

Automotive Technology Program



ANNUAL REPORT OF PROGRAM DATA 2021



UNIVERSITY of HAWAII®
KAUA'I
COMMUNITY COLLEGE

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; and adults seeking a career change returning to college.

2. Analysis of the Program/Unit

The Overall Program Health is **Healthy**.

The Health (Overall Program Healthy) has remained **HEALTHY** from 2016-2021. Both Demand and Efficiency indicators remain **HEALTHY**. The **EFFECTIVENESS** indicator has improved to **PROGRESSING** from Cautionary.

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 seen a slight decline due to the COVID pandemic but remains strong. Private sector DEMAND continues to climb as repair facilities continually request for graduates and current students to fill vacant positions despite the slight decline in the State and County numbers. Fall Full-Time majors have trended with a decline from 74% in 2019-20 to 51% in 2020-21 and increased in the Fall Part-Time enrollment from 26% in 2019-20 to 49% in 2020-21. This trend shifting more towards part-time enrollment also may have been a result of the COVID pandemic. Similarly 64% Spring Full-time enrollment in 2019-20 declined to 56% in 2020-21. However, the Spring Part-time enrollment increased from 36% in 2019-20 to 44% in 2020-21 maintaining an overall **HEALTHY** rating.

EFFICIENCY INDICATOR

The Overall Program Health Efficiency Indicator has a **HEALTHY** rating. The average class size of 10 with a class limit of 14 has remained consistent over the past years with a fill rate at 69.2% in 2020-21. Majors to FTE BOR Appointed Faculty trended with a slight increase from 16 in 2018-19 to 17 in 2019-20 and 18 in 2020-21.

EFFECTIVENESS INDICATOR

The Overall Program Health Effectiveness Indicator improved from **CAUTIONARY** to **PROGRESSING**. The Successful Completion rate in 2019-2020 at 89% improved to 92%

in 2020-21, however Fall to Fall Persistence remains relatively low at 46% due to the COVID pandemic. Several students did not complete the program due to the COVID pandemic and had to work in order to assist their families that worked in customer service industries that were laid off as the automotive repair industry was deemed essential work. Another cause of the drop Fall to Fall would be due to the inability to visit the high schools or have campus visits to showcase the program and recruit students. Zoom presentations have been very ineffective in gaining student interest and engagement during our recent recruitment efforts and marketing strategies are currently being worked on to improve this outcome.

The Unduplicated Degrees/Certificates Awarded were also affected by the pandemic dropping from 23 in 2018-19 to 15 in 2019-20, and currently with 14 in 2020-21. Persistence Fall to Spring has improved to 86% (2020-2021) from 77% (2019-2020). This 9% increase in Persistence along with the 3% increase in Successful Completion has improved the Effectiveness Indicator rating to **PROGRESSING**.

Perkins Core Indicators

1P1 Postsecondary Placement Goal of 33, has been **MET** and surpassed at 81.82.

2P1 Earned Recognized Credential Goal of 33, also **MET** and surpassed at 84.

3P1 Nontraditional Program Concentration data is not available at this time. However female student in a male dominated program has always been very low for our program and this year is the first time that we have 5 female students enrolled in the program which is a huge success in our efforts to promote our program to nontraditional students.

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 recertification process every 5 years. The process includes a very comprehensive self-evaluation and on-site evaluation by a NATEF Evaluation team. The AMT program recently completed Mid-Term Compliance Review in April 2021 and will perform the self-evaluation for recertification and the NATEF Team will visit the campus in Spring 2023. NATEF is a branch of the Automotive Service Excellence (ASE) and has changed its name to ASE Education Foundation. To remain compliant with ASE Education Foundation and industry standards, aged/inoperable equipment were identified during the self-evaluation. Equipment (battery reconditioning diagnostic unit; on-car brake lathe; air conditioning recovery/recycling/recharge unit; diagnostic scan tool; and shop air compressor) are needed to ensure students meet the required training in accordance to ASE Education Foundation tasks.

