

Automotive Technology Program





1. Program or Unit Description

Program or Unit Mission or Purpose Statement

The Automotive Technology (AMT) program at Kaua'i CC provides open access, post-secondary education to qualified students. Students and technicians of the auto repair industry develop and massage their minds to think critically as a necessity of the diagnosis, repair, and maintenance of today's hi-tech vehicles.

What is the target student or service population?

High school graduates; traditional and non-traditional students; career changing adults returning to college.

2. Analysis of the Program/Unit

College: Kaua'i Community College

Program: Automotive Mechanics Technology

Status: Report Complete

Program Quantitative Indicators



Overall Program Health: Healthy

Students that successfully complete this program of study will obtain the entry level skillsets

Automotive Mechanics Technology

#	Demand Indicators	2017 - 18	2018 - 19	2019 - 20	Demand Health
1.	New & Replacement Positions (State)	653	644	652	
2.*	New & Replacement Positions (County Prorated)	38	34	36	
3.	Number of Majors	33	31	32	Healthy
3a.	Number of Majors Native Hawaiian	21	20	16	
3b.	Fall Full-Time	62%	67%	74%	

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3c.	Fall Part-Time	38%	33%	26%	
3d.	Fall Part-Time who are Full-Time in System	0%	0%	0%	
3e.	Spring Full-Time	48%	76%	71%	
3f.	Spring Part-Time	52%	24%	29%	
3g.	Spring Part-Time who are Full-Time in System	0%	0%	0%	
4.	SSH Program Majors in Program Classes	495	664	635	
5.	SSH Non-Majors in Program Classes	2	47	39	
6.	SSH in All Program Classes	497	711	674	
7.	FTE Enrollment in Program Classes	17	24	22	
8.	Total Number of Classes Taught	16	18	18	

NOTE: New & Replacement jobs updated (View Methodology).

	Average for 3 years	A	verage f 3 years	or	Average for 3 years
	2016 Historical 2017 Current 2018 Projected	201 201 201	L7 Histor L8 Curre L9 Projec	rical int cted	2018 Historical 2019 Current 2020 Projected
	Demand Indicators	2016 - 17	2017 - 18	2018 - 19	Demand Health
1.	New & Replacement Positions (State)	926	912	901	
-2.	New & Replacement Positions (County Prorated)	106	106	105	
3.	Number of Majors	59	55	54	
3a.	Number of Majors Native Hawaiian	20	22	22	
зь.	Fall Full-Time	45%	43%	37%	

#	Efficiency Indicators	2017 - 18	2018 - 19	2019 - 20	Efficiency Health
9.	Average Class Size	9	10	10	
10.*	Fill Rate	62.5%	70.6%	69.4%	Healthy
11.	FTE BOR Appointed Faculty	2	2	2	,
12.*	Majors to FTE BOR Appointed Faculty	16	16	16	

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13.	Majors to Analytic FTE Faculty	16	16	16	
13a.	Analytic FTE Faculty	2	3	3	
14.	Overall Program Expenditures	\$411,148	\$384,722	\$391,739	
14a.	General Funded Budget Allocation	\$306,008	\$333,936	\$365,949	
14b.	Special/Federal Budget Allocation	\$11,620	\$15,929	\$3,463	
14c.	Tuition and Fees	\$93,520	\$34,857	\$22,327	
15.	Cost per SSH				
16.	Number of Low-Enrolled (<10) Classes	9	5	6	
#	Effectiveness Indicators	2017 - 18	2018 - 19	2019 - 20	Effectiveness Health
17.	Successful Completion (Equivalent C or Higher)	82%	91%	89%	
18.	Withdrawals (Grade = W)	2	5	2	
19.*	Persistence Fall to Spring	85%	82%	77%	
19a.	Persistence Fall to Fall	66%	53%	47%	
20.*	Unduplicated Degrees/Certificates Awarded	19	23	15	
20a.	Degrees Awarded	5	1	1	
20b.	Certificates of Achievement Awarded	11	39	34	Cautionary
20c.	Advanced Professional Certificates Awarded	0	0	0	
20d.	Other Certificates Awarded	19	59	13	
21.	External Licensing Exams Passed ¹				
22.	Transfers to UH 4-yr	0	0	0	
22a.	Transfers with credential from program	0	0	0	
22b.	Transfers without credential from program	0	0	0	

¹ Campus to include in program analysis if applicable.

