HAWAI‘I COMMUNITY COLLEGE
PROGRAM ANNUAL REVIEW REPORT

Electronics Technology

15 Feb 2017
Date _____

Review Period
July 1, 2015 to June 30, 2016

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Program/Unit Review at Hawai‘i Community College is a shared governance responsibility related to strategic planning and quality assurance. Annual and 3-year Comprehensive Reviews are important planning tools for the College’s budget process. This ongoing systematic assessment process supports achievement of Program/Unit and Institutional Outcomes. Evaluated through a college-wide procedure, all completed Program/Unit Reviews are available to the College and community at large to enhance communication and public accountability. Please see http://hawaii.hawaii.edu/files/program-unit-review/

Please remember that this review should be written in a professional manner. Mahalo.

PROGRAM DESCRIPTION

Describe the Program	
Provide the short description as listed in the current catalog.	This program prepares students for employment in telecommunications, medical electronics, computers, and consumer electronics. The electronic technician fabricates, installs, maintains, and repairs electronic equipment. The program courses cover basic DC and AC component theory and circuit analysis, digital systems, optics and computers and networking. Students applying to the electronics program should have two years of high school math including geometry or algebra, and two years of high school science including chemistry or physics. Upon completion of the program students will be able to apply to entry-level electronic technician positions as well as entry-level Information Technology positions.
Provide and discuss the program's mission (or goals and objectives if no program mission statement is available).	Upon successful completion, students are prepared to: •Specify, design, build, install, program, operate, troubleshoot, analyze, and modify electronics systems, automated test, and manufacturing control systems. •Specify, install, program, operate, troubleshoot, and modify computer systems. •Have effective written, interpersonal, presentation, and team building skills. •Have the necessary leadership and management skills to effectively complete a project. •Have a well-developed sense of work ethics and personal discipline to succeed in their chosen profession. •Have attitudes, abilities, and skills required to adapt to rapidly changing technologies and a desire for life-long learning.

Comprehensive Review information: Required for ARPD Web Submission

Provide the year and URL for the location of this program's last Comprehensive Review on the HawCC Program/Unit Review website: http://hawaii.hawaii.edu/files/program-unit-review/	
Year	N/A

URL	N/A
Provide a short summary regarding the last Comprehensive Review for this program. Discuss any significant changes to the program since the last Comprehensive Review that are not discussed elsewhere in this review.	No comprehensive review done in last 5 years

QUANTITATIVE INDICATORS

ARPD Data

Please attach a copy of the program's ARPD data tables and submit with the Program Review document.

a) **If you will be submitting the Program Review document in hard copy, print and staple a copy of the data tables to the submission; the icon to print the data tables is on the upper right side, just above the data tables.**
   OR
b) **If you will be submitting the Program Review document in digital form, attach a PDF copy of the data tables along with the digital submission; the icon to download the data tables as a PDF is in the upper right side, just above the data tables.**

Program data can be found on the ARPD website: http://www.hawaii.edu/offices/cc/arpd/

ANALYSIS OF THE PROGRAM's DATA

Analyze the program's ARPD data for the review period. Describe, discuss, and provide context for the data, including the program's health scores in the following categories:	
Demand	Unhealthy The status is not reflective of the industry. The category of the electronic

	technician is broad and cannot be narrowed down enough to do it justice
Efficiency	Cautionary This status is due to lack of recruiting. I am doing as much recruiting as possible
Effectiveness	Healthy We are experiencing very good persistence. The courses are effective in engaging students and making the course interesting
Overall Health	Cautionary
Distance Education	N/A..Don't teach in that style
Perkins Core Indicators (if applicable)	N/A
Performance Funding Indicators (if applicable)	N/A
Describe any trends, and any internal and/or external factors that are relevant to understanding the program's data.	The program is going through a complete update to current technologies. The Rf Communications and Process and Controls are being focused on. Industry is evolving to more automated systems and wireless communications.
Discuss other strengths and challenges of the program that are relevant to	Due to the lack of instructors assessments have not been done. I am learning the process and should be compliant in the near future

understanding the program's data.	

Analyze the program's IRO data for the year under review. Discuss how data/analysis provided by the Institutional Research Office has been used for program improvement. (For example, how results from CCSSE or IRO research requests have impacted program development.)	
Describe, discuss, and provide context for the data.	na
Discuss changes made as a result of the IRO data.	na

Report and discuss all major/meaningful actions and activities that occurred in the program during the review period. For example:	
Changes to the program's curriculum due to course additions, deletions, modifications (CRC, Fast Track, GE-designations), and re-sequencing	Rearranged first year by swapping etro121 etro121L with the 143 and etro143L courses
New certificates/degrees	none
Personnel and position additions and/or losses.	

	none
Other major/meaningful activities, including responses to previous CERC feedback.	Refurbish Challenger simulator for Onazuka Remembrance. This was beneficial to the college students for an unusual experience.

