2024 Annual Report of Program Data Electrical Installation and Maintenance Technology



1. Program or Unit Mission

The Electrical Installation and Maintenance Technology (EIMT) 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 Hawaii 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 island's 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.

College Mission Alignment

Kauai Community College's mission is a *kahua that inspires, engages, and empowers learners and educators to enrich our community and our world*. The Electrical Installation and Maintenance Technology program directly aligns with the campus mission by being engaged with students to empower them with the essential skills to meet workforce needs and to become a lifelong learner.

2. Program Student Learning Outcomes

During Ay 2023-2024 the following PSLO's were met.

EIMT	Indicate all ISLOs that apply to each PSLO.	
	Link to refer to ISLOs (use the number associated with the ISLO that applies to each PSLO)	
PSLO #	PSLO - approved 09/17/2014	ISLO #(s)
1	Read and understand blueprints sufficiently to use them to plan a project.	3, 5, 6
2	Select materials properly for a given project that comply with published codes and deliver energy efficient outcomes.	4, 5, 6

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3	Maintain and care for the tools required in the electrical industry.	7
4	Utilize Occupational Safety and Health Administration (OSHA) and State safety regulations to minimize risk and protect self and others.	5, 6, 9
5	Communicate successfully orally and in writing using computer technology.	1, 2
6	Demonstrate the craftsmanship standards of dependability, punctuality, and quality.	4, 8, 9
	Completed	10/3/2022

Below explains how each PSLO was assessed and met.

PSLO	Assessed During APRU Cycle 2024 (Y or N)	Findings Documentation gathered by Instructors through recording scores and Laulima LMS.	Improvements Implemented	Next Assessme nt Date
1. Read and understand blueprints sufficiently to use them to plan a project.	Yes	All students passed with 70% or better	Work on "Just in Time" Math and implemented the QM course for Trades. Students are in the third year of the course offerings and we are continuing to evaluate the results. Students who have completed the course have improved in program completion.	Annually
2. Select materials properly for a given project that comply with published codes and deliver energy efficient outcomes.	Yes	All students passed with 80% or better	Work on identifying proper building materials. Students are required to select and calculate the proper amount of materials needed per project. This has cut down on waste materials and decreased the need to purchase additional materials.	Annually
3. Maintain and care for the tools required in the electrical industry.	Yes	All students passed with 90% or better	Students can improve on maintaining basic hand tools more efficiently. Broken or worn out equipment have been tagged and taken out of service and the next step is to implement a preventive maintenance program.	Annually
4. Utilize Occupational Safety and Health Administration (OSHA) and State safety regulations to minimize risk and	Yes	All students passed with 90% or better	Additional Training and PPE Equipment required in the shop area. This is to eliminate accidents in the lab area. OSHA and lab rules are enforced for all students in the lab area. Students are now aware of the job requirements for	Evaluated on a daily basis

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PSLO	Assessed During APRU Cycle 2024 (Y or N)	Findings Documentation gathered by Instructors through recording scores and Laulima LMS.	Improvements Implemented	Next Assessme nt Date
protect self and others.			safety. Equipment required in the shop area. Constant monitoring, students are evaluated and graded on the application of working in a neat and workmanlike manner. This eliminates bad habits and improves the learning environment.	
5. Communicate successfully orally and in writing using computer technology.	Yes	All students passed with 70% or better	Students are required to write a weekly log. This is to help increase communication skills and to handle the completion of work orders and billing materials. This also creates documentation for the work done. Also, students need to validate their work experience for their Electrical Journey license for five years.	Annually
students passed with 80% or better 6. Demonstrate the craftsmanship standards of dependability, punctuality, and quality. Students passed with 80% or better 6. Demonstrate the craftsmanship standards of to be successful to b		Students are required to make up for tardiness after class, cleaning up and only allowed in the lab area if they have proper PPE on. The skills in the classroom will mimic what the students will do on the job. This prepares students to be successful on the job. Students were evaluated with on campus instructor evaluation on the job site. They are assessed on their progress outside of the classroom and how they interact with other workers and how they complete assigned tasks.	Weekly	

3. Analysis of the Program/Unit

Electrical Installation & Maintenance Technology ARPD Link: https://uhcc.hawaii.edu/varpd/index.php?y=2024&c=KAU&t=CTE&p=3065

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The International Brotherhood of Electrical Workers (IBEW) Local 1186 maintains the majority of all Government and commercial projects on the island, which is a small portion of total workforce demand within Kaua'i county. There is a greater demand for competent workforce in the private sector that is not reflected in the ARPD report on new and replacement positions in the county that dropped from 37 in 2022-23 to 35 in 2023-24. Within the state of Hawai'i, the Department of Labor and Industrial Relations (DLIR) requires all apprentices enrolled in an apprenticeship program to be trained through The University of Hawai'i of Community College (UHCC) Office of Continuing Education and Training (OCET). The IBEW Apprenticeship Program utilizes the National Joint Apprentice Training Center (NJATC) program curriculum which lowers the amount of students to be available for the EIMT credit program. The Apprentices in the IBEW Local 1186 are taught by OCET with instructors in the EIMT Programs across the UHCC campuses. Unfortunately, the IBEW has not hired students in the past from the EIMT credit program that are required to be in the NJATC apprenticeship program. The IBEW local 1186 has been on the slow side during the last five years with large commercial building jobs down on the island, however, consultations with industry partners have indicated new construction within the next couple of years will be increasing, and the demand for electrical workers will high. Degree and certificate graduates are not given preferential treatment but are given credit for their first year of program training that is required by the NJATC Training Alliance. This is a continual challenge that the program will face due to the small county population but will work on strategies to support student and community needs.

