

Program: Computer Studies

(Computer Information Systems, Computer Networking Technology, Computer Science)

Division: STEM

Date: 11/1/23

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With the approval of the Academic Senate and the Institutional Planning and Effectiveness Committee, we are moving to a bi-annual cycle of program review updates and full program reviews. **Fall 2023 is a Program Update cycle.**

Please note: Program Update is NOT in itself a vehicle for making requests. All requests should be made through appropriate processes (e.g., Instructional Equipment Requests) or directed to your dean or supervisor.

Time Frame: This Program Update *should reflect* on program status during the 2022-23 academic year. It should *describe plans* starting now and continuing through 2023-24.

Key Terms: The Program Review Glossary defines key terms that you can review before writing: <https://bit.ly/2LqPxOW>

HELPFUL LINKS:

- 1) [Program Review Committee Page for Writers](#)
- 2) [Fall 2023 Program Reviews](#)
- 3) [Frequently Asked Questions](#)

For Help: Contact Nadiyah Taylor: ntaylor@laspositascollege.edu.

INSTRUCTIONS:

- 1) Please respond to each question with enough detail to present your information, but it doesn't have to be very long.
- 2) If the requested information does not apply to your program, write "Not Applicable."
- 3) Suggested: Communicate with your dean while completing this document.
- 4) Send an electronic copy of this form to Nadiyah Taylor and your dean **by November 1, 2023**

IMPORTANT CHANGES AND REMINDERS

Some sections have been removed for ease of completion. However, these important tasks will need to be reviewed by programs:

- ✓ **Check for Title V updates required for any of your courses or Programs:**
 1. To check on the status of courses and programs to see if any updates are required
 - a. Log in to CurricUNET
 - b. Select "Course Outline Report" under "Reports/Interfaces"
 - c. Select the report as an Excel file or as HTML)
 2. If updates are needed, submit these updates to the Curriculum Committee
 3. Then, compare each Program Map to your current course offerings and course sequencing. Pay close attention to prerequisite information and to classes that may only be offered during certain semesters.
 - a. If your map requires a **non-Curricular** change (i.e., course sequencing) consult your [Pathway counseling faculty liaison](#) to initiate any changes.
 - b. If your map requires a **Curricular Change** (Program modifications) - these are initiated through the Curriculum Committee.
- ✓ **Review your programs to see if there are any modifications needed**
- ✓ **Review your programs and courses to see if any will be sunset or deactivate**

HAS YOUR PROGRAM HAD ANY SIGNIFICANT UPDATES SINCE THE LAST PROGRAM REVIEW?

- No, I'd like to skip the update this year, and I understand that I can only do this twice in three years.**

THERE ARE TWO SECTIONS:

1. Updates - *All programs* (page 3)
2. CTE Review – *CTE programs only* (pages 4-7)

ALL PROGRAMS: SECTION ONE

1. Please describe the most important updates, achievements, challenges, or barriers to your program in academic year 22-23.

The Computer Studies program continued to foster our working relationships with local industry, such as LLNL, to actively recruit our students for internships and jobs. As a CTE program, we continued our outreach efforts to engage with prospective students, including events such as Preview Night and Open House. Our program moved to the new 2100 building, which necessitated moving various equipment for our computer networking labs and the Computer Center. We had a successful cybersecurity summer camp targeting high school students. One faculty member applied for an NSF grant to focus on providing scholarships for computer science, chemistry, and biology students. A couple faculty were also invited to meet with Apple to discuss a potential partnership with LPC. One computer science faculty was part of the EBCAN discussions to clarify the pathway from LPC to CSU East Bay. We also provided support for a cybersecurity partnership with local, small businesses through PISCES. Our CNT discipline also partnered with San Jose State to offer a summer CISCO course that articulated to their program. Student engagement through clubs continued.

Challenges we faced include the sudden retirement of the previous coordinator, having only one full-time faculty in CIS with a large backlog of necessary curriculum revisions, and hiring needs (both full-time and part-time). Technology needs continue to serve as a barrier for our program (old equipment, aged software, locked down environments, etc.).

