Electrical Installation & Maintenance

2019
ANNUAL REPORT OF PROGRAM DATA

UNIVERSITY of HAWAI'I®
KAUA'I
COMMUNITY COLLEGE

At a minimum, each program or unit Annual Program Review Update shall include measures described in UHCCP 5.202. Additional measures may also be used for program or unit assessment.

1.   Program Description

Program or Unit Mission Statement

The Electrical Installation and Maintenance Technology mission is to provide Kaua'i employers with a trained workforce having entry-level electrical installation and maintenance skills. To provide Students with a certificate or degree that fulfills education requirements of HRS 448E of the State of Hawaii the Hawai'i Department of Commerce and Consumer Affairs: Professional & Vocational Licensing.
Electrical Installation and Maintenance fulfills its mission by incorporating the following practices. The Program:

• Makes classes available through credit/non-credit to meet State licensure requirements;
• Delivers classes for entry level, working apprentice adults and experienced journey-people in small classes that meet the island population size;
• Provides a valuable program that contributes to the islands workforce and community needs;
• Prepares and supports electrical students by providing training that otherwise would not be available except by traveling to the mainland or other islands;
• Encourages students to stay and work on the island of Kaua'i to provide economic growth to the community.

Part I. Program Description

Date of Last Comprehensive Review	10/23/2017
Date Website Last Reviewed/Updated	8/16/2019
Target Student Population	Current Kaua'i DOE High School Seniors and 20 to 40 year olds looking to change occupations to learn a construction trade.
External Factor(s) that Affected the Program or Unit	Non-credit Courses offered through KCC OCET and the IBEW compete for the same students to attend the credit program to complete the legislative requirement for education for State of Hawai'i licensure.

2.   Analysis of the Program

Strengths and weaknesses in terms of demand, efficiency, and effectiveness based on an analysis of the Quantitative Indicators. CTE programs must include an analysis of Perkins Core indicators for which the program did not meet the performance level. Include Significant Program Actions (new certificates, stop outs, gain/loss of positions, results of prior year's action plan).

Include the Annual Review of Program Data (ARPD; all Instructional programs and Academic Support programs - Library, Technology Resources, Testing Center, Tutoring, and Financial Aid), program-developed metrics (Institutional Effectiveness programs, Office of Continuing Education and Training, campus committees), or metrics required by UHCCP 5.202 that are not provided as ARPD (Administrative Service programs and some Student Support programs) under review in table format below (EP 5.202 and UHCCP 5.202).

The Overall Program Health is Cautionary

Describe and discuss demand, efficiency, effectiveness, and overall health categories. What has been the trend over the past three years in each of these categories? What factors (internal or external) may have contributed to the program or unit health categories? For Career and Technical Education (CTE) programs, provide a discussion on any unmet Perkins Core Indicator that includes contributing factors (UHCCP 5.202).

Based on this analysis, what are the program's strengths and areas to improve regarding demand, efficiency, and effectiveness?

Describe any significant program actions that occurred in the prior year (e.g., new certificate(s), stop outs, gain/loss of position(s), reduction in funding, new or completed grant(s), etc.).

Career and Technical (CTE) programs should provide an analysis for any unmet Perkins Core Indicators.

Demand Indicators				

Program: Electrical Installation & Maintenance

		2016 - 17	2017 - 18	2018 - 19	
3d.	Fall Part-Time who are Full-Time in System	0%	0%	0%	
3e.	Spring Full-Time	65%	47%	47%	
3f.	Spring Part-Time	35%	53%	53%	
3g.	Spring Part-Time who are Full-Time in System	5%	0%	0%	
4.	SSH Program Majors in Program Classes	237	205	210	
5.	SSH Non-Majors in Program Classes	40	33	15	
6.	SSH in All Program Classes	277	238	225	
7.	FTE Enrollment in Program Classes	9	8	8	
8.	Total Number of Classes Taught	9	7	6	