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#	Distance Indicators	2017 - 18	2018 - 19	2019 - 20	
23.	Number of Distance Education Classes Taught	0	0	0	
24.	Enrollments Distance Education Classes	0	0	0	
25.	Fill Rate	0%	0%	0%	
26.	Successful Completion (Equivalent C or Higher)	0%	0%	0%	
27.	Withdrawals (Grade = W)	0	0	0	
28.	Persistence (Fall to Spring Not Limited to Distance Education)	0%	0%	0%	
#	Perkins Indicators	Goal	Actual	Met	
29.	1P1 Technical Skills Attainment	94.75	80	Not Met	
30.	2P1 Completion	61	80	Met	
31.	3P1 Student Retention or Transfer	86	90	Met	
32.	4P1 Student Placement	66.75	100	Met	
33.	5P1 Nontraditional Participation	23.75	9.68	Not Met	
34.	5P2 Nontraditional Completion	23.25	13.04	Not Met	
#	Performance Indicators	2017 - 18	2018 - 19	2019 - 20	
35.	Number of Degrees and Certificates	16	40	35	
36.	Number of Degrees and Certificates Native Hawaiian	11	28	12	
37.	Number of Degrees and Certificates STEM	Not STEM	Not STEM	Not STEM	
38.	Number of Pell Recipients ¹	5	29	22	
39.	Number of Transfers to UH 4-yr	0	0	0	

* Used in Rubric to determine Health Indicator

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https://uhcc.hawaii.edu/varpd/index.php?y=2020&c=KAU&t=CTE&p=2177

The Overall Program Health is Healthy.

The Health (Overall Program Healthy) has remained HEALTHY from 2016-2020. Both Demand and Effectiveness indicators remain HEALTHY.

DEMAND INDICATOR

The Overall Program Health Demand Indicator has a HEALTHY rating. The number of New and Replacement Positions for the State and County has remained relatively stable. Private sector DEMAND continues to climb relative to State and County numbers.

EFFICIENCY INDICATOR

The Overall Program Health Efficiency Indicator has remained Healthy following the new rubric for programs that has a mandated enrollment capacity. The earlier method of calculation identified the fill rate that dropped from 92.4% in yr 15-16 to 62.8% in yr 16-17 and 62.5% in yr 17-18 being rated as Cautionary. This drop in the fill rate was due to a student success initiative with an English and Math co-requisite that was added to the program requirements. It also affected the number of low enrolled classes from three in yr 15-16 to 13 in yr 16-17 and nine in yr 17-18. In Fall 2016 students struggled as 75% nine of 12 AMT students that enrolled in Math 75X during their 1st semester did not pass. As a result of their struggles four withdrew, four received N grades, and one received a D grade. Seven of those students also dropped out of the AMT classes after their 1st semester and did not return to our program making it a 50% class reduction. Other Trades programs were also affected as 50% 16 of 32 students did not pass with a C or higher grade in Math 75X and 42% 5 of 12 students did not pass with a C or higher grade in Math 100. This played an immediate impact on the fall to spring persistence from 74% in yr 15-16 to 65% in yr 16-17. These results affected the graduating class of Spring 2018 which also affected the rest of the Trades causing the Campus Performance Standards to drop with the Trades graduates playing a major factor.

The AMT program addressed the problem of students that were struggling in Math with early warning indicators and collaborated with the Math faculty to identify students struggling early and provided tutoring support. Students were also provided other options in meeting their graduation requirements taking Business Math as an alternative and the Trades programs will also include a Quantitative Methods class of Applied Math for Trades once it is approved by the Curriculum Committee. Feedback from students has improved in their Math classes and we anticipate a higher completion and graduation rate for our AMT students as class enrollment has improved.

EFFECTIVENESS INDICATOR

The Overall Program Health Effectiveness Indicator slipped from HEALTHY to CAUTIONARY. The 2018-2019 Fall to Spring enrollment was 15 students dropping to 12 students vs 2019-2020 Fall to Spring enrollment of 14 student dropping to 11 students. The 5% drop contributed to the slip from the Healthy to Cautionary rating, but as shown by actual student count, the actual number of students dropping from Fall to Spring remained at three students. Perkins Core Indicators

1P1- Technical Skills Attainment was slightly below the goal of 94.75% at 80% although students are meeting all NATEF standards.

2P1- Completion surpassed the goal of 61% at 80%.

3P1-Student Retention surpassed the goal of 86% goal vs 90% actual retention.

