### 2023 INSTRUCTIONAL ANNUAL PROGRAM PLANNING WORKSHEET

CURRENT YEAR: 2022 – 2023 PROGRAM: ELECTRONIC AND ELECTRICAL TECHNOLOGY (EET)

CLUSTER: WORKFORCE DEVELOPMENT LAST YEAR CPPR COMPLETED: 2022

NEXT SCHEDULED CPPR: 2026 CURRENT DATE: 2/24/2023

The Annual Program Planning Worksheet (APPW) is the process for:

- reviewing, analyzing and assessing programs on an annual basis
- documenting relevant program changes, trends, and plans for the upcoming year
- identifying program needs, if any, that will become part of the program's Resource Plan (download from this folder) (Please review the Resource Allocation Rubric when preparing the resource plan)
- highlighting specific program accomplishments and updates since last year's APPW
- tracking progress on a Program Sustainability Plan if established previously

**Note**: Degrees and/or certificates for the *same* program *may be consolidated* into one APPW.

This APPW encompasses the following degrees and/or certificates:

- 1 Associate of Science (A.S.) in Electrical Technology
- 2 Certificate of Achievement (C.A.) in Electronics and State Electrician
- 3 Certificate of Achievement (C.A.) In Power and Instrumentation

#### **GENERAL PROGRAM UPDATE**

Describe significant changes, if any, to program mission, purpose or direction. *If there are not any, indicate: NONE.* 

NONE (Since CPPR – 2022)

#### PROGRAM SUSTAINABILITY PLAN UPDATE

Was a Program Sustainability Plan established in your program's most recent Comprehensive Program Plan and Review?

Yes	$\ensuremath{\exists}$ If yes, please complete the Program Sustainability Plan Progress Report below
Nο	If no, you do not need to complete a Progress Report, — " None Required."

If you selected yes, please complete the Program Sustainability Plan Progress Report below after you complete the Data Analysis section. That data collection and analysis will help you to update,

<sup>1</sup> San Luis Obispo County Community College District Instructional Annual Program Planning Worksheet Approved by Academic Senate April 28, 2017 Document to be Used for Submission Spring, March 6, 2023

if necessary, your Program Sustainability Plan.

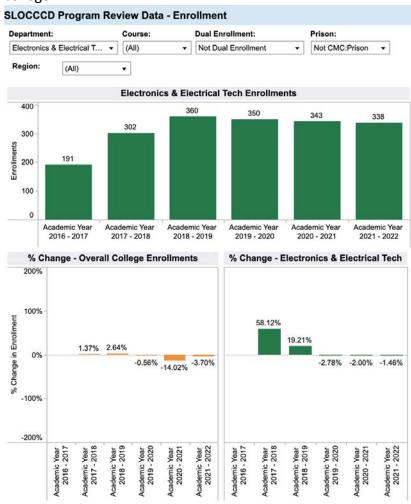
"N/A"

### DATA ANALYSIS AND PROGRAM-SPECIFIC MEASUREMENTS

Your responses to the prompts for the data elements below should be for the entire program. If this APPW is for multiple degrees and/or certificates, then you MAY want to comment on each degree and/or certificate or discuss them holistically for the entire program being sure to highlight relevant trends for particular degrees and/or certificates if necessary. Responses in this document need only reference the most recent year's available data.

# A. General Enrollment (Insert Aggregated Data Chart)

Insert the data chart and explain observed differences between the program and the college.



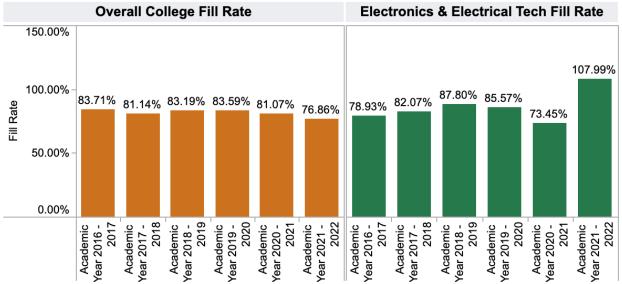
### **General Enrollment Narrative:**

For the 2021 – 2022 academic year the EET department was down in enrollments by -1.46% (338) as compared to the previous academic year (343). In comparison the overall college enrollments were down by -3.70%. For the EET department this enrollment decrease is considered statistically negligible. We attribute the relatively flat differential to the stabilization of the COVID pandemic.

# B. General Student Demand (Fill Rate) (Insert Aggregated Data Chart)

Insert the data chart and explain observed differences between the program and the college.

