Attachment 1 –A
Revised July 2007

UNIVERSITY OF HAWAI`I COMMUNITY COLLEGES
ANNUAL INSTRUCTIONAL PROGRAM REVIEW
PROCEDURES, COMPONENTS, AND MEASURES

ELECTRONICS TECHNOLOGY PROGRAM

Introduction:
Program Mission Statement and brief description of the program including a listing of program level student learning outcomes.

Electronics Technology Program Mission Statement:

The Electronics Technology Program serves the community by preparing students for employment in the telecommunications, medical electronics, computer and networking and astronomical/observatory technologies.

Electronics Technology Program Student Learning Outcomes:

Outcome #1: The student will be able to specify, design, build, install, program, operate, troubleshoot, analyze, and modify electronic systems, automated test, and manufacturing control systems. The student will also be able to specify, install, program, operate, troubleshoot, and modify computer systems.

Outcome #2: The student will have effective written, interpersonal, presentation, and team building skills.

Outcome #3: The student will have the necessary leadership and management skills to effectively complete a project.

Outcome #4: The student will have a well-developed sense of work ethics and personal discipline to succeed in their chosen profession.

Outcome #5: The student will have attitudes, abilities, and skills required to adapt to rapidly changing technologies and a desire for life-long learning.

Part I. Quantitative Indicators for Program Review

Annual Report of Program Data for Electronics Technology
HAW CC Program Major(s): ET

Demand Indicators		Fall of Year			
		2005	2006	2007	
1	New & Replacement Positions (State)	8	8	6	
2	New & Replacement Positions (County)	-1	-1	2	
3	Number of Majors	36	19	25	
					Demand Health
4	SSH Program Majors in Program Classes	261	120	164	Unhealthy
5	SSH Non-Majors in Program Classes	0	0	0	
6	SSH in All Program Classes	261	120	164	
7	FTE Enrollment in Program Classes	17.40	8.00	10.93	
8	Number of Sections Taught	8	8	8	

Efficiency Indicators		Fall of Year			
		2005	2006	2007	
10	Average Class Size	10.88	5.00	7.00	
11	Fill Rate	54.38	25.00	35.00	
12	FTE BOR Appointed Faculty	1.00	1.00	1.00	
13	Majors / FTE BOR Appointed Faculty	36.00	19.00	25.00	**Efficiency Health**
14	Majors / Analytic FTE Faculty	22.50	11.88	15.63	Cautionary
14a	Majors / Analytic FTE Faculty @ 12 cr.	18.11	9.56	12.58	
15	Program Budget Allocation ('07 @ 12cr.)	$80,294.00	$79,168.00	$81,152.40	
16	Cost per SSH ('07 @ 12cr.)	$307.64	$659.73	$494.83	
17	Number of Low-Enrolled (<10) Sections	0	8	6	

Effectiveness Indicators					
		2005	2006	2007	
19	Persistence (Fall to Spring)	72.22	78.95	72.00	
20a	Number of Degrees Earned (Annual)*	5	13	7	
20b	Number of Certificates of Achievement Earned (	0	0	0	
21	Number Transferring (to UHM, UHH, UHWO)	0	4	2	
	Perkins - Campus Actual **				
22	1P1 Academic Achievement	75	93.33	100	
23	1P2 Vocational Achievement	90	88.89	100	
24	2P1 Completion	50	55.56	60	**Effectiveness Health**
25	3P1 Placement Employment/Education	100	80	90	Cautionary
26	3P2 Retention Employment	100	100	77.78	
27	4P1 Non Traditional Participation	5.56	12.12	15.79	
28	4P2 Non Traditional Completion	0	0	25	
	Perkins - State Standards **				
22	1P1 Academic Achievement	81.81	81.92	81.87	
23	1P2 Vocational Achievement	90.00	90.00	90.42	
24	2P1 Completion	36.00	37.33	38.17	
25	3P1 Placement Employment/Education	71.00	71.72	71.07	
26	3P2 Retention Employment	90.00	92.00	92.00	
27	4P1 Non Traditional Participation	14.81	14.60	14.60	
28	4P2 Non Traditional Completion	12.86	12.73	12.19	
29	Faculty FTE Workload @ 12 cr.	1.99	1.99	1.99	

Overall Program Health	Cautionary

***All degrees and certificates are counted based on fiscal year.**

**** Perkins data are for CTE programs only. From report on 2006-2007 Perkins activity year**

Part II. Analysis of the Program

Strengths and weaknesses in terms of demand, efficiency, and effectiveness based on an analysis of data.

The program continues to emphasize it's discipline certification and licensure which has been the de facto hiring standard for prospective employers as it attests to the person's knowledge and skills. The program is the only authorized proctoring site in the State for all FCC licenses.

In responding to the program's health indicator effectiveness of "cautionary", in the Fall 2008 semester, the Electronics Technology Program submitted to the CRC to modify its courses to reflect <100 to 100+ to facilitate articulation with the UHCC system. With courses listed as 100+, the program is planning on offering distance education Internet based on-line courses starting in the Spring 2009 semester to Kauai and Maui CCs. The program is optimistic that this new medium will break down the barriers and to maximize opportunities for more inter-institutional cooperation in course development and implementation and increased access and enrollment via the Internet in hopes of improving the overall program's health.

Significant Program Actions (new certificates, stop-out; gain/loss of positions, results of prior year's action plan)

With the electronics field becoming more advanced, in the Spring 2008 semester, the program was given approval to add two (2) Certificate of Completion, one in Network Technology and one in Optics Technology. The Fall 2008 semester showed seven (7) students enrolled in the Network Technology track and 8 students in the Optics Technology track increasing the program's student headcount by 15 improving significantly the overall program's health.

Part III. Action plan

Contingent upon the approval to modify the program's courses to 100+ level, the program is optimistic that the on-going discussions on articulation with UHM (College of Engineering) and with other baccalaureate programs within or outside the State of Hawaii to maximize opportunities for students to transfer 100+ courses/credits earned through this program to improve the overall program's health.
Promote improving the transition from secondary to postsecondary by participating in Career Pathways and visiting feeder high schools with various high-tech demonstrators.

Part IV. Resource Implications (physical, human, financial)

To ensure responsiveness to the changing community needs created by emerging technologies and the program's commitment in fulfilling the functional responsibilities of meeting the community needs must be ensured of adequate funding levels for professional and career development opportunities and in the procurement of appropriate resources to continuously improve student-learning outcomes and to achieve a satisfactory overall program's health.