Hawai'i and the rest of the world are committed to the Clean Energy Initiative to have 100% Clean Transportation by 2045. Our Automotive Technology program at Kaua'i Community College is the only program in the UHCC system that trains on Hybrid and Electric vehicle technology and we must keep pace in preparing our next generation of

technicians for this new technology. In order to remain compliant in this new technology of Electric vehicles with Advanced Driver Assist Systems (ADAS) and driverless autopilot controls, newer vehicles will be needed to train our students along with new ADAS calibration equipment. Having these new vehicles will allow our program to continue to blaze the trail setting the standard for the other automotive programs to follow.

The Automotive Technology Program also participates in the ASE Entry Level Certification testing for our students graduating in the program at 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.

Kaua'i CC Automotive Technology Program has been participating in this ASE sponsored voluntary testing for over 20 years and is the only Automotive Technology Program in the UHCC system to participate. Kaua'i CC automotive technology students have tested at the top 20 percentile of students across the nation (a reflection of the Automotive Technology Program at Kaua'i CC).

[ARPD Data Table - Automotive](#)

3. Program Student Learning Outcomes or Unit/Service Outcomes

PSLO	Assessed During this APRU Cycle (Y or N)	Findings	Improvements Implemented	Next Assessment Date
500+ ASE tasks	Yes	Students' testing at 70+ percentile	N/A	Click or tap to enter a date.
PSLO 1 Demonstrate technical proficiency in entry-level skills for employment in the automotive service field or related areas.	Yes	92% Technical skills attained in Student ASE Certifications	N/A	Annually

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<p>PSLO 2 Apply the theory behind automotive procedures and use critical thinking when performing service, maintenance, diagnostics, and repair of all major automotive systems.</p>	<p>Yes</p>	<p>92% Successful completion "C" or higher</p>	<p>N/A</p>	<p>Annually</p>
<p>PSLO 3 Comply with personal and environmental safety practices in accordance with applicable safety and environmental regulations.</p>	<p>Yes</p>	<p>100% Compliance</p>	<p>N/A</p>	<p>Annually</p>
<p>PSLO 4 Identify and use appropriate tools, testing, and measuring equipment required to accomplish each task established by the National Automotive Technicians Education Foundation (NATEF).</p>	<p>Yes</p>	<p>100% Technical skills attained</p>	<p>N/A</p>	<p>Annually</p>

PSLO 5 Locate references, training information and manufacturer's procedures from industry resources using the appropriate technology and perform tasks in accordance with their research.	Yes	100% Technical skills attained	N/A	Annually
PSLO 6 Perform all diagnostic and repair tasks in accordance with manufacturer's recommended procedures as published.	Yes	100% Technical skills attained	N/A	Annually
PSLO 7 Communicate effectively both orally and in writing.	Yes	92% Successful completion "C" or higher	N/A	Annually

4. Action Plan

Action Plan	Anticipated Outcome	Actual Outcome
Maintain ASE Education Foundation standards and prepare for 5-year re-certification.	ASE Education Foundation standards maintained annually.	Remain compliant

5. Resource Implications

I am requesting additional resources for my program/unit.

- 2022 Tesla Model 3 EV \$50,000(Perkins 2022)
- 2022 Ford F-150 Lightning EV \$50,000(Perkins 2022)
- ADAS Calibration System \$20,000(Perkins 2021)
- Air Compressors (for Hybrid Shop and Auto Body Replacement) \$10,000(Equipment)
- On-Car Brake Lathe \$10,000(Perkins 2021)
- R1234yf Refrigerant Recovery/Recycling/Recharge unit \$10,000 (Perkins 2021)
- Automotive Diagnostic Scanner \$8,000(Perkins 2021)

6. Optional: Edits to Occupation List for Instructional Programs

I am requesting changes to the SOC codes/occupations listed for my program/unit.