2. What are the most important things your program observed with respect to student learning, equity, and success in 22-23? This could be related to your SLOs or from other sources.

For all three disciplines, we experienced an increase in the percentage of traditional college aged students enrolling in our courses. In general, we see a slight increase in FTES for CS and CNT, but a decline for CIS. Gender gaps continue to exist in CS and CNT and should be addressed.

3. Got anything new planned for 23-24?

With the addition of two, new full-time faculty members, we are excited to leverage their expertise to improve our program. There is interest in expanding our community outreach through summer camps, including robotics for middle schoolers and drone programming for high schoolers. The Girls Who Code club is being restarted to help remedy the gender gap. Close collaboration with the new MESA Scholars program.

LPC Equity Definition: Equity is parity in student educational outcomes. It places student success and belonging for students of color and disproportionately impacted students at the center of focus.

CTE UPDATE (CTE PROGRAMS ONLY): SECTION TWO

Vicki Shipman will provide you with or support any data needs

LABOR MARKET CONDITIONS: EXAMINE YOUR MOST RECENT LABOR MARKET DATA (WITHIN THE LAST 2 YEARS).

1. Demonstrate labor market need (demand – completers = need); projected growth for the next five years.

- Software Developer
 - CIS: $23,498 - 1,334 = 22,164$
 - CS: $23,498 - 4,031 = 19,467$
- Computer User Support Specialist
 - CIS: $22,238 - 727 = 21,511$
 - CS: $22,238 - 3,545 = 18,693$
- Information Security Analyst
 - CIS: $5,284 - 1,334 = 3,950$
 - CNT: $5,284 - 309 = 4,975$
 - CS: $5,284 - 3,545 = 1,739$
- Computer Network Support Specialist
 - CIS: $4,781 - 996 = 3,785$
 - CNT: $4,781 - 619 = 4,162$
 - CS: $4,781 - 4,149 = 632$

2. What is the median income for occupations within your program?

- Software Developer: \$182, 638
- Computer User Support Specialist: \$77,498
- Information Security Analyst: \$149,828
- Computer Network Support Specialist: \$89,124

ADVISORY BOARDS:

1. Has your program complied with advisory board recommendations?

i. YES No

2. If not, please explain.

STRONG WORKFORCE PROGRAM METRICS: UTILIZING LAUNCHBOARD, REVIEW THE STRONG WORKFORCE PROGRAM METRICS. REVIEW THE DATA AND THEN REPORT ON YOUR SPECIFIC PROGRAM.

Data Reporting Notes:

Data are suppressed according to FERPA to protect students' personally identifiable information. Suppression takes place when too few students are included in the metric. Meaning, if there is not data, your program did not have a minimum of ten (10) students for this metric.

LaunchBoard data metrics lag in terms of academic year reporting. For your program review SWP metrics, report on the latest year available with a notation of the year. Meaning, if there is not data, your program did not have a minimum of ten (10) students for this metric.

CI. STRONG WORKFORCE PROGRAM STUDENTS

Report on students in your program who took at least 0.5 units in any single credit course or who had at least 12 positive attendance hours in any noncredit course(s) in the selected year or who enrolled in noncredit course(s) in Spring 2020 or any term in academic year 2021 and who enrolled on a TOP code that is assigned to a vocational industry sector in the selected year.

How may these metrics improve?

Year: 2021-2022

CIS: 247, decreasing trend

CNT: 202, steady trend

CS: 470, slight decreasing trend

We can improve on these metrics by increasing our outreach efforts to attract students to our program.

C2. SWP STUDENTS WHO EARNED 9 OR MORE CAREER EDUCATION UNITS IN THE DISTRICT IN A SINGLE YEAR

Report on students in your program, the proportion who successfully completed nine or more career education semester units in the selected year within a single district

How may these metrics improve?

Year: 2021-2022

CIS: 39%, increasing trend

CNT: 47%, steady trend

CS: 13%, steady trend

LPC Equity Definition: Equity is parity in student educational outcomes. It places student success and belonging for students of color and disproportionately impacted students at the center of focus.

Overall, these metrics are favorable, but can be improved further through additional section offerings of our courses.

