

# Comprehensive Program Review Report



## Program Review - Computer

### Program Summary

#### 2021-2022

**Prepared by:** Craig Arnold, Brian Bettencourt, Tara Bosma, Susan Mazzola

**What are the strengths of your area?:** Quality of Instructors: Within the Business Department, we currently have seven full-time instructors teaching computer courses. Seven instructors are certified to teach courses online. All instructors have a master's degree, many with years of teaching experience and/or real-world experience. Currently our instructors are serving 103.2 FTES with a success rate of 71.1%, a 4.8% increase from the previous year.

A detailed look at the success rate with information coming from the PR dashboard (Tableau); Gender: female-72%, male-70.6%, and unknown-\*%; Instructional Mode: Face-to-face-78.1%, Hybrid-66.1%, and Online-69.5%; Campus: Visalia-77.7%, Hanford-66.7%, Tulare-81.3%, and Online-69.0%; and race/ethnicity; African American-81.8%, American Native-\*%, Asian-93.9%, Filipino-60.0%, Hispanic-68.0%, Multi Ethnicity-66.0%, Pacific Islander-\*%, White-76.1%, Unknown-68.4%.

**Internship Program:** The Business Department currently places approximately 31 students per year in computer related internships with approximately 22 participating local businesses. This is a steady increase from the program's inception approximately 12 years ago.

**Technology Use:** The current software being taught includes: Microsoft Office 2019, Microsoft Visual Studio 2019, javac.

**Full-time Professors:** The full-time faculty of the Business Department currently teach 91.4% of the computer courses. The remaining 8.6% are taught by adjunct faculty with many years of teaching and real-world experience.

**Internship Assistant:** A part-time classified employee assists with the Internship program. The assistant, working with the Internship Coordinator, communicates with local businesses setting up internship opportunities, meets with students, manages student applications, pairs student with appropriate internships, monitors student progress, and facilitates student evaluations.

**What improvements are needed?:** Student Success: During the pandemic, student access to adequate computers and the Internet is a major concern. Many students have been unaware of the resources available through the college.

**Computers:** Through the library, some students have been able to check out computers and hot spots. Some students have been issued computer vouchers. Computers checked out through the LRC have lacked the necessary software for many courses despite instructor requests. Students do not have permission to add needed software.

**Communication:** Provide students a departmental-level document with information on available computer-related resources.

**Describe any external opportunities or challenges.:** The challenge is to prepare students for computer-related positions. The program is unique in that many courses are geared for multiple types of career opportunities. Other courses are specific to train students in the work areas of computer programming and information systems.

**Overall SLO Achievement:** The Student Learning Outcomes are currently being tracked and assessed in TracDat and are meeting or exceeding expectations. The overall reported student success rates meet the target goals.

**Changes Based on SLO Achievement:** As a result of students meeting or exceeding success goals, instructors have continued to adapt to new pedagogies to meet current student needs. For example, many instructors created home offices to facilitate teaching of their classes, held office hours via Zoom, and completed online teaching certifications. These adaptations provide students with quality online instruction and support to promote success.

**Overall PLO Achievement:** Assessment of PLOs evaluated for Computer Programming and Information Degree and Certificate

with data from the spring 2020 semester. All three PLOs increased in success: two achieving 100% success and one achieving 93% success.

**Changes Based on PLO Achievement:** The PLO with 93% success was up significantly due to a change in evaluation method.

**Outcome cycle evaluation:** Each year several courses are slated for review of outcome assessments base on their three year cycle. The Business Division faculty meet to discuss the TracDat assessments and recommend changes according to student needs and changing environment.

## Action: Student Success Rates

Maintain student success at or above 63%.

**Leave Blank:**

**Implementation Timeline:** 2020 - 2021, 2021 - 2022

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:** At the end of their program, students will be able to demonstrate competency in Word processing, spreadsheets, databases, and/or web development.

**Person(s) Responsible (Name and Position):** Susan Mazzola

**Rationale (With supporting data):** Overall student success during 2020-21 was 71.1%. Work will continue to maintain a desired success rate at or above 63%.

**Priority:** High

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

### Update on Action

#### Updates

**Update Year:** 2021-2022

09/13/2021

**Status:** Continue Action Next Year

Student success is even better than last year now 71.1% with a 4.8% increase further exceeding our 63% goal.

**Impact on District Objectives/Unit Outcomes (Not Required):**

**Update Year:** 2020 - 2021

09/22/2020

**Status:** Continue Action Next Year

Student success for 2019-20 is at 66%, which exceeds our ongoing goal of at least 63%.

**Impact on District Objectives/Unit Outcomes (Not Required):** Impact on District Objectives/Unit Outcomes: District Objective #2.4: By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

### Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

**District Objective 2.4** - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2013-2015

**2013-2015: District Objective #1** - District Objective #1 for 2013-2015: Provide effective academic support services as measured by an increase in the rate at which students successfully complete courses.

District Objectives: 2015-2018

**District Objectives** - 2.4 - Increase Career Technical Education course success rates and program completion annually.

District Objectives: 2021-2025

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**District Objective 2.1** - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

**District Objective 2.4** - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

**District Objective 3.2** - Increase the course success rate by 10% for each disproportionately impacted student group in their transfer level Quantitative Reasoning and English courses by the end of their first year from 2021-2025.