The program will continue best practices, as done in the past, and will continue to serve the community in providing credit for experience to help electricians meet the educational requirements. As a result of the ongoing outreach efforts to promote the program at the high schools, the number of program majors have increased from 22 in 2022-23 to 39 in 2023-24 with the number of Native Hawaiian students also increasing in the same time period from 10 to 17 students. Fall full-time majors increased from 47% to 54% which led to nearly doubling the SSH program majors in program classes from 361 to 667 along with increasing the total number of classes taught from 9 to 13.

Efficiency

The average class size for the EIMT Program has increased from 12 in 2022-23 to 13 2023-24 with the fill rate increasing from 68.6% to 76.9% in the same period reducing the number of low enrolled courses from 3 to 2. Majors to full-time equivalent (FTE) Board of Regents (BOR) appointed faculty increased from 22 to 39 during this period as a positive result of outreach efforts conducted by the CTE Workforce Development Coordinator in collaboration with the Program Coordinator. The Majors to analytic FTE faculty dropped from 22 to 19 with the increased number of courses taught, however, the analytic FTE faculty increased from 1 to 2 due to the extra lecturers hired to teach those additional courses.

Effectiveness

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Completion rates dropped from 99% in 2022-23 to 92% in 2023-24, and withdrawals increased from zero to five. Fall to fall persistence dropped from 85% to 52% due to the unanticipated early retirement of the program instructor during the middle of the spring 2024 semester. Although two emergency hired lectures filled in during the remainder of the semester, several students stopped out. However, the fall to spring persistence remained at 86% with the larger class enrollment and number of majors in the program. Prior to the retirement of the instructor, increased interest in the program due to outreach and marketing efforts by the CTE Workforce Development Coordinator and program faculty led to improvements in degrees and certificates awarded. The unduplicated degrees and certificates awarded jumped from four in 2022-23 to 15 in 2023-24, having the Degrees awarded quadrupling from two to eight, and the certificates awarded with a significant jump from three to 13, as well as the other certificates awarded increasing from four to 24.

Perkins Core Indicators

The EIMT Program surpassed the Perkins Core Indicators for 1P1 Postsecondary Placement and 2P1 Earned Recognized Credential. 1P1 goal of 35% has an actual achievement of 100% and 2P1 goal of 35% is met with an actual achievement of 67%. The Nontraditional Program Concentration 3P1 goal of 12% was not met having only 4% actual achievement and although this indicator is low, the entire Trades division within the UH system continues to be challenged with this outcome. The program will persist with outreach efforts to improve this outcome and ensure students have all the support they need to complete the program. Nontraditional participation and completion has been a priority in the EIMT Program.

Performance Indicators

The EIMT Program had a significant increase in the number of degrees and certificates from five to 21, the number of degrees and certificates issued to Native Hawaiian students jumped from two to 15 and the number of Pell recipients increased from three to 10. These increased results are indicators of the high demand in the construction industry for qualified entry-level electricians as ongoing outreach and program awareness and opportunities are presented to the community.

4. Action Plan

Action Plan	Anticipated Outcome	Actual Outcome
Enhance collaboration with the IBEW Local 1186 and the Electrical industry to provide job placement and internship opportunities	 Work collaboratively with CTE Workforce Development Coordinator in partnership building and internship/job placement and data tracking. Establish an active Industry Advisory Board 	

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Maintain or increase degrees and certificates	Maintain unduplicated degrees and certificates of at least 13 to 15	Currently met with 15 Unduplicated degrees/certificates, 8 AAS degrees, and 13 Certificate of Achievements
Maintain or increase the fill rate	Increase enrollment in courses	Currently met with an increase from 12 to 13 average enrollment at 76.9%
Improve Fall to Fall Persistence	Increase Fall to Fall Persistence from 52% by at least 5%	

The EIMT Program suffered a minor setback upon the sudden, midterm retirement of its full-time faculty due to unforeseen circumstances. The program finished the semester utilizing lecturers and attempted to hire a replacement full-time faculty during the summer that was unsuccessful. An ongoing search for a full-time instructor as well as additional lecturers are and have been in process. Continued industry collaboration including working with the union, non-union contractors, and establishing a strong Advisory Board for the program will be pursued to prepare entry-level electricians. Continued outreach and program promotion at the high schools with the CTE Workforce Development Coordinator will be done to sustain and increase interest in the program in order to continue building SSH in all program classes.

5. Resource Implication

XI am NOT requesting additional resources for my program/unit.