# SLOCCCD Program Review Data - Student Demand (Fill Rate) Department: Course: Dual Enrollment: Not Dual Enrollment Not CMC:Prison Overall College Fill Rate Electronics & Electrical Tech Fill Rate



Fill Rate: The ratio of enrollments to class limits. Cross listed class limits are adjusted appropriately.

Also, courses with zero class limits are excluded from this measure.

### **Student Demand (Fill Rate) Narrative:**

Fill rates (ratio of enrollments to class limits) for the 2021 - 2022 academic year were 107.99% as compared to 73.45% for the previous year in the EET department. This jump

<sup>3</sup> San Luis Obispo County Community College District Instructional Annual Program Planning Worksheet Approved by Academic Senate April 28, 2017 Document to be Used for Submission Spring, March 6, 2023

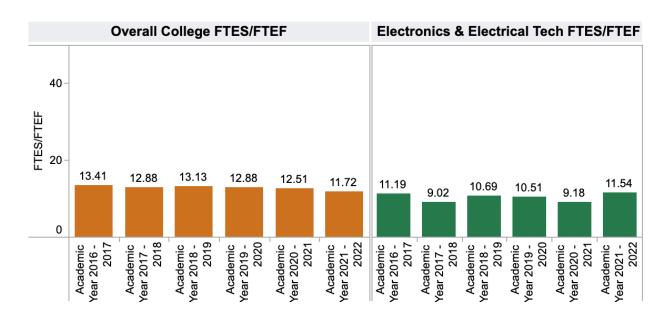
in EET enrollments is attributed to the attenuated concerns about students registering for in-person labs and decline in COVID related illness.

This has resulted in relatively full sections of most EET courses since the for 2021 - 2022 academic year. Typically, certified electrician trainees are averaging more than \$20 per hour after approximately 14 months of experience with local electrical contractors and other area employers seeking the skill sets that the vast majority of our students possess and/or are developing. Some of the larger area employers (e.g., PG&E) hire qualified entry-level employees at over \$30 per hour. Most area employers who recruit our students offer overtime hours to new employees who have successfully completed their probationary period.

# C. General Efficiency (FTES/FTEF) (Insert Aggregated Data Chart)

Insert the data chart and explain observed differences between the program and the college.

# SLOCCCD Program Review Data - Efficiency (FTES/FTEF) Department: Course: Dual Enrollment: Prison: Electronics & Electrical Tech ▼ Not Dual Enrollment ▼ Not CMC:Prison ▼



FTES/FTEF: The ratio of total FTES to Full-Time Equivalent Faculty (SXD4 Total-Hours/17.5)/XE03 FACULTY-ASSIGNMENT-FTE)

<sup>4</sup> San Luis Obispo County Community College District Instructional Annual Program Planning Worksheet Approved by Academic Senate April 28, 2017 Document to be Used for Submission Spring, March 6, 2023

# **General Efficiency (FTES/FTEF) Narrative:**

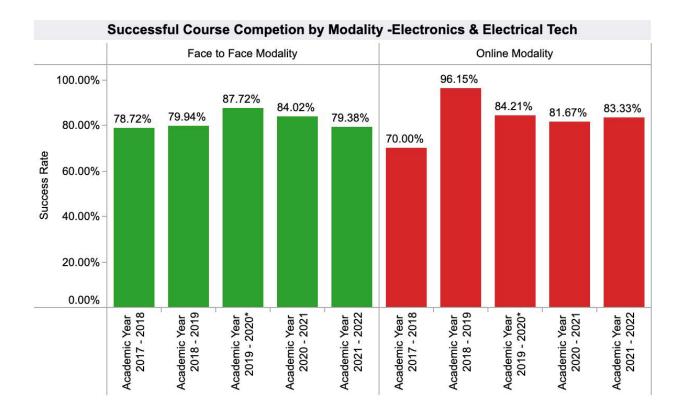
The EET Departments overall efficiency (FTES/FTEF) increased from 9.18 (2020 - 2021) to 11.54 (2021 - 2022). During recent summers, we continued offering the 6.0-unit Electronic Fundamentals (EET-213) course as well as the 4-unit State Electrician Trainee Topics (EET-119) course over the 8-week summer sessions. Although attrition during the summer is higher than attrition during the Fall or Spring semesters the course has been popular and clearly meets the needs of students who are unable to manage a 6-unit hybrid course which includes a 1-unit face-to-face lab during the Fall or Spring. The higher attrition of students in the 8-week summer session of EET-213 had some impact in the Department Efficiency dropping to 9.18 during 2020 – 2021 in addition to impacts from the COVID-19 pandemic. In discussions with local industry, students, faculty, and district administrators the summer offerings have proven highly effective overall and allows the EET department to avoid an "over impacted" program during the fall and spring semesters.

