus areas were included in the plan with Focus Area 8 providing direction for college technology –

Focus Area 8 - Citrus College will keep pace with technologies that promote an efficient and effective educational and administrative environment.

For each focus area specific strategies were developed to provide direction for planning and implementing operational goals. Within Focus Area 8 were three strategies -

Strategy 8.1 - Optimize the use of technology in teaching and learning to support innovative teaching practices.

Strategy 8.2 - Provide a robust, secure, accessible technology infrastructure, which is adequately funded, to improve and facilitate college processes and provide data resources relevant to institutional decision making.

Strategy 8.3 -Improve student success through strategically leveraging technologies that support student success initiatives.

In addition to the focus area and strategies, each year an Annual Implementation Plan will be developed. Technology projects will be defined not only for strategic within Focus Area 8, but may also come from the ten other focus areas. The annual implementation plan projects will need to be incorporated into the Technology Master Plan and the TeCS Department will work in partnership with other college departments and academic divisions to implement those strategies.

Accreditation Standards -

The current Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges accreditation standard were implemented on June 2014. Standard III – Resources included the standards for technology. This standard ensures that “institution effectively uses its human, physical, technology, and financial resources to achieve its mission and to improve academic quality and institutional effectiveness”.

The standards for technology are defined in Standard III C. This standard has five parts that address services, facilities, hardware and software; technology infrastructure; safety, reliability and security; technology staffing; and policies and procedures. The details of the standards are:

C. Technology Resources

1. Technology services, professional support, facilities, hardware, and software 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 technology systems related to its programs, services, and institutional operations.
5. The institution has policies and procedures that guide the appropriate use of technology in the teaching and learning processes.

CITC SWOT Analysis

During the development of the 2017-2022 Technology Master Plan, the CITC conducted a Strengths – Weaknesses – Threats – Opportunities (SWOT) analysis to examine the college’s internal technology environment in light of external factors. From this analysis CITC identified areas to address in planning. The results of the SWOT analysis are presented in the table below.

SWOT		Internal Factors	
		Strengths	Weaknesses
External Influences	Opportunities	<p><u>Leverages</u></p> <ul style="list-style-type: none"> - Third party applications filling processing gap - Infrastructure being brought up to date - New staff members in TeCS - Chancellor’s Office providing products 	<p><u>Constraints</u></p> <ul style="list-style-type: none"> - Funding availability may not remain consistent - Need to increase staff and faculty training for new products - Need to increase security for end users - Expanding social media
	Threats	<p><u>Vulnerabilities</u></p> <ul style="list-style-type: none"> - Upgrades the Ellucian platform to new Banner version - More reporting requirements - 	<p><u>Problems</u></p> <ul style="list-style-type: none"> - Maintaining a secure environment - Staff salary – matching industry standard for future staffing -

2017-2022 Technology Goals

The technology goals presented below represent the long term goals for technology at Citrus College for the next five years and provide a common basis for annual technology planning.

Technology Area	Goals
I. Administrative Information Systems	A. Upgrade to Banner 9 B. Expand reporting environment C. Implement third party software applications that compliment Banner environment
II. Educational Technology	A. Expand online options for student access B. Implement new instructional support applications
III. Network, Infrastructure and Telecommunications	A. Increase security B. Continue upgrades to infrastructure
IV. Operations and Support Service	A. Increased training options and opportunities
V. Web Environment	A. Upgrade college web page B. Expand use of social media

Implementation Objectives

Implementation Objectives 2020 - 2021

Each year, implementation strategies and objectives will be defined in support of the long term technology goals.

1. Administrative Information Systems (AIP 8.2)

Goal 1A: Upgrade to Banner 9

Strategies and Objectives

1. Implement Banner 9 Self-Service
2. Implement Banner 9 Financial Aid Self-Service

Goal 1B: Expand reporting environment.