	Efficiency Indicators	2016 - 17	2017 - 18	2018 - 19	Efficiency Health
9.	Average Class Size	8	9	9	
*10.	Fill Rate	51.9%	58.1%	48.6%	
11.	FTE BOR Appointed Faculty	1	1	1	
*12.	Majors to FTE BOR Appointed Faculty	22	19	20	
13.	Majors to Analytic FTE Faculty	22	19	20	
13a.	Analytic FTE Faculty	1	1	1	
14.	Overall Program Budget Allocation	$0	$0	$0	**Cautionary**
14a.	General Funded Budget Allocation	$0	$0	$0	
14b.	Special/Federal Budget Allocation	$0	$0	$0	
14c.	Tuition and Fees	$0	$0	$0	
15.	Cost per SSH	$0	$0	$0	
16.	Number of Low-Enrolled (<10) Classes	7	6	3	

	Effectiveness Indicators				

	Passed			
22.	Transfers to UH 4-yr	0	1	0
22a.	Transfers with credential from program	0	0	0
22b.	Transfers without credential from program	0	1	0

	Distance Indicators	2016 - 17	2017 - 18	2018 - 19	
23.	Number of Distance Education Classes Taught	0	0	0	
24.	Enrollments Distance Education Classes	0	0	0	
25.	Fill Rate	0%	0%	0%	
26.	Successful Completion (Equivalent C or Higher)	0%	0%	0%	
27.	Withdrawals (Grade = W)	0	0	0	
28.	Persistence (Fall to Spring Not Limited to Distance Education)	0%	0%	0%	

	Perkins Indicators	Goal	Actual	Met	
29.	1P1 Technical Skills Attainment	93	100	Met	
30.	2P1 Completion	55	40	Not Met	
31.	3P1 Student Retention or Transfer	81.9	80	Not Met	
32.	4P1 Student Placement	66.25	50	Not Met	
33.	5P1 Nontraditional Participation	23.5	9.52	Not Met	
34.	5P2 Nontraditional Completion	23	0	Not Met	

	Performance Indicators	2016 - 17	2017 - 18	2018 - 19	
35.	Number of Degrees and Certificates	7	4	9	
36.	Number of Degrees and Certificates Native Hawaiian	1	1	3	
37.	Number of Degrees and Certificates STEM	Not STEM	Not STEM	Not STEM	
38	Number of Pell Recipients[1]	4	2	5	
39.	Number of Transfers to UH 4-yr	0	1	0	

Demand Indicators

During the last year the IBEW 1186 has accepted applications to hire 10 electricians in Kaua'i County into their program but have not hired anyone. They try to start a new group of

apprentices every four to five years. Because the union jobs are required to train through University of Hawaii of Community College (UHCC) Office of Continuing Education and Training (OCET) Apprenticeships using National Joint Apprentice Training Center (NJATC) curriculum. Because of economic climate, industry positions have decreased slowly over the past five years with a few down years with New/Replacement County positions losing overall by one position. The number of related trades is not taken into account with the number of jobs available. Therefore, the program produces more majors than New and Replacement positions available for Journey-Person Electrician. The IBEW local 1186 has been on the slow side during the last three years with large commercial building jobs down on the island. In fall 2015 the IBEW hired 10 Apprentice Electricians starting their fifth and final year in January 2020. The next apprenticeship class has been postponed until next year to begin in fall 2020 with an additional 10 job openings. Graduates are not given preferential treatment, but are given credit for their first year of schooling that is required by the NJATC Training Alliance.