# D. Student Success—Course Completion by Modality (Insert Data Chart)

Insert the data chart and explain observed differences between the program and the college.

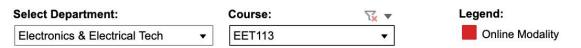
SEE FOLLOWING PAGE. -

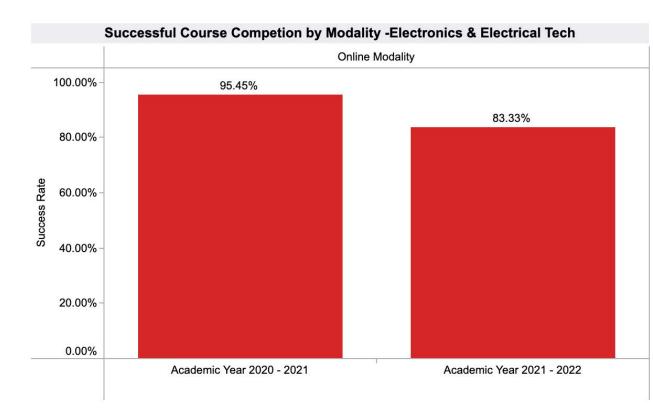




Succ	essful Course Competior	by Modality	Table - Ele	ctronics &	Electrical Te	ech
		Academic Year 2017 - 2018	Academic Year 2018 - 2019	Academic Year 2019 - 2020*	Academic Year 2020 - 2021	Academic Year 2021 - 2022
Face to Face	Department Success Rate	78.72%	79.94%	87.72%	84.02%	79.38%
Modality	Total Department Enrollments	282.0	334.0	312.0	223.0	320.0
Online Modality	Department Success Rate	70.00%	96.15%	84.21%	81.67%	83.33%
	Total Department Enrollments	20.0	26.0	38.0	120.0	18.0

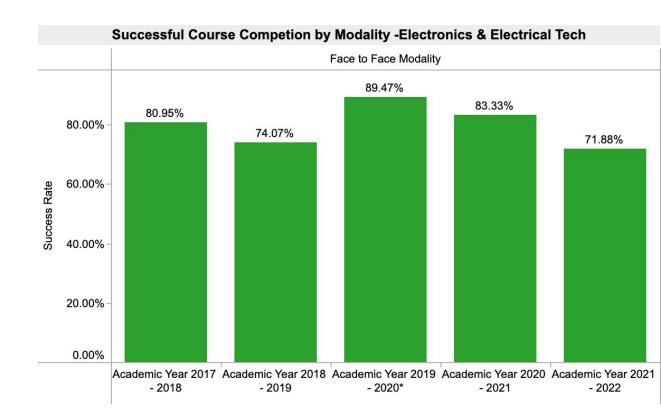
-See Page 16 for Successful Course Completion by Modality – Summary of EET Dept courses narrative-





Succ	essful Course Competion	by Modality	Table - Ele	ctronics &	Electrical Te	ech
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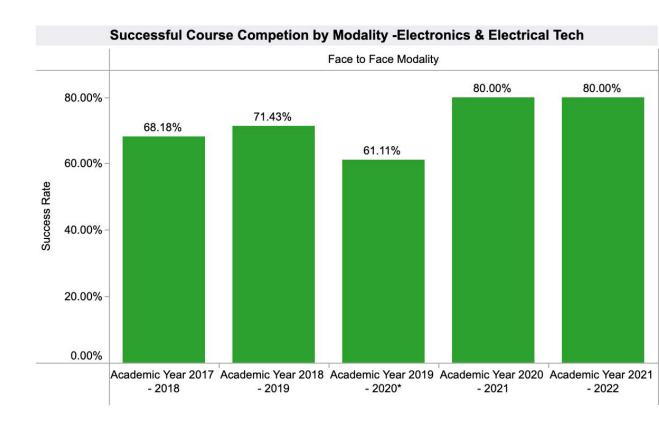




# Successful Course Competion by Modality Table - Electronics & Electrical Tech

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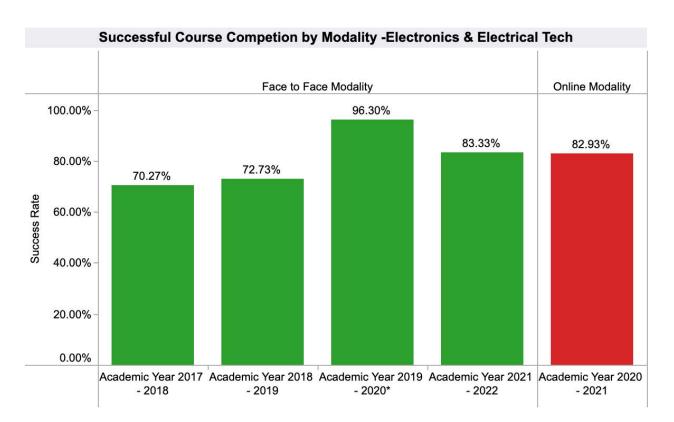