Strategies and Objectives

1. Leverage reports from DegreeWorks

Goal 1C: Implement third party software applications that compliment Banner environment

Strategies and Objectives

1. Migrate e-mail to Office 365 for Faculty and Staff
2. Implement Campus Logic integration for Financial Aid
3. Enhance integration between DegreeWorks and Banner

2. Educational Technology (AIP 8.3)

Goal 2A: Expand online options for student access

Strategies and Objectives

- 1.

Goal 2B. Implement new instructional support applications

Strategies and Objectives

1. Launch DegreeWorks templates for streamlines student educational plans and Guided Pathways
2. Leverage Argos, Student Advising Profile to support Guided Pathways
3. Simplify the ability of counselors to update academic goals during advising session

Implementation Objectives

3. Network, Infrastructure and Telecommunications (AIP 8.2)

Goal 3A: Increase security

Strategies and Objectives

1. Implement two-factor authentication

Goal 3B: Continue upgrades to infrastructure

Strategies and Objectives

1. Update the projector and sound switching technology in the classroom
2. Planning for upgrade of backbone network for the college
3. Install modular data center

4. Operations and Support Services (AIP 8.2)

Goal 4A: Increased training options and opportunities

Strategies and Objectives

1. Training in Microsoft Teams for staff and faculty
2. Training in Microsoft Office 365 for staff and faculty

5. Web Environment (AIP 8.2)

Goal 5A: Upgrade college web page

Strategies and Objectives

1. Create pages for Guided Pathways
2. Expand and enhance the CTE program pages

Goal 5B: Expand use of social media

Strategies and Objectives

(See objectives of Communications and External Relations)

Technology Planning Accomplishments

2019-2020 Technology Planning Accomplishments

1. Administrative Information Systems (AIP 8.2)

Goal 1A: Upgrade to Banner 9

Strategies and Objectives

3. Implement Banner 9 self-service - **Banner 9 registration, student profile, information update, faculty grade entry completed.**

Goal 1B: Expand reporting environment.

Strategies and Objectives

1. Develop reports and systems to maximize allocations under the new funding formula
2. Expand the use of PowerBI for analytics – **PowerBI in use by IRPE**

Goal 1C: Implement third party software applications that compliment Banner environment

Strategies and Objectives

1. Continue implementation of InfoSilem for Course Scheduling (**AIP 8.3**)
2. Continue implementation of the CornerStone Learning Management System - **Completed**
3. Complete the development of an online application for the Nursing program - **Completed**

2. Educational Technology (AIP 8.3)

Goal 2A: Expand online options for student access

Strategies and Objectives

1. Complete implementation of the Ready Education Mobile App - **Completed**

Goal 2B. Implement new instructional support applications

Strategies and Objectives

1. Explore a Case Management system for students (such as Starfish)
2. Explore technologies for classroom teleconferencing (**AIP 8.1**)

Technology Planning Accomplishments

3. Network, Infrastructure and Telecommunications (AIP 8.2)

Goal 3A: Increase security

Strategies and Objectives

1. Pilot two-factor authentication for administrative systems
2. Complete an in-depth security assessment (coordinated with the CCC Chancellor's Office) - **Completed**
3. Complete the implementation of the PacketFence Network Access Control system – **Completed for wireless**

Goal 3B: Continue upgrades to infrastructure

Strategies and Objectives

1. Continue replacement of classroom projectors (as funding permits)
2. Continue desktop computer replacement (as funding permits)
3. Explore a Containerized Data Center solution – **Site plan completed**

4. Operations and Support Services (AIP 8.2)

Goal 4A: Increased training options and opportunities

Strategies and Objectives

1. Provide training for new functionality in Banner 9 **completed Banner Registration**
2. Provide training for Ready Education Mobile App communication - **Completed**
3. Provide training for InfoSilem Course Scheduling – **initial training completed**

5. Web Environment (AIP 8.2)

Goal 5A: Upgrade college web page

Strategies and Objectives

1. Explore website conversion from Sharepoint to another platform
2. Implement pages to support Guided Pathways (**AIP 8.3**)

