

**HAWAII COMMUNITY COLLEGE  
COMPREHENSIVE PROGRAM  
REVIEW REPORT**

**Electrical Installation  
Maintenance Technology  
Program**

**November 18, 2011**

**Assessment Period: July 1, 2008 to June 30, 2011**

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*Program Review at Hawai'i Community College is a shared governance responsibility related to strategic planning and quality assurance. It is an important planning tool for*

*the college budget process. Achievement of Student Learning Outcomes is embedded in this ongoing systematic assessment. Reviewed by a college wide process, the Program Reviews are available to the college and community at large to enhance communication and public accountability.*

**HAWAII COMMUNITY COLLEGE  
COMPREHENSIVE PROGRAM REVIEW  
Electrical Installation Maintenance Program**

**Part I: 2011 Annual Program Review Inserted Here**

[http://www.hawaii.edu/offices/cc/arpd/ppreview.php?rev\\_key=305](http://www.hawaii.edu/offices/cc/arpd/ppreview.php?rev_key=305)

**Part II:**

**A. Program Effectiveness**

1. Write a brief narrative describing how the program supports the College's mission and Institutional Learning Outcomes (ILOs).

*Provides the maximum learning opportunity for students to build proficiency in electrical installation and maintenance technology, current NEC National Electrical Code NFPA 70 interpretations and comprehension, current construction field and industry methodology, related field manual dexterity, cultural awareness, and sound work ethics; in alignment with UHCC's and HawCC's mission to serve all segments of our Hawai'i Island Community.*

2. **As a result of a five year review of the program and preparing to write this program review, summarize:**

- a. **What changes have been made (e.g. courses, curricula) due to economic impacts and/or community needs;**

*Change in energy technology are being made. Fossil fuels are near the point of depletion. Renewable Energy such as Photovoltaic has become the alternate source of these times. The EIMT program and curriculum has been modified by removing outdated practices. PV Systems and modern technology has replaced those practices. Hawaii is one of the states in the U.S. that has incentives for home owners and businesses for installing a PV System. The EIMT program is working towards implementing a PV curriculum. Also, EIMT first year students will be participating in DHHL 2012 Model Home by wiring of the model home & executing the installation of the Photovoltaic 4KW DC*

*output system.. The collaboration with other HawCC programs & trades will be beneficial for a realistic time management & code compliant/inspected project. This corner capstone project will fulfill the course outline to produce employable workers in the electrical construction industry.*

**b. What changes have been made based on assessment results;**

*Assessment results linked the curriculum with industry. The Advisory Committee who are from industry, are very pleased with the assessment tools presented to them.*

**c. Other pertinent information.**

**3. Program Effectiveness Strengths and Weaknesses  
Enumerate the top three strengths and weaknesses**

S1 Enrollment is healthy & copious  
S2 Effective Indicators: Successful Completion  
S3 Perkins Student Retention or Transfer  
W1 Non Traditional Participation  
W2 New & Replacement Positions (state)  
W3 Economy recession-Degrees Awarded

**4. Discuss the progress the program has made in meeting the goals set in the last Comprehensive Program Review.**

*Pursuing the establishment of a Photovoltaic curriculum.  
Re-established the participation in the model home for EIMT 20 & 22 students.*

**5. List the program's top 3 goals/plans for the next Comprehensive Review period. Briefly describe evidence that supports these goals/plans.**

- *Establish a Photovoltaic curriculum to implement the PV Grid-Tie system already purchased through Perkins.*
- *Design a new 3 credit curriculum on Basic Photovoltaic systems for EIMT majors only. EIMT students will have basic AC/DC theories and electrical safety. This class would provide another option for Natural Science electives.*

- *Aspire funds to provide more trainer kits to enhance Model Home Practicum Lab Projects*

6. **Discuss the progress the program has made in meeting the goals set in the last Comprehensive Program Review.**

*Pursuing the establishment of a Photovoltaic curriculum.*

*Re-established the participation in the model home, as a corner capstone Project for EIMT 20 & 22..*

7. **List the program’s top 3 goals/plans for the next Comprehensive Review period. Briefly describe evidence that supports these goals/plans.**

- Establish a Photovoltaic curriculum to implement the PV Grid-Tie system already purchased through Perkins.
- *Design a new 3 credit curriculum on Basic Photovoltaic systems for EIMT majors only. EIMT students will have basic AC/DC theories and electrical safety. This class would provide another option for Natural Science electives.*
- *Aspire funds to provide more trainer kits to enhance Model Home Practicum Lab Projects.*

**B.** Action Plan for Program Improvement: Complete Tables 1-4 to provide justification for program budget requests

**Table 1—Top 3 Non-Cost Items**

(examples are given in *italics*; delete & replace with Program’s items)