During the last year, the number of majors has increased, from 19 up to 20. The data also shows a substantial number of full-time students have decreased from 45% to 32% while the numbers of part-time students have increased substantially from 55% to 62%. This is because of stability in the faculty teaching courses and the classes being offered on a two year cycle consistently. The number of SSH Program Majors in Program Classes have been up and down during the three year cycle with an influx of new students during the initial startup, With a high of 237 and a low of 160 but is estimated to level off during last year at 210. FTE Enrollment in Program Classes peaked in AY14-15 and is trending to level off at approximately 210 over the next five years. The total number of classes taught has decreased to 6 each year, mainly due creating a standard two year pathway asked for by the administration. Demand for the EIMT Program in 2019 is Cautionary during the last year due to the three year hiring cycle of IBEW jobs and less non-union jobs on the island and the 1st year apprentices coming from Oahu to work NECA contractors.

Efficiency Indicators
The Average Class size for the EIMT Program has increased slightly from 8 to 9over last three years, and hopefully shows a future upward trend with the combining the credit/non-credit courses. A big influx of students started fall 2019 due to the Football Club starting and many of those students are in the trades. The Fill Rate slightly decreased over last year down to 48.6% from 58.1%. As OCET courses are offered the enrollment in EIMT does go down. Last year eight working electricians completed taking classes through OCET in the EIMT Facilities on Tuesday-Thursday nights. Because no OCET classes were taught on Tuesday-Thursday EIMT 23 was offered twice to take care of the increase of students. Spring Semester the EIMT 51 course is being moved to the afternoon to accommodate FENG 30 and 40 for Air Conditioning to allow eight students to graduate a year earlier than estimated. One NFPA 70E course was taught for OCET for Electrical Safety for Non-Electrical Workers. FTE BOR Appointed faculty

remains at one, and Majors to Analytic FTE Faculty has decreased over last five years. Several sections of data were not provided in this past three years under budget allocation.

The number of Low-Enrolled classes has decreased from 7 to 3 by trying to increase recruitment rates by offering tours and speaking at the Construction Academy classes at the High Schools. The number of entry level courses has been limited to fall semester and students must now start then to begin the cycle. The amount of students taking EIMT on Kauai's is at 5.0 per ten thousand people while it is at 0.65 on Oahu and 1.75 for the Big Island. Health Efficiency for the EIMT Program for 2017 is Cautionary.

Effectiveness Indicators

In 2017 shows that the Successful Completion has decreased slightly to 92%, which is down from the highest of 100% in the past three years. Withdrawals have also been low overall with two during the five-year cycle. One student received a job offer in the trade and began an apprenticeship and the other decided that they did not like working at heights and changed programs. Persistence fall to spring indicates an downward trend from 74% to 67% once again over last year, although the Persistence fall to fall has stayed steady from 48% to 50%, part of that may be attributed to high number of students starting that year trying to use their enrollment to qualify for IBEW employment. While the number of Unduplicated Degree/Certificates Awarded and Degree Awarded rose, this is due to faculty intervention. The faculty contacted students that were one to three credits short to see what the program could do to help those students finish.

The data on the Certificates of Achievement Awarded is also related to those students who were contacted. Students have been found to have completed the EIMT Certificates, but failed to change their declared major from FENG after starting. A PAR change to Building Construction Technology in fall 2020 will address this issue of low enrollment, and will allow students to select from other course offerings. The number of Transfers with and without credential from the program is nonexistent; and is not a measured positive outcome for this CTE program that has historically been a terminal a degree.

Distance Education (Completely On-line Classes)

The EIMT program does not offer Distance Learning at the current time.

Performance Funding

The EIMT Program shows positive upward growth in the Number of Degrees and Certificates and Number of Degrees and Certificates Native Hawaiians. The number of Pell Recipients has fluctuated over the past five years, perhaps due to the stronger economy and in direct relation to part-time students funding their own education. With the addition of the credit/non-credit courses in FY2019-2020 the number of Pell Recipients may increase. The overall cost of the OCET course is the number one reason given for not taking the licensure classes. Creating a credit/non-credit (CO) that has financial aid available will help draw more students to the program. The

number of Transfers to UH 4-year was at zero as expected with most student entering the work force.