4P1-Student Placement surpassed the goal of 66.75% goal vs 100% actual placement owing to close industry relationships with repair facilities continually inquiring for entry level technicians. 5P1-Nontraditional Participation has all AMT programs in the UHCC system not meeting these indicators. The Non-Traditional aspect of students in the AMT arena is a very low percentage nationwide. The goal is set at 23% with our actual amount at 9.68% participation. Until women view the auto tech career as appealing and physically attainable, we predict this trend to remain status quo. However, we have hired a Trades Program Career Track Coordinator to help all Trades program in recruiting efforts to improve nontraditional participation.

5P2-Nontraditional Completion also did not meet the goat of 23% at 13.04% actual completion. Efforts are currently being made to improve this outcome with new recruitment strategies.

The last CPR (Comprehensive Program Review) for the AMT program was successfully completed in Spring 2018. The AMT program is externally accredited by NATEF. Automotive Programs certified by NATEF go through a re-certification process every five years. The process includes a very comprehensive self-evaluation and on-site evaluation by a NATEF Evaluation team. The AMT program recently completed the self-evaluation and the NATEF Team was on campus in Spring 2018. To remain compliant with NATEF and industry standards, aged/inoperable equipment were identified during the self-evaluation. Equipment (wheel alignment machine, wheel balancer, "smart" diagnostic scanner, "smart" board)) was purchased to ensure students met the required training in accordance to NATEF tasks.

The Automotive Technology Program at Kauai Community College participates in the NATEF Entry Level Testing for Student Certification of students graduating in the program and the end of their tenure in Automotive Technology Program. This test was designed to evaluate the Effectiveness of post-secondary Automotive Technology Programs across the nation.

KCC Automotive Technology Program has been participating in this NATEF sponsored voluntary testing for 20 years. KCC is the only Automotive Technology Program in the UH Community College system to participate. Kauai CC automotive technology students have tested at the top 20 percentile of students across the nation (a reflection of the Automotive Technology program at Kauai CC).

3. Program Student Learning Outcomes or Unit/Service Outcomes

PSLO	Assessed During this APRU Cycle (V or N)	Findings	Improvements Implemented	Next Assessment Date
500+ NATEE	Ves	Students' testing	N/A	Click or tap to
tasks	105	at 70+ percentile	1 1 1 2 1	enter a date
PSL 0 1	Ves	92% Technical	N/A	Annually
Demonstrate	105	skills attained in	1 1 1 2 1	7 minually
technical		Student ASE		
proficiency in		Certifications		
entry-level skills		Continuations		
for employment in				
the automotive				
service field or				
related areas.				
PSLO 2	Yes	90% Successful	N/A	Annually
Apply the theory		completion "C" or		5
behind automotive		higher		
procedures and		0		
use critical				
thinking when				
performing				
service,				
maintenance,				
diagnostics, and				
repair of all major				
automotive				
systems.				
PSLO 3	Yes	100% Compliance	N/A	Annually
Comply with				
personal and				
environmental				
safety practices in				
accordance with				
applicable safety				
and environmental				
regulations.				

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DSI O 4	Vac	100% Technical	N/A	Appuolly
Identify and use	1 05	skills ottoined	1N/ <i>F</i> 1	Annually
approprieto to ala		SKIIIS anallicu		
appropriate tools,				
testing, and				
measuring				
equipment				
required to				
accomplish each				
task established				
by the National				
Automotive				
Technicians				
Education				
Foundation				
(NATEF).				
PSLO 5	Yes	100% Technical	N/A	Annually
Locate references,		skills attained		-
training				
information and				
manufacturer's				
procedures from				
industry resources				
using the				
appropriate				
technology and				
nerform tasks in				
accordance with				
their research				
DSL Q 6	Vac	100% Technical	N/A	A nnuolly
Porform all	1 05	skills attained	1N/A	Allinually
diagnostic and		SKIIIS attained		
repair tasks in				
accordance with				
manufacturer's				
recommended				
procedures as				
published.				
PSLO 7	Yes	90% Successful	N/A	Annually
Communicate		completion "C" or		
effectively both		higher		
orally and in				
writing.				

4. Action Plan

Action Plan	Anticipated Outcome	Actual Outcome
Maintain NATEF standards	NATEF standards maintained	Remain compliant

and prepare for 2 ½ year Mid- Term Compliance review.	annually.	

Next Comprehensive Program Review (CPR) for the Automotive Technology Program will be in the Spring of 2023.

5. Resource Implications

Detail any resource requests, including reallocation of existing resources (physical, human, financial)

X I am NOT requesting additional resources for my program/unit.