**\*Strengths/Weaknesses are numbered (S1,S2,S3;W1,W2,W3) and taken from A.3**

Task:	Academic yr.	Who is responsible	Justifications	
			How does it improve program effectiveness?	Addresses which strength or weakness*
<i>1. Implement a “Sustainable Energy” Course in the Spring Semesters.</i>	<i>2012</i>	<i>EIMT Instructor (s)</i>	<i>A,B,C,D,E</i>	<i>S1.S2.S3.W1.W2.W3</i>
<i>2. Survey graduates who obtain Electrical Licenses</i>	<i>Spring 2012</i>	<i>EIMT Instructor (s)</i>	<i>A,B,C,D,E</i>	<i>S1, S2, S3, S4, W1, W3</i>
<i>3. Use survey results to revise Program Learning Outcomes</i>	<i>Fall 2013</i>	<i>EIMT Instructor (s)</i>	<i>A,B,C,D,E</i>	<i>S1,S2,S3, S4, W1, W3</i>

<b>Table 2-Prioritized Top 3 Cost Items (“G” funded requests only)</b> (examples given in italics; delete & replace with Program’s items)					
<b>*Budget Categories: P=Personnel; Six=College Discretionary Fund; SE-Supplies Enhanced;</b>					
<b>Eq-Equipment (&gt;-\$5K)</b>					
<b>**Strategic Outcomes Goals and performance measures are: A1.1.B4..C1..D3..E2..etc.</b>					
jack hammer and accessories					W3
2) Pick-up Truck Crew Cab	2012	EIMT Instructors	\$50,000.00	A, B, C	
3) Computers and Specific Lab Programs for first & second year Student Lab trainer kits	2012	EIMT Instructors	\$70,000.00	A, B, C, D	S1, S2, S3, W1, W2, W3

**Table 3.--Repair and Maintenance**

Nature of Problem	Describe Location: e.g. Building(s) & Rooms(s)
<ul style="list-style-type: none"> <li>-increase square footage to provide efficient working space for student workstations</li> <li>-upgrade more energy efficient shop light fixtures</li> <li>-upgrade trolley power receptacle system</li> <li>-repair rooftop exhaust fans</li> <li>-replace storage rack systems</li> <li>-replace pipe/conduit racks</li> <li>-repair hoist system</li> <li>-replace air compressor system</li> <li>-replace doors and locks</li> </ul>	<p>Building 391/17 Laboratory</p>
<ul style="list-style-type: none"> <li>-upgrade phone lines and catv cables</li> <li>-replace office furniture</li> <li>-upgrade electrical power outlets</li> <li>-improve internet cable layout</li> <li>-replace floor tiles</li> <li>-replace doors and locks</li> </ul>	<p>Building 391/18, 22 Faculty Offices</p>
<ul style="list-style-type: none"> <li>-replace louvers</li> <li>-replace furniture</li> <li>-replace light fixtures</li> <li>-replace ceiling tiles</li> <li>- upgrade electrical power outlets</li> <li>-replace floor tiles</li> <li>-replace doors and locks</li> </ul>	<p>Building 391/23, 24 Lecture Rooms</p>
<ul style="list-style-type: none"> <li>-replace light fixtures</li> <li>-replace ceiling tiles</li> <li>-replace racking systems</li> <li>-improve electrical</li> <li>-replace doors and locks</li> </ul>	<p>Building 391/12, 13, 14, 15, 16, 20, 21 Storage / Tool Rooms</p>

**Table 4—Equipment Depreciation, if applicable**

(examples given in *italics*; delete & replace with Program’s items & add rows as needed) **Key to abbreviations:**

**CP=Controlled Property w/item value \$1K-\$5K**

**E=equipment w/item value >\$5K Key to abbreviations:**

	<b>Category: CP or E</b>	<b>Expected Depreciation Date</b>	<b>Estimated Replacement Cost</b>
(2007) 4” EMT Bender	E	2012	\$20,000.00
(2007) Fluke Kit	CP	2008	\$2,500.00
(2005) Power MIG	CP	2010	\$2,300.00
(2005) Thermal Dynamics Plasma Cutter	CP	2010	\$2,700.00
(1999) Bender	CP	2004	\$3,500.00
(1992) Motor Control Center	E	1993	\$7,500.00
(2004) Dell Computer	CP	2005	\$3,000.00
(2002) Computer PDC	CP	2003	\$3,000.00
(2007) Plate Compactor	CP	2012	\$2,500.00
(1994) Chevrolet Truck	E	1999	\$45,000.00
(1985) Van Dodge	E	1990	\$30,000.00
(2003) Threader Machine	CP	2008	\$4,500.00
(2008) 2-1/2” thru 4” Conduit Bender	E	2013	\$15,000.00
(2007) Laser Level	CP	2012	\$4,000.00
(2011) 3KW Photovoltaic System	E	2015	\$10,000.00

**Table 4—Equipment Depreciation, if applicable**