Goal 5B: Expand use of social media

Strategies and Objectives

1. Leverage communications options in the Ready Education Mobile App - **Completed**

Appendix A – SWOT Analysis

Appendix A - SWOT Analysis Details

A S.W.O.T Analysis (Strength-Weakness-Opportunity-Threat) identifies and analyzes the strengths, weaknesses, opportunities and threats an organization faces in the near and short/long term depending upon organizational goals and objectives

Step 1 – Look at internal factors, strengths and weaknesses of an organization

- Strengths - Positive tangible and intangible attributes, internal to an organization that are within the organization's controls
- Weaknesses - Factors that are within an organization's control that detract from its ability to attain the desired goal and which the organization can improve

Step 2 – Look at external factors, opportunities and threats that exist in the external environment

- Opportunities - External attractive factors that represent the reason for an organization to develop and that will propel the organization. Opportunities are potential future strengths.
- Threats - External factors, beyond an organization's control, that could place the organization mission or operation at risk; items are often classify them by their "seriousness" and "probability of occurrence". Threats are potential future weaknesses.

Step 3 – Review your SWOT matrix with a view to creating an action plan to address each of the four areas. Pair and internal with an external factor to define areas for action

- Leverages (Strengths + Opportunities) "Positional advantage; power to act effectively" when internal strengths combine with external opportunities
- Vulnerability (Strengths + Threats) "Susceptible to injury or penalties; insufficiently defended; liable to succumb to temptation" when external threats combine with internal strengths
- Constraints (Weakness + Opportunities) "The state, quality or sense of being restricted to a given course of action or inaction" when external opportunities combine with internal weaknesses
- Problems (Weakness + Threats) "A question or situation that presents uncertainty, perplexity, or difficulty" when external threats combine with internal weaknesses

Appendix A – SWOT Analysis

SWOT Analysis Input

- Strengths
 - New Staff: 3 programmers (2 are SSSP funded), 3 Tech Support staff (2 are SSSP funded) and 1 part-time tech support
 - Technology Education for Students
 - Campus Emergency System in place (3 tier)
 - Wireless expansion in process
 - Cell phone coverage in buildings
 - Products that are filling in gaps
 - Infrastructure brought up to date
- Weaknesses
 - Availability of equipment and funding
 - Expand technology education (faculty, staff, student)
 - Demand for technology projects
 - Products that need interface with Banner
 - End User Security
 - Wireless access for printing
 - Print Management
 - Turnover of staff (CISO, supervisor, staff)
 - Disk space
 - Office space issue
 - Off-site backup system
- Opportunities
 - Chancellor's office system wide projects
 - Ellucian expanding products
 - Canvas to replace BlackBoard
 - Social Media
 - Cloud
 - eBooks, Hero
 - OER
 - Professional support groups
- Threats
 - Maintain Security (Virus, DropBox)
 - Ellucian products
 - Demand for Reporting
 - Social Media
 - New technologies (devices, software)
 - Changing technology landscape
 - Salary (match the industry)

Appendix B – Planning Schedules Integration

Appendix B – Planning Schedules Integration

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2021-2022	2022-2023
Accreditation							
Annual Reports		Annual Report	Annual Report	Annual Report	Annual Report		Annual Report
Accreditation 2015	Report-Summer 2015 Visit - Fall 2015						
Accreditation 2022				Writing Report	Writing Report	Report-Summer 2012 Visit - Fall 2022	
Strategic Plan							
2011-2016	Year 5 - AIP						
2017-2022	Write New Plan	Year 1 - AIP	Year 2 - AIP	Year 3 - AIP	Year 4 - AIP	Year 5 - AIP	
2023-2028						Write New Plan	Year 1 - AIP
Educational & Facilities Master Plan							
2011-2020	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
2021-2030						Write new plan	Year 1
Technology Plan							
2013-2017	Year 3 - Annual Update	Year 4 - Annual Update					
2018-2023		Write New Plan	Year 1 - New Plan	Year 2 - Annual Update	Year 3 - Annual Update	Year 4 - Annual Update	Year 5 - Annual Update

Appendix C – Integration Planning Flow Chart