Perkins Core Indicators

The EIMT Program met the Perkins Core Indicators for Technical Skills Attainment. However, Completion, Student Retention/Transfer and Student Placement goals were not met. It is difficult to ascertain why the other four core indicators were not met as the data provided is incomplete. Nontraditional Participation and Completion has been a priority in the EIMT Program. The one female in the class and has decided to not complete her generals and did not graduate as expected even though she completed all EIMT courses. We have had our new Trades Tracking Coordinator working with her to make sure she stays on track to graduate, but still dropped out of her classes. The instructor contacted all students who completed the EIMT courses and two students are expected to complete this semester. Four are expected to complete after spring 2020 with those students currently enrolled to complete electives or non-electrical required classes.

The last CPR (Comprehensive Program Review) was in 2017 and was reviewed by the college cabinet.

3.   Program Student Learning Outcomes

    a) List of the Program Student Learning Outcomes
    b) Program Student Learning Outcomes that have been assessed in the year of the Annual Review of Program Data.
    c) Assessment Results
    d) Changes that have been made as a result of the assessments.

Report on PSLO assessment for the prior year.

1. List of the PSLOs.
2. Indicate PLSOs that were assessed in the year of this APRU.
3. Assessment findings.
4. Changes that have been made as a result of the assessment findings.
5. Next planned assessment date.

PSLO	Assessed During this APRU Cycle (Y or N)	Findings	Improvements Implemented	Next Assessment Date
1.The ability to read a blueprint and negotiate through the drawings to layout a project.	YES	1.Follow Blueprints in building lab projects 2.Use blueprints to complete load calculation from NEC 3.Select materials for a given job from blueprints	New blueprint reading software was requested in Perkins Grant from CMH Software to improve residential and motor control diagrams	Annually
2.The proper selection of materials that comply with published codes and deliver energy efficient outcomes	YES	1.Assignment to take of material list and receive pricing and the purchase materials for on campus projects. 2.Install materials accordance to the NEC Code and local county ordinances	Student are now required to understand materials, cost and procurement procedures for the college. More student projects needed. Labs to be built to accommodate when jobs on campus are not available	Annually
3.The ability to maintain and care for the tools required in the electrical industry.	Yes	1.Student must pick out the tools need to perform projects and demonstrate their proper use. 2.Cleanup and care for tools and equipment. Wear proper PPE when performing task.	Students are given a tool list at the beginning of ELEC 30 and must provide their own hand tools so that they will learn to take care of them. School will only provide necessary power tools.	Annually
4.The safety procedures necessary to assess a task for hazards and the steps required to meet OSHA and State safety regulations.	Yes	1.All students must pass the safety exam at the beginning of each class before participating in labs. 2.As a new task is given each student is required to demonstrate the proper and safe way to complete the task. 3.Students are not allowed to next task without completing safety requirements.	Students are docked points for unsafe conditions and for not using properly taking care of PPE during class.	Annually
5.The ability to communicate successfully in writing, orally and with computer technology.	Yes	1.Students are given written exams on each topic with a midterm and final at the end of the semester. Include are MC, TF, fill in the blank, short essay, and one long essay question. 2.National Electrical Code questions are open book in line with the national standard of being able to answer any questions within three minutes. 3.Many of the assessment are given on the computer system and require students to be computer literate.	The software used in the program was owned by the instructor and during the last APRU the program purchased updated software licenses making all software used legal. Computer services have taken over the update and maintenance of the computer system.	Annually
6.The commitment to craftsmanship including the use of energy efficient practices, dependability and punctuality, and pride in accomplishments.	Yes	1.Students are required to be in class. Three absents are allowed per semester with 30% of grade based on attendance 2.All projects done on campus are expected to be in a professional and workman like manner as according to the NEC and the NECA.	Labs that cover the tasked covered in the course material are important to make sure all skills are accomplished. Completing projects on campus are important; but must not take the place of classroom studies.	Annually

4.   Action Plan

Include how the actions within the plan support the college's mission. In addition to the overall action plan for the program, include specific action plans for any Perkins Core Indicator for which the program did not meet the performance level.

