

HAWAI`I COMMUNITY COLLEGE
ANNUAL
PROGRAM REVIEW REPORT

Auto Mechanics Technician (AMT)

December 3, 2009

(Assessment Period: 2008-2009)

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**UHCC December 2009 Coversheet –
Annual Report Program Data**

College: Hawaii Community College

Program: Auto Mechanics Technology (AMT)

Check All Credentials Offered	AA	AS	ATS	AAS	CA	CC	COM	ASC	APC
				X	X				

Introduction: Brief description of the program and program mission.

The mission of the Automotive Mechanics Technology (AMT) Program is to prepare students for successful employment as an automotive mechanic. The AMT Program offers a 42 credit Certificate of Achievement and a 63 credit Associates in Applied Science (A.A.S.) degree. Students completing the A.A.S. degree are ready for the ASE exam and although it is not a requirement for the program, students are encouraged to take the exam. The ASE exam is conducted by the national Institute for Automotive Service Excellence and is a nationally recognized credential.

Part I.

Quantitative Indicators (Reported on 2009 Summary Report Program Data excel sheet --includes health calls based on system scoring rubric).

**Annual Report of Program Data for Automotive Mechanics Technology
Hawaii Community College Program Major(s): AMT**

Overall Program Health					Healthy			
Demand Indicators					Academic Year			Demand Health Healthy
					Fall 06	Fall 07	08-09	
1	New & Replacement Positions (State)	79	134	130				
2	New & Replacement Positions (County Prorated)	17	25	25				
3	Number of Majors	53	48	51				
4	SSH Program Majors in Program Classes	504	444	876				
5	SSH Non-Majors in Program Classes	0	0	0				

6	SSH in All Program Classes	504	444	876
7	FTE Enrollment in Program Classes	34	30	29
8	Total Number of Classes Taught	7	7	14

Efficiency Indicators		Academic Year			Efficiency Health Healthy
		Fall 06	Fall 07	08-09	
9	Average Class Size	21.3	18.6	18.3	
10	Fill Rate	106%	93%	91%	
11	FTE BOR Appointed Faculty	2.0	2.0	2.0	
12	Majors to FTE BOR Appointed Faculty	26.5	24.0	25.3	
13	Majors to Analytic FTE Faculty	33.1	30.0	28.4	
13a	Analytic FTE Faculty	n/a	n/a	1.8	
13b	Majors to Analytic FTE Faculty @12cr.	26.2	23.7	22.7	
13c	Analytic FTE Faculty @12cr.	2.0	2.0	2.2	
14	Overall Program Budget Allocation @12cr. F07, 0809	\$83,072	\$105,093	\$119,069	
14a	General Funded Budget Allocation	n/a	n/a	\$119,069	
14b	Special/Federal Budget Allocation	n/a	n/a	\$0	
15	Cost per SSH @12cr. F07, 0809	\$164.83	\$236.70	\$135.92	
16	Number of Low-Enrolled (<10) Classes	0	0	0	

Effectiveness Indicators		Academic Year			Effectiveness Health Cautionary
		2006	2007	08-09	
17	Successful Completion (Equivalent C or Higher)	n/a	n/a	99%	
18	Withdrawals (Grade = W)	n/a	n/a	3	
19	Persistence (Fall to Spring)	87%	85%	74%	
20	Unduplicated Degrees/Certificates Awarded	n/a	n/a	18	
20a	Number of Degrees Awarded	12	19	15	
20b	Certificates of Achievement Awarded	7	16	16	
20c	Academic Subject Certificates Awarded	n/a	n/a	0	
20d	Other Certificates Awarded	n/a	n/a	0	
21	Transfers to UH 4-yr	0	0	0	
21a	Transfers with degree from program	n/a	n/a	0	
21b	Transfers without degree from program	n/a	n/a	0	

C/P denotes that the measure is provided by the college, if necessary.

Data current as of: 8/19/2009 - 3:30:PM

Distance Education Completely On-line Classes	Academic Year		
	Fall 06	Fall 07	08-09

22	Number of Distance Education Classes Taught	n/a	n/a	0
23	Enrollment Distance Education Classes	n/a	n/a	0
24	Fill Rate	n/a	n/a	0%
25	Successful Completion (Equivalent C or Higher)	n/a	n/a	0
26	Withdrawals (Grade = W)	n/a	n/a	0
27	Persistence (Fall to Spring Not Limited to Distance Education)	n/a	n/a	0%
Perkins IV Core Indicators				
Perkins IV Measures 2007-2008		Goal	Actual	Met
28	1P1 Technical Skills Attainment	90.00	95.65	Met
29	2P1 Completion	44.00	78.26	Met
30	3P1 Student Retention or Transfer	55.00	72.22	Met
31	4P1 Student Placement	50.00	70.59	Met
32	5P1 Nontraditional Participation	25.00	12.82	Did Not
33	5P2 Nontraditional Completion	25.00	10	Did Not

Part II.

Analysis of the Program (strengths and weaknesses in terms of demand, efficiency, and effectiveness based on an analysis of the data).

OVERALL PROGRAM HEALTH: Rated as *Healthy*

Demand Indicators: Rated as *Healthy*

There are 2.04 majors for every new and replacement position in the County (51/25). This ratio indicates a Demand score of Healthy.

Efficiency Indicators: Rated as *Healthy*

The fill rate is 91% and majors to FTE BOR appointed faculty is 25.3; both Healthy indicators.

Effectiveness Indicators: Rated as *Cautionary*

Number of degrees and certificates earned in relation to majors is 35% (18/51), a Healthy indicator. Number of degrees and certificates earned in relation to new and replacement positions in the county is .72 (18/25), a Cautionary score. Persistence fall to spring is 74%, a Cautionary Score. Many times the students do not persist because of personal issues and has nothing to do with the program itself.