## Action: Update software and hardware

Provide students with updated software and hardware comparable to industry standards.

**Leave Blank:**

**Implementation Timeline:** 2020 - 2021, 2021 - 2022

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:** At the end of this program, students will be able to manage various computer applications and programming techniques.

**Person(s) Responsible (Name and Position):** Craig Arnold, Instructor

**Rationale (With supporting data):** During this past year all software has stayed the same. The need to remain current with industry technology is important for student employment opportunities.

**Priority:** High

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

### Update on Action

#### Updates

**Update Year:** 2021-2022

09/13/2021

**Status:** Continue Action Next Year

Microsoft Office 2019 is now installed in all Business Division classrooms and lab.

**Impact on District Objectives/Unit Outcomes (Not Required):**

### Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 2.4** - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2013-2015

**2013-2015: District Objective #1** - District Objective #1 for 2013-2015: Provide effective academic support services as measured by an increase in the rate at which students successfully complete courses.

District Objectives: 2015-2018

**District Objectives** - 4.2 -Improve the efficiency, effectiveness and communication of human, physical, technological, and financial resources to advance the District Mission.

District Objectives: 2021-2025

**District Objective 2.4** - Increase the percentage of CTE students who achieve their employment objectives by five percentage

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points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

## Action: Business Department Student Guide to Computer Resources

Provide departmental-level course specific document to share information on the computer resources available to the students through COS.

**Leave Blank:**

**Implementation Timeline:** 2020 - 2021, 2021 - 2022

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:** 2.4 Increase career technical education course success rates and program completion annually.

**Person(s) Responsible (Name and Position):** Brian Bettencourt, Tara Bosma

**Rationale (With supporting data):** Providing students access to information on the available technologies would improve the success for many of our students who have traditionally had limited technology at home and difficulty finding support information. Students are checking out and/or purchasing inadequate computers for their specific courses.

**Priority:** Medium

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

### Update on Action

#### Updates

**Update Year:** 2021-2022

09/13/2021

**Status:** Continue Action Next Year

Because COS marketing distributed a student guide in fall 2020 we held off distributing a Business Department guide. Our students are still in need of a class specific resource guide to ensure they have the proper computer equipment with relevant software to be successful.

**Impact on District Objectives/Unit Outcomes (Not Required):**

## Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objectives: 2021-2025

**District Objective 2.1** - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

**District Objective 2.4** - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

**District Objective 4.2** - Improve communication practices needed to support organizational effectiveness and continuous improvement across all District units and constituents from 2021-2025.

## Action: Reinstate Comp 130 in the GE Pattern, Area: A-2 Oral

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## Communication and Analytical Thinking

Submit the Comp 130 documentation to the GE Committee for GE Pattern course approval.

**Leave Blank:**

**Implementation Timeline:** 2021 - 2022

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:**

**Person(s) Responsible (Name and Position):** Tara Bosma

**Rationale (With supporting data):** Without the inclusion of Comp 130 in the GE Pattern students only have one introduction computer course where often times their abilities are mismatched with the pace of Comp 005. In addition they are often unaware of an alternative introductory course (Comp 130). Therefore, to promote student success and increase transfer rates, Comp 130 needs to be reinstated as a GE Pattern course.

**Priority:** High

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

### Link Actions to District Objectives

District Objectives: 2018-2021
<b>District Objective 1.1</b> - The District will increase FTES by 1.75% over the three years
<b>District Objective 2.4</b> - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points
District Objectives: 2021-2025
<b>District Objective 1.1</b> - The District will increase FTES 2% from 2021 to 2025.
<b>District Objective 2.4</b> - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

## Action: New Faculty Hire for Computer/Business Courses

Meet student demand for both computer and business course offerings in the Business Division to increase the number of students who earn a degree/certificate or transfer to a UC/CSU.

**Leave Blank:**

**Implementation Timeline:** 2021 - 2022

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:**

**Person(s) Responsible (Name and Position):** Brian Bettencourt, Division Chair

**Rationale (With supporting data):**

**Priority:** High

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

### Resources Description

<b>Personnel - Faculty</b> - Personnel/Faculty--New/Replacement. The Business Division would like to replace a full-time faculty member who has retired. (Active)
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**Why is this resource required for this action?:** Most of the 11 full-time faculty members in the Business Division are teaching overloads.

Since full-time faculty will not be able to cover the retiree's units, we would need to attempt to staff these courses with qualified adjunct instructors who are also certified to teach distance education courses. The Business Division has difficulty in recruiting qualified adjunct instructors who can teach in the mornings and afternoons when the vast majority of our courses are scheduled. Many of our current Business Department adjuncts are teaching maximum unit loads, so the Division will not be able to sustain the current level of course offerings.

In order for the Business Division to effectively serve our students transferring to a CSU with a degree in Business Administration Associate in Science Transfer degree (AST), we need to hire a full-time instructor who can teach business and computer courses.

**Notes (optional):**

**Cost of Request (Nothing will be funded over the amount listed.):**

## Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 1.1** - The District will increase FTES by 1.75% over the three years

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objectives: 2021-2025

**District Objective 1.1** - The District will increase FTES 2% from 2021 to 2025.

**District Objective 2.1** - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.