### Successful Course Competion by Modality Table - Electronics & Electrical Tech

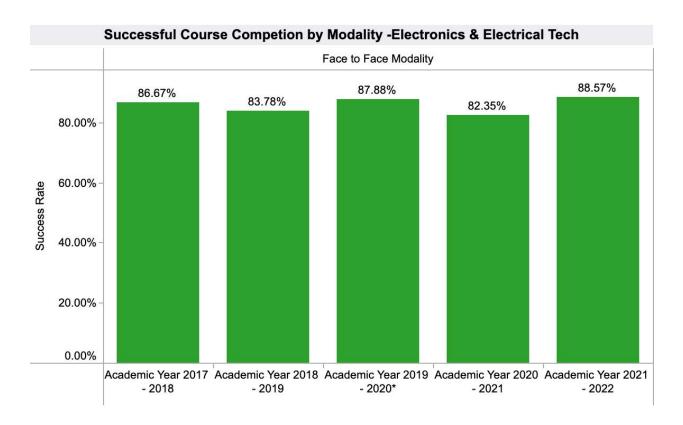
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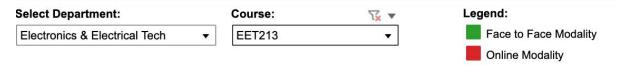


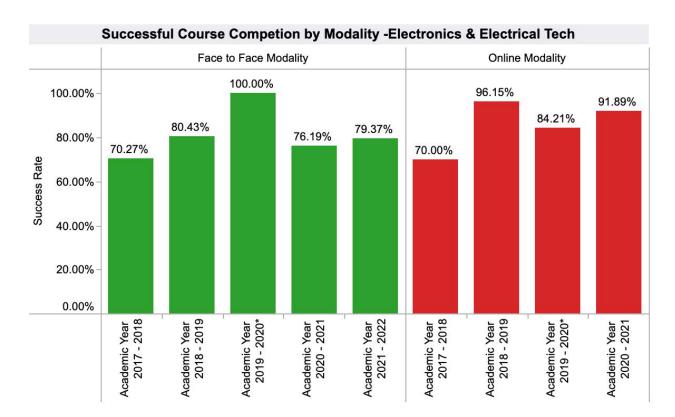
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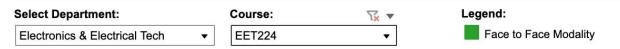


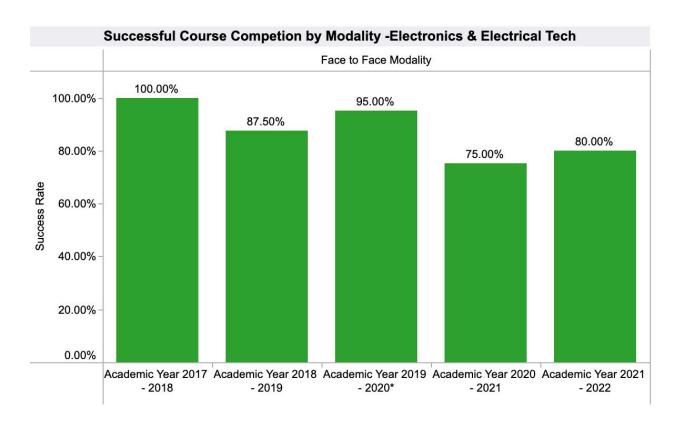
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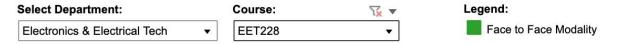