Describe, analyze, and celebrate the program's successes and accomplishments. (For example, *more students were retained/graduated* OR *the program successfully integrated new strategies/technologies*.)	
Discuss what the program has been doing well. Are there areas that needs to be maintained and strengthened? Please provide evidence if applicable (ex: program data reports, relevant URL links, etc.).	Our program has went from 2 students first year to 6. We hope to double come next Fall. The schedule changes have improved the flow of the needed knowledge base and have eliminated conflicts with other courses. I have been able to repair most problems with the equipment. The focus on process and controls will require PLC's for training purposes. We are also arranging to work with the Children's Museum for an aircraft display.

Describe, analyze, and discuss any challenges and/or obstacles the program has faced.	
Identify and discuss the program's challenges/obstacles.	Lack of time and people for the massive changes We need new lab equipment. The lab equipment should reflect current technology. Unfortunately these pieces parts are quite lacking. The budget for a technology base program is extremely low. This places restraints on keeping up with industry
Discuss changes and actions taken to address those challenges, and any results of those actions.	There are no funding for such
Discuss what still needs to be done in order to successfully meet and overcome these challenges.	More recruiting and updating of lab equipment Oscilloscopes, signal generators, leads for test equipment, parts for labs

PROGRAM ACTION PLAN

Discuss the program's prior year's (AY14-15) action plan and results.	
Describe the program's action plan from the prior review period and discuss how it was implemented in AY15-16.	1.The "Demand Indicator" section does not give an accurate view of potential job opportunities that exist in the field locally or state wide. Proving that expanding the advisory committee will be needed. 2.The "Efficiency Indicator" section will be corrected by using recruiting. The goal here is to canvas as many potential schools as possible and demonstrate the opportunities here at HCC.
Discuss the results of the action	1.The advisory Committee is an ongoing recruitment. I have

plan and the program's success in achieving its goals.	been able to bring in 2 new advisors. 2.Recruiting students will be an ongoing task. Our growth has tripled and I expect more come next year
Discuss any challenges the program had in implementing that action plan or achieving its goals.	1.It's very difficult to get advisors because they work all day as well. 2. Recruiting has been a challenge. Thanks to people like Thatcher he has made my job easier.

- Did the program review its website during AY15-16? Please check the box below that applies.

☒ Reviewed website, no changes needed.

☐ Reviewed website and submitted change request to webmaster on _____(date)_____.

☐ Reviewed website and will submit change request to webmaster.

Please note that requests for revisions to program websites must be submitted directly to the College's webmaster at
http://hawaii.hawaii.edu/web-developer

Discuss the program's overall action plan for AY16-17, based on analysis of the Program's data and the overall results of course assessments of student learning outcomes conducted during the AY15-16 review period.	**Benchmarks and Timelines for implementation and achievement of goals.**
Action Goal 1: Expanding the advisory committee will be needed to continue. The needs of the local industry has not been realized.	**Benchmarks/Timelines: Ongoing**

How can this action Goal lead to improvements in student learning and attainment of the program's learning outcomes (PLOs)?

Allows us to be more "in tune" to industry. Understanding the industry needs allows for better direction of the program

Action Goal 2:	**Benchmarks/Timelines: ongoing**
Recruit. Without students there is no program	

How can this action Goal lead to improvements in student learning and attainment of the program's learning outcomes (PLOs)?

We need students to teach and industries to utilize them

Action Goal 3:	**Benchmarks/Timelines: Summer 2017**
Realignment of courses and updating material to meet today's technology	

How can this action Goal lead to improvements in student learning and attainment of the program's learning outcomes (PLOs)?

Better courses makes better students

RESOURCE IMPLICATIONS

NOTE: General budget asks are included in the 3-year Comprehensive Review. Budget asks for the following categories only may be included in the Annual review: health and safety needs, emergency needs, and/or necessary needs to become compliant with Federal/State laws/regulations.

Please provide a brief statement about any implications of or challenges with the program's current operating resources.