Note: 1) Career Technical Education (CTE) programs must include in analysis any Perkins IV Core indicator for which the program did not meet the goal.

2) If using alternative “program capacity” method to determine program efficiency, include in analysis.

Perkins IV Core Indicators: The program has met 4 of 6 Perkins IV’s goals. The 2 areas that were not met; *Nontraditional Participation* and *Nontraditional Completion*, are due to the low female count. The AMT program has seen an increase in female participants over the years and the instructors are working very hard to retain them. Unfortunately there were a few who did not continue for personal reasons.

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

Through Special and Perkins funding, the AMT Program purchased several equipment items, a step towards upgrading equipment to meet industry standards. This will give students a more realistic experience by providing them the opportunity to work on equipment that are used in industry.

Action Plan 2008-2009	Status
Review course level outcomes and submit necessary curriculum forms to update course outlines and syllabi.	In progress.
Develop and document assessment strategies for all learning outcomes and have validated by Program Advisory Council.	In progress
Develop a system to track the results of students taking the ASE exams.	In progress
Utilize technology to teach students about repairs – The program will use Mitchell On Demand, a computer based repair manual that is commonly used in the industry.	Currently being used but subscription needs to be renewed in 2010. The renewal will be critical.
Request fund to update scan tool which is a vital part of the engine performance module. Newer model cars require the updated tool.	Completed
Request funds for a complete tool set. Instructors currently supply their personal tools for students use .	This is still a priority item in progress.
Seek funds to purchase a transmission engine cradle. This is a new piece of equipment necessitated by newer model cars whose transmission comes out with the engine.	This is still a priority item.

Action Plan 2008-2009	Status
Request funds to replace A/C Stations. Current equipment is broken and will not meet federal specs.	The replacement is critical to meet federal specs and curriculum.
Request funds to replace air hoist lifts. The existing lifts are starting to give trouble and if the cylinder leaks it would be an EPA problem. The program has three underground hoists to replace. The program is requesting replacement before leakage occurs.	This is still a priority item due to the EPA problem if leak occurs. Currently one was replaced but three more still exists.
Attend NATEF event. NATEF is the National Automotive Technicians Education Foundation.	This is a priority professional development activity.
Request funds to replace hot water pressure washer. Washer is broken and parts are not available. Washer is used in all phases of lab assignments.	Completed
Explore and research incorporating Hybrid technology into the curriculum. Make changes to curriculum, if necessary.	Did not pursue. Ongoing.
Inquire ways in which program can pay for the state licenses faculty have had to purchase personally for their ASE certification exams; without the licenses the repair facility could not do "live" jobs.	Did not pursue. Ongoing.

Part III. Action Plan

The following are additional Action Plan items to those "Ongoing".

1. Attend classes to certify faculty to teach hybrid vehicles. The technology requires special certification due to safety concerns. This is a priority professional development activity in order to modify curriculum to incorporate hybrid.
2. Request funds to purchase a plasma cutting tool. Use of this tool will require less use of hazardous materials and is overall safer to use.
3. Request funds to repair or replace current bridge crane. Currently the crane is inoperable.
4. Recruit/retain non-traditional students. Females are largely under-represented in the carpentry field even though they can achieve equal levels of knowledge and hand skills as males.
5. Seek new job market areas in the automotive industry and create a job network in this area.

6. Research the pros and cons of reinstating work orders adding a minimal shop fee for “live” jobs.

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

Needs	Justification	Estimate Cost
Mitchell-On-Demand renewal.	This computer based repair manual will expire at the beginning of 2010. This is required in all phases of our curriculum—lecture and lab and used by all students daily.	\$5,500
Replace A/C Stations.	The replacement is critical to meet federal specs and curriculum. This equipment is essential for use in all phases of the engine, electrical, engine performance courses.	\$17,000
Replace transmission jack.	Existing jack is broken and parts are not available for repair. This equipment is essential for use in all phases of the engine, powertrain & autotrans courses. Without this equipment students cannot safely complete their assignments in these areas.	\$4,000
Replacement tools	Receive monies from comprehensive program review to purchase some tools that are needed for current model vehicles. The automotive mechanics field is tool intensive and tools need to be updated as changes occur in vehicles.	\$11,000
Transmission engine cradle.	This is a safety issue. Newer model cars have transmissions that come out with the engine. The program currently uses a make-shift pulley system which is a hazard.	\$5,000
Plasma cutting tool	Use of this tool will require less use of hazardous materials and is overall safer to use. This is	\$5,000

Needs	Justification	Estimate Cost
	current technology.	
Hybrid classes for faculty	Attend classes to certify faculty to teach hybrid vehicles. Currently technology which requires special certification due to safety concerns.	\$6,000
Three above ground hoists.	The existing lifts are starting to give trouble and if the cylinder leaks it would be and EPA problem. The program has three under ground hoist to replace. The program is requesting replacement before leakage occurs.	\$40,000 (before leak occurs)
Faculty Development	Attend NATEF event. NATEF is the National Automotive Technicians Education Foundation, a non profit foundation responsible for ADS program certification based evaluations.	\$6,000
Bridge crane	Currently, equipment is inoperable. This equipment is used in all phases of instruction.	\$60,000
Replacement tools	Receive monies from comprehensive program review to purchase some tools that are needed for current model vehicles. The automotive mechanics field is tool intensive and tools need to be updated as changes occur in vehicles.	\$11,000

Annual Report Program Data and analysis located on college website at:

[AY 2009 Completed Annual Program-Unit Reviews](#)