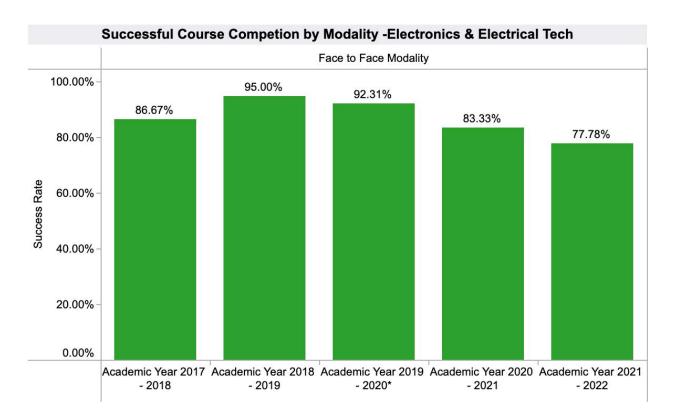
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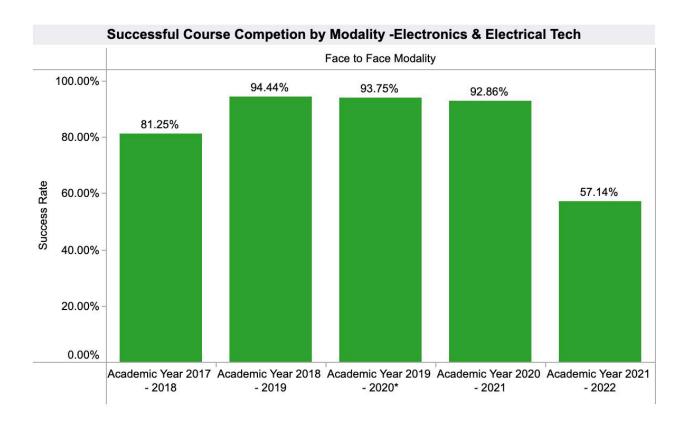
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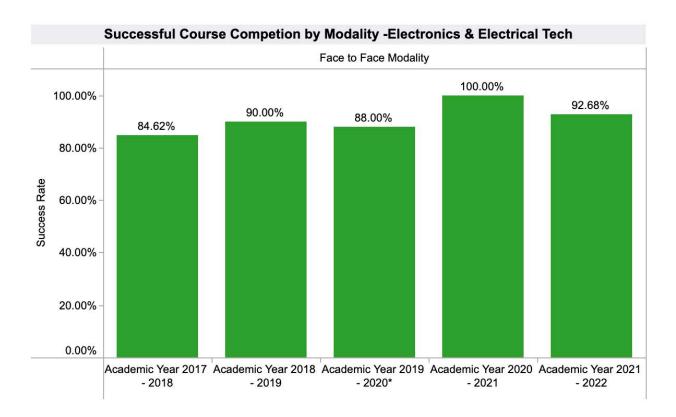
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# Successful Course Completion by Modality – Summary of EET Dept courses Narrative:

Based on the bar charts and data in the graphs above (emphasizing the first successful course completion by modality graph which represents <u>all</u> program courses), successful course completion for face-to-face instructional modality decreased very slightly. The data shown for 2017 – 2018 vs 2021 – 2022 shows an increase in successful course completion.

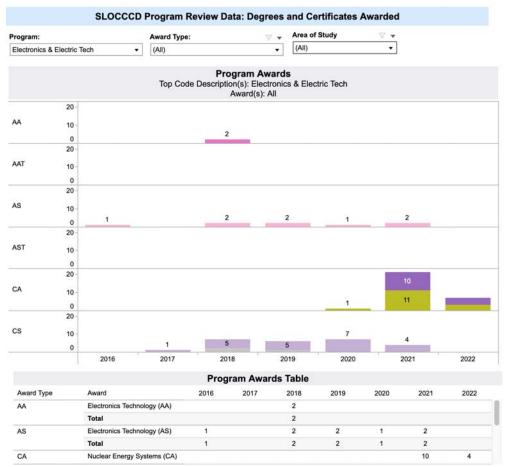
Strategies implemented over this last cycle to increase student success include an increased awareness of the existence of, and need for, electrical contractors and some area employers to require all applicants to be certified electrician trainees through the state DLE and Cuesta EET program to be in compliance with state law (CLC 800 -800.5). Some area contractors have incurred substantial fines for lack of compliance with state law related to electrical workers who are not certified. This requirement has continued to be discussed extensively with the EET advisory committee and other area employers resulting in the certification becoming a virtual prerequisite for most new employees well as continued employment.

This increased awareness of the need to have active employees and applicants enrolled in a state certified program has increase the importance of having "non-journey level" personal successfully complete program courses to meet the minimum academic annual hourly requirement of 150 academic hours per calendar year in courses approved by the state in the crosswalk. This has resulted in ongoing and increased interest and successful course completion within the department. The EET program is the only state certified (non-union) program in the county and within over 100 miles of the main campus.

E. Degrees and Certificates Awarded (Insert Data Chart)

Insert the data chart and explain observed differences between the program and the college.