N/A

For budget asks in the allowed categories (see above):	
Describe the needed item(s) in detail.	N/A
Include estimated cost(s) and timeline(s) for procurement.	N/A N/A
Explain how the item(s) aligns with one or more of the strategic initiatives of 2015-2021 Strategic Directions.	N/A

http://hawaii.hawaii.edu/sites/default/files/docs/strategic-plan/hawcc-strategic-directions-2015-2021.pdf

LEARNING OUTCOMES ASSESSMENT

For all parts of this section, please provide information based on CLO (course learning outcomes) assessments conducted in AY 2015-16, and information on the aligned (PLOs) program learning outcomes assessed through those course assessments.

If applicable, please also include information about any PLO assessment projects voluntarily conducted by the program's faculty/staff.

Evidence of Industry Validation and Participation in Assessment (for CTE programs only)

Provide documentation that the Program has submitted evidence and achieved certification or accreditation from an organization granting certification in an industry or profession. If the program/degree/certificate does not have a certifying body, you may submit evidence of the program's advisory committee's/board's recommendations for, approval of, and/or participation in assessment(s). **Please attach copy of industry validation for the year under review and submit with the document.**

Courses Assessed

- List all program courses assessed during AY 2015-16, including those courses for which a follow-up "Closing the Loop" assessment was implemented during the review year.

Assessed Course Alpha, No., & Title	**Semester assessed**	**CLOs assessed (CLO# & text)**	**CLO-to-PLO alignment (aligned PLO# & text)**
None yet			
"Closing the Loop" Assessments Alpha, No., & Title	**Semester assessed**	**CLOs assessed (CLO# & text)**	**CLO-to-PLO alignment (aligned PLO# & text)**

Assessment Strategies

For each course assessed in AY 2015-16 listed above, provide a brief description of the assessment strategy, including:	
a description of the type of student work or activity assessed (e.g., research paper, lab report, hula performance, etc.);	
a description of who conducted the assessment (e.g., the faculty member who taught the course, or a group of program faculty, or the program's advisory council members, etc.);	
a description of how student artefacts were selected for assessment (did the assessment include summative student work from all students in the course or section, OR were student works selected based on a representative sample of students in each section of the course?);	
a brief discussion of the assessment rubric/scoring guide that	

identifies criteria/categories and standards.	

Expected Levels of Achievement

- For each course assessed in AY 2015-16, indicate the benchmark goal for student success for each CLO assessed.
  - example 1: "85% of students will Meet Standard or Exceed Standard for CLO#1";
  - example 2: "80% of students will attain Competency or Mastery of CLO#4."

Assessed Course Alpha, No., & Title	**Benchmark Goal for Student Success for Each CLO Assessed**

Results of Course Assessments

For each course assessed in AY 2015-16:	
provide a description of the summative assessment results in terms of students' attainment of the CLOs and aligned PLOs.	

Other Comments

Include any additional information that will help clarify the program's course assessment results.	
Include comparisons to any applicable College or related UH-System program standards, or to any national standards from industry, professional organizations, or accrediting associations.	The program has not had proper assessments done in many years. I am currently working with the assessment coordinator to correct this issue.
Include, if relevant, a summary of student survey results, CCSSE, e-CAFE, graduate-leaver surveys, special studies, or other assessment instruments used that are not discussed elsewhere in this report.	

Next Steps – Assessment Action Plan

Describe the program's intended next steps to improve student learning, based on the program's overall AY 2015-16 assessment results. Include any specific strategies, tactics, activities, or plans for instructional change, revisions to assessment practices, and/or increased student support.	
Instructional changes may include, for example,	In process are revisions to the curriculum. My goal is to create a program that our local and state and beyond would

revisions to curriculum, teaching methods, course syllabi, course outlines of record (CORs), and other curricular elements.	appreciate.
Proposals for program modifications may include, for example, re-sequencing courses across semesters, or re-distribution of teaching resources, etc.	In process are the resequencing of courses to make more sense in the order of knowledge required to successfully complete the program. This will allow for a more intelligent sense of order in the learning of knowledge base and skills base.
Revisions to assessment strategies or practices may include, for example, revisions to learning outcome statements (CLOs and/or PLOs), department or course assessment rubrics (criteria and/or standards), development of multi-section/course summative assignments or exams, etc.	Developing better rubric's for each individual course to gain documentable consistency.
Student support and outreach initiatives may include, for example, wrap-around student services, targeted tutoring and/or mentoring, etc.	

Part VI. Cost Per SSH

Please provide the following values used to determine the total fund amount and the cost per SSH for your program:

General Funds = $_____
Federal Funds = $_____
Other Funds = $_____
Tuition and Fees = $_____

Part VII. External Data

If your program utilizes external licensures, enter:

Number sitting for an exam _____
Number passed _____