Action Plan	Anticipated Outcome	Actual Outcome
EIMT Sustainability and Green Technology Project: Wire Recycling	Decreased boxes of used wire in each department and cost refunded to cover wire stripper and future wire purchased.	A wirer stripping machine was purchased out of annual budget. Students are currently recycling the wire used and it will be turned in the near future.
EIMT Replace Apple MiniMac computers and CP4005dn HP Printer in CARP 109	Less down time and increased use of educational software. More online assessments taken by students.	Item was turned over to IT Department. Determind to eleminate computers in CT109 and replace with Chromebooks. Move some working comuters into Lab area to replace outdated Windows XP. One computer room to be repaced in Building Trades in CARP 108
EIMT Low Enrollment Action Plan	Increased enrollment beginning 8/2018 into the Building Construction Program. Increase student enrollment at the beginning of each year.	Course enrollment was at 9 Students for one courses the remaining courses were higher than expected. Course scheduling was changed to accommodate larger enrollment. Continued work on BCT Program is ongoing to combine programs.
EIMT Persistence Fall to Fall in Effectiveness Indicators	Increased enrollment in courses EIMT 23 and EIMT 53 beginning 9/2018	The EIMT courses had 32 students enrolled and need to be split into two classes, but the EIMT course had lower enrollment of only 8 students.
EIMT Perkins Indicators Not Met	Increased enrollment of female from an average of one to two per semester beginning 9/2018 into the building Construction Program.	One female unfortunately dropped out of the program after completing all EIMT courses. Visits were made to the Construction Academy by J Andrews and D Lang and enrollment increased, but nontraditional stayed level flat

List any additional significant actions that impacted your program (e.g., new certificate, loss or gain of faculty or staff, stop outs, etc.).

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Analysis of Alignment with CPR

List the goals that were identified to be initiated, continued, or completed during this APRU cycle, in your last CPR, and if they were achieved. Be sure to include the benchmark, desired outcome, actual outcome, and unit of measure. If you completed your last CPR prior to 2018, please refer to ***** in this section.

Goal/Strategic Goal or Priority**	Achieved (Y or N)?	Benchmark	Desired Outcome	Actual Outcome	Unit of Measure
EIMT Low Enrollment Action Plan	No	Class Size 10 Students	10 Students or Greater	Class size 9	Demand Indicators
EIMT Persistence Fall to Fall in Effectiveness Indicators	No	Increase percentage of Fall to Fall	Increased by 8% and No Withdrawals	Dropped to 50%	Effectiveness Indicators
Maintain Technical Skills Attainment	Yes	92.92%	100%	100%	Perkins Indicators
Completions	No	51.51%	60%	40%	Perkins Indicators
Student Retention or Transfer	No	81.81%	90%	80%	Perkins Indicators
Student Placement	No	64.51%	65%	50%	Perkins Indicators
Nontraditional Participation	No	23%	25%	9.25%	Perkins Indicators
Nontraditional Completion	No	22.22%	25%	0%	Perkins Indicators

**All Strategic Goals and Priorities are Aligned to the College Mission.

Describe any impacts these goals had on your health indicator(s).
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*Based on findings in Parts I – IV, develop an action plan for your program or unit from now until your next CPR date. This should include goals that align with the College Mission, measurable outcomes, benchmarks, and alignment to the College's Strategic Priorities, and/or

Strategic Goals. Be sure to focus on weaknesses identified in ARPD data, PSLO outcomes, results of survey data, and other data used to assess your unit or program. This plan should guide your program and subsequent APRUs, but may be amended based on new initiatives, updated data, or unforeseen external factors.

5.   Resource Implications

Resource Request(s) for next year (from CPR Plan for your program or unit, or one(s) developed in Part V above if CPR was completed prior to 2018).

☒ **I am NOT requiring resources for my program/unit.**