-SEE NEXT PAGE-



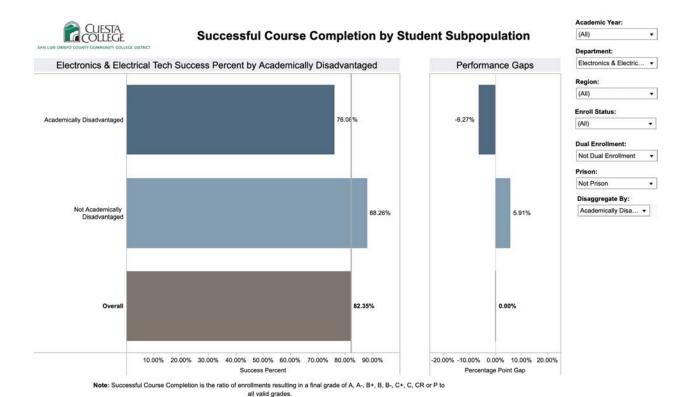
Program Awards: The number of degress and certificates awarded by program type

#### **Degrees and Certificates Awarded Narrative:**

Historically, most EET students began working full or part time in the electrical/electronic industry during their first or second semester in the program. The Division of Labor Enforcement only prescribes that students complete the requirements for their Certificate of Achievement (C.A.) In order to qualify to sit for the General Electrician Certification exam. The state does not currently require that students apply to Cuesta for their C.A. to sit for the exam. We are in discussions with the state to change this policy.

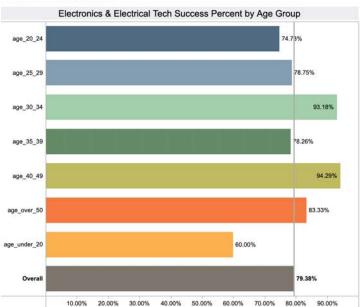
As such, most students who qualify for their C.A. are focused on working and preparing for the state exam. Most simply do not submit their C.A. application. We are working to rectify this situation through guided pathways as well as progress plans with each student through CTE counseling and faculty. For upward promotability in industry the need for students to complete the additional General education courses required to be awarded their Associate of Science in Electrical Technology cannot be overstated. Using Industry guest speakers and emphasizing earnings differentials; this is being addressed.

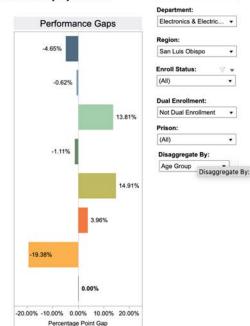
- F. <u>General Student Success Course Completion (Insert Aggregated Data Chart)</u>
  Insert the data chart and explain observed differences between the program and the college.
  - Hyperlink inactive. However, EET General Student Success is above college ave. each year.
- G. Review the <u>Disaggregated Student Success</u> charts; include any charts that you will reference. Describe any departmental or pedagogical outcomes that have occurred as a result of programmatic discussion regarding the data presented.





### Successful Course Completion by Student Subpopulation





Academic Year:

Academic Year 2021 ... ▼

Academic Year:

San Luis Obispo

Dual Enrollment: Not Dual Enrollment

(All)

Disaggregate By:

DSPS

Academic Year 2021 ... ▼

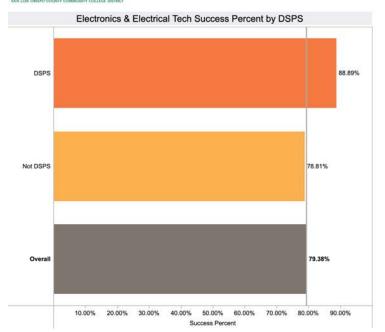
Electronics & Electric... ▼

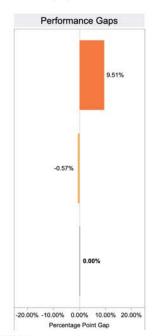
Note: Successful Course Completion is the ratio of enrollments resulting in a final grade of A, A-, B+, B, B-, C+, C, CR or P to all valid grades.

Success Percent

# CUESTA COLLEGE

# Successful Course Completion by Student Subpopulation



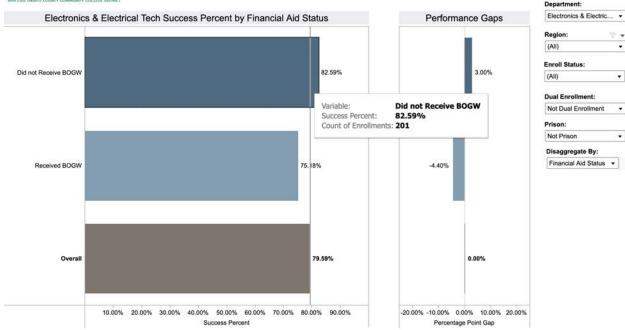


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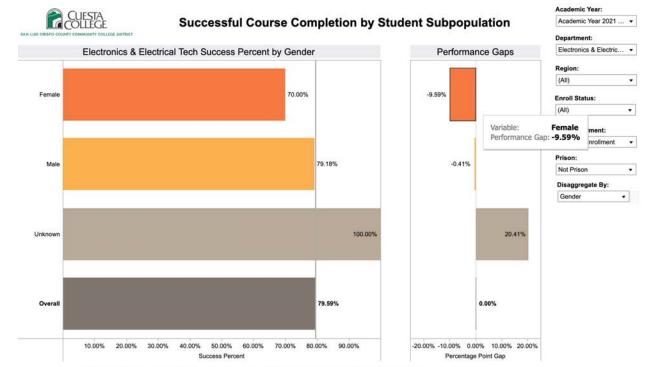


