

**Career Education Program Two-Year Review
Team Efficacy Report
Spring 2019**

Name of Department: Electricity/Electronics

Efficacy Team: Abena Wahab, Krista Ornelas-Mora, and Todd Heibel

Overall Recommendation: Continuation

Continuation Conditional Probation

Rationale for Overall Recommendation:

The Electricity/Electronics has submitted a thoroughly detailed, comprehensive two-year review. This is among a handful of CTE programs that serves both college to career and college to university student populations. It is clear that this program has utilized institutional, regional through national, industry advisory committee, Program Review, and other pertinent data and input to consistently update certificates, degrees, and curriculum in order to better serve student and employer needs. The primary critique of the two-year review document is its length. It greatly exceeds the five-page maximum. Otherwise, it is a well-written document that reflects a well-functioning and forward-looking program that meets diverse student and industry needs.

1. Purpose of this Program: Meets Does Not Meet

Efficacy Team Response:

The department offers a variety of in-demand certifications, degrees, and courses eligible for transfer. Their mission and description (i.e. purpose) characterize the program as meeting the needs of students who wish to enter the labor force quickly (college to career), as well as those who endeavor to transfer to a four-year university program. The diversity of certificates and associate degrees offered paints a portrait of a nimble program that meets the needs of students, industries, and universities alike. There is solid information here, including recognition from national organizations, that would also benefit the “Quality” section of this document.

Efficacy Team Recommendation: While target populations are implicitly addressed (e.g. students who require basic training in order to enter the labor force, students who need to acquire additional skills for career advancement, and students who wish to transfer to a four-year university program), the narrative could include more explicit examples. For example, is the Electricity/Electronics Program over- or under-represented, in terms of age, ethnicity, gender, and other demographic cohorts? Are there efforts in place to recruit under-represented groups or success stories in increasing such cohorts?

2. Demand for this Program: Meets Does Not Meet

Efficacy Team Response:

The program includes important quantitative and qualitative data from the California Employment Development Department (CA EDD) and industry advisory meetings. However, the year that the CA EDD data were reported is missing from the document.

Due to the increased demand of automation, the program includes mechatronic aspects within the curriculum. This reflects input from labor market and industry advisory meetings and allows the program to adapt to a rapidly changing industry. A great demand for solar technicians is anticipated because of the state law requiring all houses in California be built with solar power systems. Some of this information would also be useful within the “External Issues” section.

Recent enrollment trends are largely attributed to high employment (and low unemployment) rates. Implicit within this discussion is the negative impact upon certification rates (awarded certificates) when students exit the program after completing just a few classes in order to enter a robust job market. While this is perhaps more speculative and anecdotal than data-driven, this narrative could benefit the “Cost” discussion.

Efficacy Team Recommendation: The year that public domain data are published should be included within the document. Although difficult, perhaps the program could (briefly) survey students upon exiting the program in order to determine how many students are departing to take jobs within the industry (without completing certificates and degrees).

3. Quality of this Program: Meets Does Not Meet

Efficacy Team Response:

The Electricity/Electronics program provides CTE core indicator, faculty licensure, faculty experience (extensive field knowledge and industry-related experience), and national recognition and approval of certification data. The program’s certificates are recognized and approved and sanctioned by many national organizations. Multi-year trends of awarded certificates and degree could be more explicitly detailed. Nonetheless, this appears to be a program strength.

SLO data suggest that students are achieving success rates from 88%-94% on average. Through various funding mechanisms, including grants, the program is able to acquire the most advanced training systems to expose students to the latest technologies, making them very employable. In addition, partnerships and internships have benefitted students who endeavor to enter the labor force. Eleven courses have been articulated with CSU and UC systems, benefitting transfer students.

Efficacy Team Recommendation: Provide just a few additional details regarding fluctuations in awarded degrees and certificates.

4. External Issues: Meets Does Not Meet

Efficacy Team Response:

The program provides a diverse analysis of external issues within this section, including EMP, labor market, advisory committee, national standards, green technologies, and various grant funding streams. As notes within previous sections, there is an assertion that course enrollment would decline when the economy is good. Nonetheless, the program seemed to have steady enrollment (with only a slight decline) for the last two years. This may indicate that the program is stable. An accelerated program has been suggested by programs and local offices, and the program has developed and piloted the Accelerated Electronics Technology Certificate, an 8 month certificate. Although it is in its nascent

stages, success has come from that program. The program ensures that technologies that pertain to national and state building codes, including green technologies, are in the curriculum.

5. Cost of this Program: Meets Does Not Meet

Efficacy Team Response:

Efficiency, FTES, success, retention, and awarded certificates and degrees suggest fiscal stability within the program. While a reduction in (laboratory) class size typically negatively impacts efficiency, it appears to have increased student retention and success. This is also attributed to continued curricular improvements. Exploration of accelerated certificate programs suggests that the Electricity/Electronics Program is sensitive to student and industry needs. The program has managed to keep equipment up to date through Perkins and Strong Workforce grant funding, in addition to their base line institutional funding.

6. Two-Year Plan: Meets Does Not Meet

Efficacy Team Response:

The program provides a detailed two-year plan that includes outreach and marketing, tutoring, curricular development, industry partnership, and secondary-to-post secondary pipeline activities. In addition, there is an ongoing effort to hire a full-time laboratory technician, as well as recruit faculty with knowledge of current industry trends and standards.

7. Progress on Previous Does Not Meets: Meets Does Not Meet

Efficacy Team Response:

In response to perceived inaccuracies in reporting enrollment and FTEF data, the program proves a more accurate alignment with actual data reported within the latest EMP document. Class size caps have been more directly addressed, as well as the impact of class cap reductions on efficiency, enrollment, success, and retention. Outdated curriculum issues have largely been addressed, with four courses being updated during the spring 2019 semester.

In response to labor market trends not fully informing program planning, the Electricity/Electronics Program has articulated how industry needs and national standards contribute to curricular and pedagogical design (including development of new and accelerated certificate programs). Facility limitations are discussed, as is the promise of a new CTE building on programmatic planning.