C3. SWP STUDENTS WHO COMPLETED A NONCREDIT CTE OR WORKFORCE PREPARATION COURSE

Report on students in your program with a noncredit enrollment on a CTE TOP code or a noncredit enrollment in a workforce preparation course, the proportion who completed a noncredit CTE or workforce preparation course or had 48 or more contact hours in a noncredit CTE or workforce preparation course(s) in the selected year

How may these metrics improve?

CIS: too few students to report
CNT: too few students to report
CS: too few students to report

C4. SWP STUDENTS WHO EARNED A DEGREE OR CERTIFICATE OR ATTAINED APPRENTICESHIP JOURNEY STATUS

Report on students in your program the number of unduplicated SWP students in your program who earned a noncredit certificate, Chancellor's Office approved certificate, associate degree, and/or CCC baccalaureate degree on a TOP code assigned to a vocational sector and who were enrolled in the district on any TOP code in the selected year or who attained apprenticeship journey status on a vocationally flagged TOP code in the selected year and who were enrolled at any community college at the start of the apprenticeship program on a vocationally flagged TOP code

How may these metrics improve?

CIS: too few students to report
CNT: 11 (year 2020-2021)
CS: too few students to report

For CNT, we could improve our relations with local industry representatives in hopes of creating an apprenticeship pipeline between our students and their companies. We can also consider streamlining the course offerings to make earning a degree or certificate more manageable for students.

C5. SWP STUDENTS WHO TRANSFERRED TO A FOUR-YEAR POSTSECONDARY INSTITUTION

Report on students in your program who earned 12 or more units at any time and at any college at any time up to and including the selected year and who exited the community college

system, the number of students who enrolled in any four-year postsecondary institution in the subsequent year

How may these metrics improve?

No data found on LaunchBoard.

C6. SWP STUDENTS WITH A JOB CLOSELY RELATED TO THEIR FIELD OF STUDY

Report on students in your program who responded to the CTE Outcomes Survey and did not transfer to any postsecondary institution, the proportion who reported that they are working in a job very closely or closely related to their field of study.

How may these metrics improve?

CIS: 60%, decreasing trend (year 2019-2020)

CNT: 67%, decreasing trend (year 2019-2020)

CS: 80%, increasing trend (year 2018-2019)

We need to consider looking closer at the curricula being offered for CIS and CNT. We may need to revise courses to better align with the industry skills that employers are looking for in their applicants.

C7. MEDIAN ANNUAL EARNINGS FOR SWP EXITING STUDENTS

Report on students in your program who exited the community college system and who did not transfer to any postsecondary institution, median earnings following the academic year of exit

How may these metrics improve?

Year: 2020-2021

CIS: \$57,780, increasing trend

CNT: \$61,924, decrease

CS: \$36,740, decreasing trend

CS stands out here, as it is the lowest median annual earnings as well as following a decreasing trend. This could be an indication that not many employers are looking for applicants with basic programming skills; they're looking for degree-earning employees. We could try to engage more with local industry to find the necessary skills students need and incorporate these into our courses.

C8. MEDIAN CHANGE IN EARNINGS FOR SWP EXITING STUDENTS

LPC Equity Definition: Equity is parity in student educational outcomes. It places student success and belonging for students of color and disproportionately impacted students at the center of focus.

Report on students in your program students who exited and who did not transfer to any postsecondary institution, median change in earnings between the second quarter prior to the beginning of the academic year of entry (for the first time ever as a non-Special Admit or return to any community college after an absence of one or more academic years) and the second quarter after the end of the academic year of exit from the last college attended.

How may these metrics improve?

Year: 2020-2021

CIS: 7%, decreasing trend

CNT: 62%, increasing trend (outlier?)

CS: 15%, increasing trend

See above response.

C9. SWP EXITING STUDENTS WHO ATTAINED THE LIVING WAGE

Report on students in your program who exited college and did not transfer to any postsecondary institution, the proportion who attained the district county living wage for a single adult measured immediately following academic year of exit.

How may these metrics improve?

Year: 2020-2021

CIS: 64%, increasing trend

CNT: 66%, decrease

CS: 47%, decreasing trend

See above response.