#### Successful Course Completion by Student Subpopulation

Academic Year 2021 ... ▼



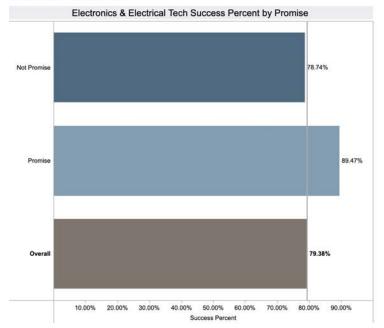
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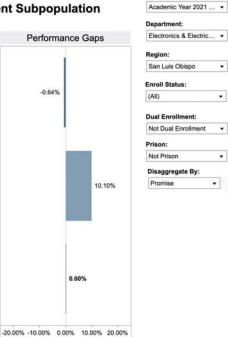


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# Successful Course Completion by Student Subpopulation





Percentage Point Gap

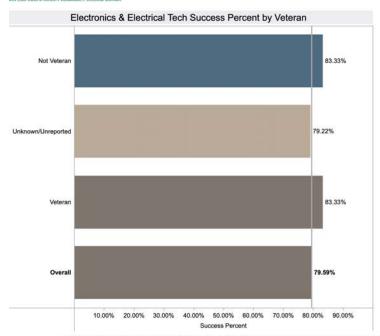
Academic Year:

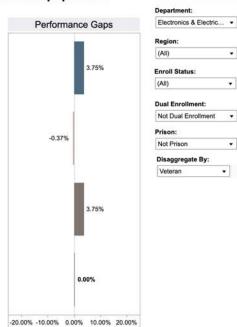
Academic Year 2021 ... ▼

Note: Successful Course Completion is the ratio of enrollments resulting in a final grade of A, A-, B+, B, B-, C+, C, CR or P to all valid grades.

# CUESTA COLLEGE

# Successful Course Completion by Student Subpopulation

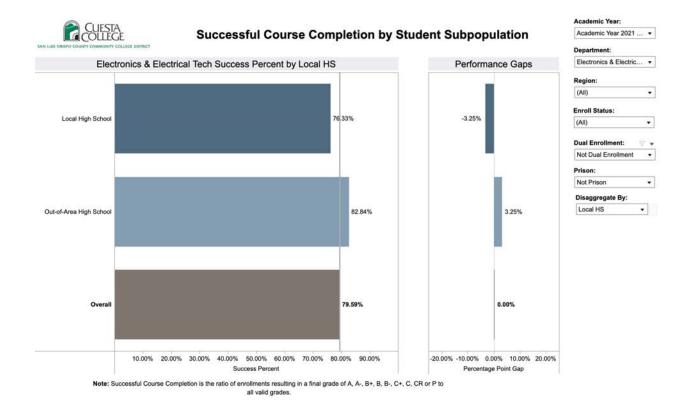




Percentage Point Gap

Note: Successful Course Completion is the ratio of enrollments resulting in a final grade of A, A-, B+, B, B-, C+, C, CR or P to

all valid grades.



The following are some questions you might want to consider:

- What specific groups are experiencing inequities? What patterns do you notice in the data? How have the equity gaps changed since the previous academic year?
- What professional opportunities are your program faculty participating in to address closing equity gaps?
- What strategies, policies and/or practices in your program have you implemented or what could be improved to better support students who experience equity gaps?

# **Successful Course Completion by Student Subpopulation Narrative:**

Part of the above data indicates that individuals identifying their gender as female are significantly underrepresented. Faculty observations support this data. This has been an issue both in the Cuesta Program and in the electrical industry. Through advertising (including "word of mouth", high school outreach, networking, etc.) steps are being taken to attract more individuals identifying their gender as female. The other subpopulation that represents a statistically significant gap are reentry students. This is viewed as positive because more individuals between 40 and 50 years old are attracted to transition to the electrical trade which currently (and projected out 10 years) has one of the highest supply/demand gaps of virtually all recognized trades.

# OTHER RELEVANT PROGRAM DATA (OPTIONAL)

Provide and comment on any other data that is relevant to your program such as state or national certification/licensure exam results, employment data, etc. If necessary, describe origin and/or data collection methods used.

# Other relative program data narrative in graphics:

The EET program is certified by the state to offer the highest level of laboratory and lecture (including D.E.) curriculum available, the Whole General (Residential, Commercial, and Industrial) Electrician Program in accordance with the California Labor Code (CLC) statutes.

State (DLE) Website Listing (screen shot from internet):

147 Cuesta College - Open to the public

Approved to Offer Whole General Electrician Curriculum

San Luis Obispo County

P.O. Box 8106

San Luis Obispo, CA 93403

Phone (805) 546-3264

Fax (805) 546-3963

Contacts: John Cascamo (Administrator), john\_cascamo@cuesta.edu

Bret Allen (Technical), ballen@cuesta.edu

Website: www.cuesta.edu

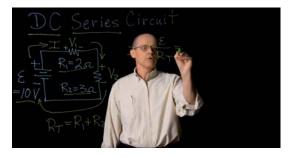
\*

Note: Administer change in process to: oscar ramos@cuesta.edu

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Recent addition to EET (et al) program(s) D.E. recording resources:

# **Example of Light Board Recording (screen shot)**



#### PROGRAM OUTCOMES ASSESSMENT CHECKLIST AND NARRATIVE

#### **CHECKLIST:**

$\boxtimes$	SLO assessment cycle calendar is up to date.
$\boxtimes$	All courses scheduled for assessment have been assessed in eLumen.
	Program Sustainability Plan progress report completed (if applicable). "N/A"

#### **NARRATIVE:**

Briefly describe program changes, if any, which have been implemented in the previous year as a direct result of the Program or Student Services Learning Outcomes Assessment. If no program changes have been made as results of Program or Student Services Learning Outcomes Assessment, indicate: NONE.

"NONE"

# PROGRAM PLANNING / FORECASTING FOR THE NEXT ACADEMIC YEAR

Briefly describe any program plans for the upcoming academic year. These may include but are not limited to the following: (Note: you do not need to respond to each of the items below). If there are no forecasted plans for the program, for the upcoming year, indicate: NONE.

- A. New or modified plans for achieving program-learning outcomes
  - -Acquire new lab trainers for Commercial and Industrial wiring course (strong workforce)
  - Acquire new multimeters and oscilloscopes for use in all EET courses (strong workforce)
  - Acquire electrical parts list (X3) for custom platform fabricated by welding lab for EET
  - Acquire handheld CT meters and data recorders for EET courses (strong workforce)
  - -Acquire dynamic signal analyzer for 3-phase power lab (strong workforce)
  - Acquire 10 foot workbench cables with banana plugs for EET experiments (S.W.)

    Additional equipment necessary for achieving program-learning outcomes in Unit Plan
- B. Anticipated changes in curriculum, scheduling or delivery modality
  - EET-113 pending CurricuNET submission cancel, Active EET-113 major modification to D.E.
- C. Levels, delivery or types of services

N/A

D. Facilities changes

Paint and carpet room 4501-D (over 25 years since last carpeted or painted)

E. Staffing projections

Lab technician needed for EET (75%)

F. Other

Trailor and/or work truck needed for EET Program (strong workforce)

#### PROGRAM SUSTAINABILITY PLAN PROGRESS REPORT

This section only needs to be completed if a program has an existing Program Sustainability Plan. Indicate whether objectives established in your Program Sustainability Plan have been addressed or not, and if improvement targets have been met.

# **Not Applicable**

Area of Decline or	Identified Objective	Planning Steps	Has the Improvement
Challenge	(Paste from PSP)	(Check all that apply)	Target Been
			Met?
		☐ Identified	
Enrollment		☐ Resources Allocated	Select one
		☐ Implemented	
Ct. doub Douboud		☐ Identified	
Student Demand (Fill Rate)		☐ Resources Allocated	Select one
(Fill Nate)		☐ Implemented	
Tff: a: a n a v		☐ Identified	
Efficiency (FTES/FTEF)		☐ Resources Allocated	Select one
FIES/FIEF)		☐ Implemented	
Ctudout Cusoss		☐ Identified	
Student Success – Course Completion		☐ Resources Allocated	Select one
		☐ Implemented	
Student Success —		☐ Identified	
		☐ Resources Allocated	Select one
Course Modality		☐ Implemented	
Degrees and		☐ Identified	
Certificates		☐ Resources Allocated	Select one
Awarded		☐ Implemented	

If Program Sustainability Plan is still necessary, provide a brief description of how you plan to continue your PSP and update your PSP to remove any objectives that have been addressed and include any new objectives that are needed.